North Carolina Medical Journal

Owned and Published by

NORTH CAROLINA MEDICAL SOCIETY

Under the Direction of Its

EDITORIAL BOARD

Volume 37
January-December, 1976

EDITORIAL OFFICE

300 South Hawthorne Road

Winston-Salem, N.C. 27103

Press of
Edwards & Broughton Company
P. O. Box 27286

1821 North Boulevard

Raleigh, N.C. 27611

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY January 1976, Vol. 37, No. 1

NORTH CAROLINA
Medical Journal

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1976 Leadership Conference
January 30-31, 1976—Raleigh

1976 ANNUAL SESSIONS
May 6-9—Pinehurst

Both often

Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

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in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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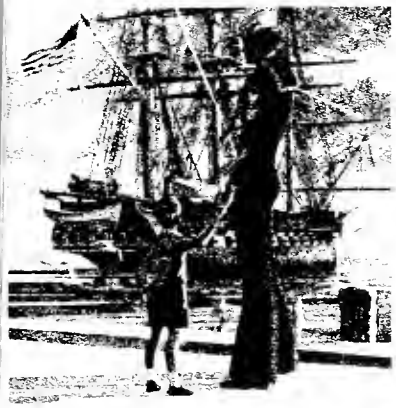

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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina
Medical Society

January 1976, Vol. 37, No. 1

NORTH CAROLINA MEDICAL JOURNAL, 300 S. Hawthorne Rd., Winston-Salem, N. C. 27103, is owned and published by The North Carolina Medical Society under the direction of its Editorial Board. Address manuscripts and communications regarding editorial matter to this Winston-Salem address. Questions relating to subscription rates, advertising, etc., should be addressed to the Business Manager, Box 27167, Raleigh, N. C. 27611. All advertisements are accepted subject to the approval of a screening committee of the state Medical Journal Advertising Bureau, 711 South Blvd., Oak Park, Illinois 60302 and/or by a Committee of the Editorial Board of the North Carolina Medical Journal in respect to strictly local advertising. Instructions to authors appear in the January and July issues. Annual Subscription, $5.00. Single copies, $1.00. Publication office: Edwards & Broughton Co., P.O. Box 27286, Raleigh, N.C. 27611. *Second-class postage paid at Raleigh, North Carolina 27611.*

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	40-49	38.50	89.00	106.00
	50-59	62.00	137.00	154.00
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45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
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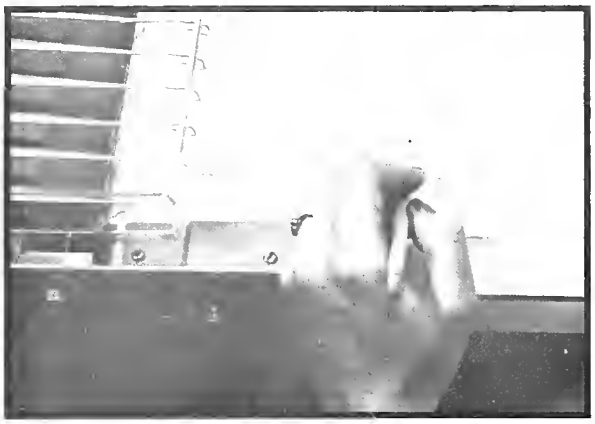

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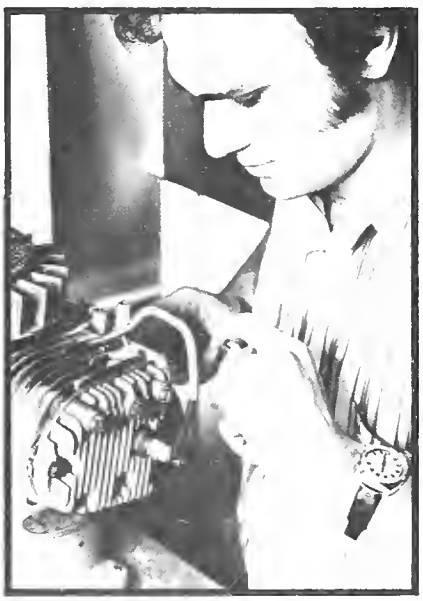

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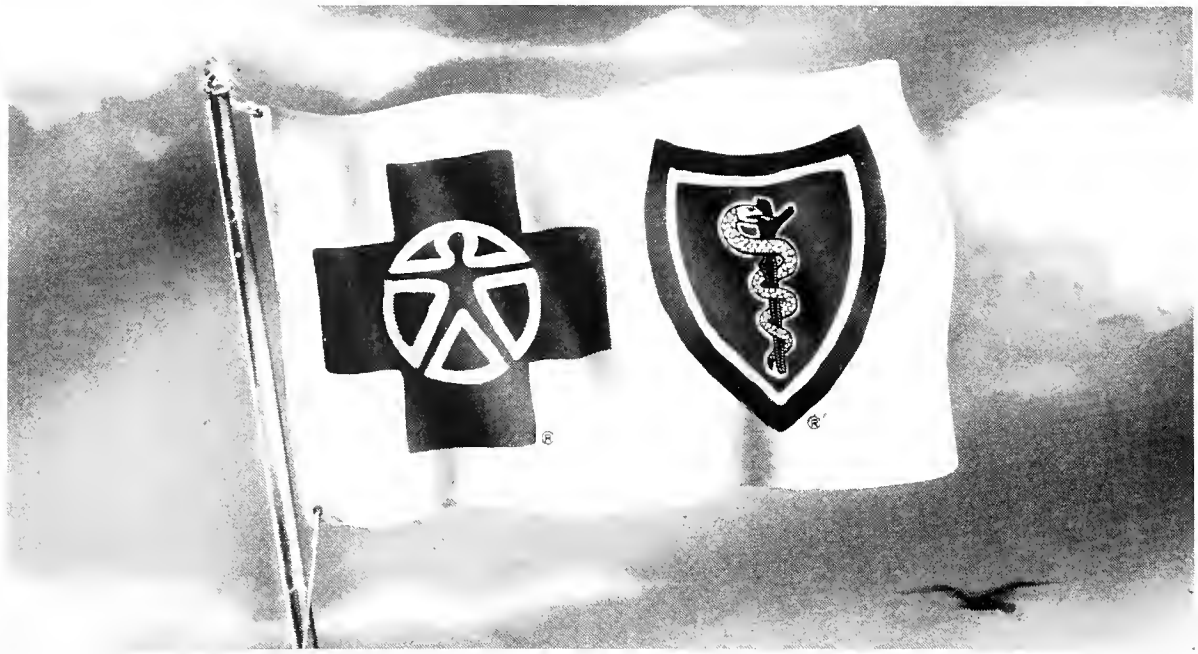

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found useful in the management of vertigo* associated with diseases affecting the vestibular system.

Can relieve nausea and vomiting often associated with vertigo.*

Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.

Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.

Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg/kg/day in rabbits and 10 mg/kg/day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy See "Contraindications."

ADVERSE REACTIONS Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
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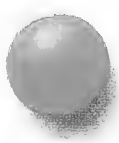
Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Documented bioavailability...
Regimen flexibility

q.i.d. or q 6h immediately after or between meals



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erythromycin enteric-coated tablets, Upjohn

250 mg

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See facing page for brief summary of prescribing information.

J-4889-9

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-lycin Tablets (erythromycin enteric-coated tablets) are spe-
ly coated to protect the contents from the inactivating effects
f astric acidity and to permit efficient absorption when ad-
istered either immediately after meals or when given be-
en meals on an empty stomach.

ications: *Streptococcus pyogenes (group A beta-hemolytic*
ptococci): Upper and lower respiratory-tract, skin, and soft-
ue infections of mild to moderate severity. Parenteral benza-
e penicillin G is considered by the American Heart Associa-
to be the drug of choice in the treatment and prevention
streptococcal pharyngitis and in long-term prophylaxis of
umatic fever. When oral medication is necessary (because
parenteral route is contraindicated) or if there is known
rgy to penicillin, the following recommendations made by
American Heart Association apply: 1) Oral penicillin G or V
ere no allergy exists)—This is the drug of choice. Give for
inimum of 10 days; 2) Erythromycin—Give for a minimum
0 days. A few strains of streptococci resistant to erythro-
in have been reported.
ha-hemolytic streptococci (virdans group): Short-term pro-
laxis against bacterial endocarditis prior to dental or other
rative procedures in patients with a history of rheumatic
r or congenital heart disease who are hypersensitive to
icillin. (Erythromycin is not suitable prior to genitourinary
gery where the organisms likely to lead to bacteremia are
m-negative bacilli or the enterococcus group of streptococci.)
phylococcus aureus: Acute infections of skin and soft tissue
mild to moderate severity. Resistance may develop during
itment.
lococcus pneumoniae: Upper respiratory-tract infections
., otitis media, pharyngitis) and lower respiratory-tract in-
ions (e.g., pneumonia) of mild to moderate degree.
coplasma pneumoniae (Eaton agent, PPLO): In the treatment
primary atypical pneumonia, when due to this organism.
oonema pallidum: Infections due to this organism.
Corynebacterium diphtheriae and *Corynebacterium minutissimum:* As an adjunct to antitoxin, to prevent establishment of carriers, and to eradicate the organism in carriers. In the treatment of erythrasma.
Entamoeba histolytica: In the treatment of intestinal amebiasis only. Extra-enteric amebiasis requires treatment with other agents.
Listeria monocytogenes: Infections due to this organism.

Contraindication: Contraindicated in patients with known hypersensitivity to erythromycin.

Warning: Safety for use in pregnancy has not been established.

Precautions: Erythromycin is principally excreted by the liver. Caution should be exercised in administering the antibiotic to patients with impaired hepatic function. Surgical procedures should be performed when indicated.

Adverse reactions: The most frequent side effects of erythromycin preparations are gastrointestinal, such as abdominal cramping and discomfort, and are dose-related. Nausea, vomiting, and diarrhea occur infrequently with usual oral doses. During prolonged or repeated therapy, there is a possibility of overgrowth of non-susceptible bacteria or fungi. If such infections occur, the drug should be discontinued and appropriate therapy instituted. Mild allergic reactions such as urticaria and other skin rashes have occurred. Serious allergic reactions, including anaphylaxis, have been reported.

Treatment of overdosage: The drug is virtually nontoxic, though some individuals may exhibit gastric intolerance to even therapeutic amounts. Allergic reactions associated with acute overdosage should be handled in the usual manner—that is, by the administration of adrenalin, corticosteroids, and antihistamines as indicated and the prompt elimination of unabsorbed drug, in addition to all needed supportive measures.

How supplied: 250 mg—in bottles of 100 and in unit-dose packages of 100 enteric-coated tablets. Caution: Federal law prohibits dispensing without prescription.

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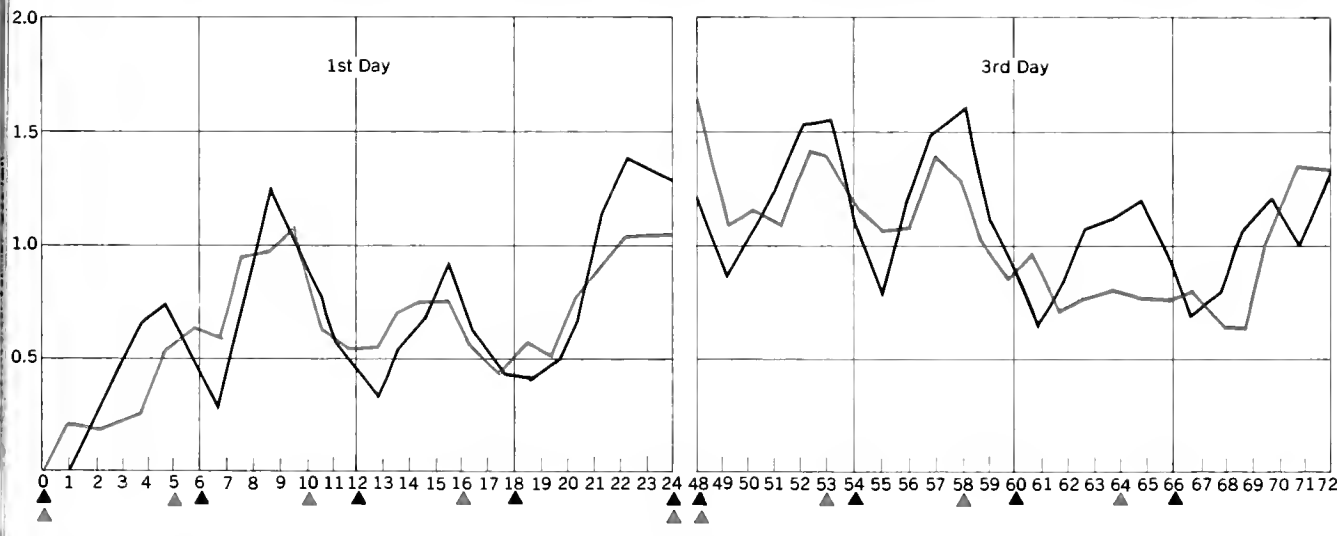

Regimen A (after meals)—One 250 mg E-Mycin® tablet administered q.i.d. immediately after breakfast, lunch, and dinner, and at bedtime with a snack.

Regimen B (between meals)—One 250 mg E-Mycin tablet administered q 6h at least two hours after meals.

E-Mycin Study CS076 on file at The Upjohn Company. The study was performed with twenty-two normal male adult volunteers utilizing a randomized two-way complete crossover design.

o statistically significant difference in area under
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urs at the 95% confidence level ($p>.05$).

ıe data clearly demonstrate that E-Mycin, when
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ıced average serum levels equivalent to those
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ast two hours after meals.

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The Upjohn Company, Kalamazoo, Michigan 49001, U.S.A.

MED B 7-

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?

Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the

Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

ain purpose of drug information r the patient is to get his coopera- on in following a drug regimen.

reparation and distribution of atient drug information

We would hope to amass infor- ation from physicians, medical cieties, the pharmaceutical indus- y and centers of medical learning. he ultimate responsibility for uni- rm labeling must, however, rest ith the Food and Drug Administra- on. There is nothing wrong with is agency saying, "this informa- on is generally agreed upon and herefore it should be used," as long s our process for getting the infor- ation is sound.

Distribution of the information a problem. In great measure it ould depend on the medication in uestion. For example, in the case f an injectable long-acting proges- erone, we would think it mandatory issue two separate leaflets—a hort one for the patient to read be- re getting the first shot and a long ne to take home in order to make a ecision about continuing therapy. this case, the information might e put directly on the package and ot removable at all. But for a medi- ation like an antihistamine this nformation might be issued sepa- ately, thus giving the physician the ption of distribution. This could reserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the pnysician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

---

nly the doctor can remove that fear y 20 or 30 minutes of conversation.

I'm not suggesting that we ithhold any information from the latient because, first of all, it would e totally dishonest and secondly, it ould defeat the very purpose of the nsert. I do think that a patient on the irth control pill should know about he incidence of phlebothrombosis.

If you're going to tell a patient he incidence of serious adverse re- ctions, then you have to tell him hat a concerned medical decision vas made to use a particular medi- ation in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

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I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

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AUTIONS: Use cautiously with other sedative, hypnotic rcotic agents. Use with caution in patients with acute or ic hepatic disease, fever, hyperthyroidism, diabetes tus, severe anemia, congestive heart failure, or a history ug dependence or suicidal tendencies. May impair ess and coordination with increased accident risk.

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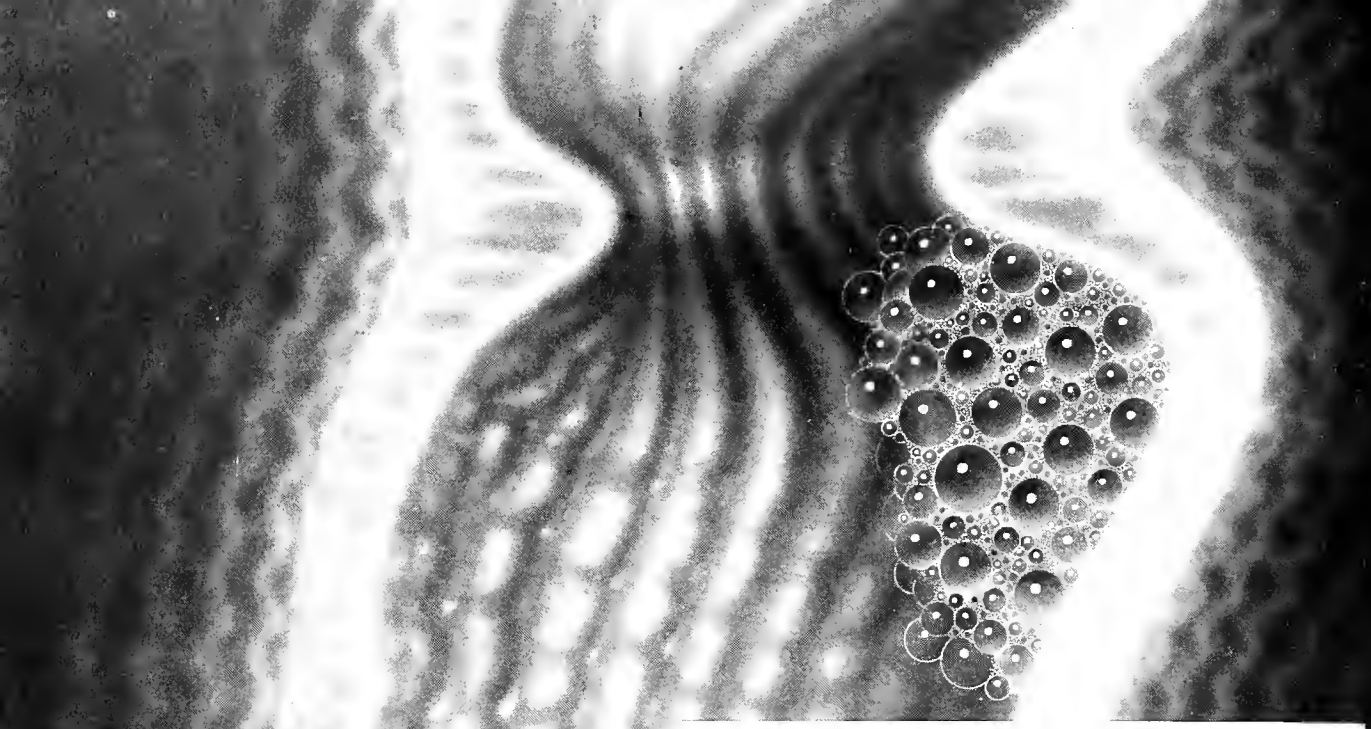

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Management of Pulmonary Embolism

Francis Robicsek, M.D., Harry K. Daugherty, M.D., Donald C. Mullen, M.D., Norris B. Harbold, Jr., M.D., Donald G. Hall, M.D., and Robert D. Jackson, M.D.

IT has been estimated that half a million patients suffer pulmonary embolization every year and 40,000 die as a consequence of their disease.[1] That these figures are considerably higher than those previously reported indicates two things: (1) the medical profession is increasingly aware of this problem, and (2) the introduction of pulmonary angiography and pulmonary scanning shed the light of accurate diagnosis on cases previously unrecognized.

While most physicians have regarded this disease, which often occurs as a dreaded complication of an otherwise successful surgical procedure, with a somewhat fatalistic attitude, some have recommended preventive measures. Weight reduction before elective surgery, elevation of the lower limbs, galvanic stimulation of the calf muscles during the operation, early postoperative mobilization and pharmacological treatment have been advocated to reduce the chances of phlebothrombosis and consequential pulmonary embolism. Unfortunately, these measures have been only partially successful. Pulmonary embolism still occurs in a significant number of patients and treatment is hindered by a number of persisting problems.

From the Department of Thoracic and Cardiovascular Surgery, Charlotte Memorial Hospital, Charlotte, North Carolina 28201
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PATHOPHYSIOLOGY NOT UNDERSTOOD

The first such problem is that even after a century of experimental and clinical research, the pathophysiology of pulmonary embolism is not completely understood.[2] Controversy continues between proponents of mechanical blockade and proponents of humoral and reflex vasoconstriction. Almost every year, theories emphasizing the role of histamine, serotonine and other bioactive substances are set forth, only to be questioned and later disproved. The situation is further obscured by the great diversity with which different patients react to different embolic insults to the lung. Some reactions are but mildly symptomatic of massive emboli while others bring about a deep shock following occlusion of secondary branches. The fact that some embolic occlusions result in infarctions and others do not remains an enigma. Although research has shed considerable light on the impact of pulmonary embolism on the heart, particularly the right ventricle and its prognostical significance of pulmonary embolism, it has left untouched our ignorance about the effects of pulmonary embolism on the coronary circulation and the intramyocardial distribution of blood flow.

UNDER-DIAGNOSIS

The second problem is underdiagnosis. Even in institutional care of patients, a large number of pulmonary emboli—probably the majority of them—go undetected. It is evident that the disease must be suspected more frequently.[3]

The main reason for underdiagnosis is the non-specificity of the clinical picture in both small and massive pulmonary embolism. Clinical evidence of thrombophlebitis is present in only a third of the patients with manifest pulmonary embolism. When the emboli are small enough to reach the periphery of the lung, the patient usually presents himself with pleuritic pain and friction rub, and later with occasional hemoptysis and, in about half of the cases, with consolidation of the infarcted area and pleural effusion. Involvement of secondary major branches usually leads to tachypnea, rales, tachycardia, fever and loud pulmonary second sound. If the pulmonary embolus is massive, it is usually associated with shock, severe dyspnea and dull mid-chest pain, greatly accentuated P_2 and the development of S_3 or S_4 gallop sounds.

While the development of the combination of these symptoms may be characteristic of pulmonary embolism, they also may mimic other life-threatening conditions, primarily myocardial infarction.

The other reason for underdiagnosing pulmonary embolism is the continuing lack of specific laboratory tests. Enzyme studies, once promising, have not proved to be specific. The only way to avoid the serious, sometimes deadly mistake of under-diagnosis of pulmonary embolization is to consider it a possibility in every challenging diagnostic situation, especially if the patient has symptoms of phlebothrombosis, heart failure, is on bed-rest or has recently undergone surgery. The old 19th Century medical saying should be rephrased from "If it is young, and the symptoms don't make sense, think of tuberculosis" to "If it is lung, and the symptoms don't make sense, think of pulmonary embolism."

OVER-DIAGNOSIS

It should also be mentioned, however, that some physicians, trying to avoid the sandtrap of underdiagnosing, have fallen into the trap of over-diagnosing. We can recall several instances in which patients with nondescript chest pain, cor pulmonale or even a simple nosebleed have been diagnosed as having pulmonary emboli, been placed on anticoagulants or, worse, have had their cava ligated.

ASSESSMENT OF DIAGNOSTIC TESTS

Closely associated with the problem of under- and over-emphasis is the problem of proper assessment of diagnostic tests.

Enzyme studies

The unreliability of enzyme studies has already been mentioned. While the lactic acid dehydrogenase (LDH) is elevated in 50-70% of the cases, the glutamic oxalacetic transaminase (GOT) shows an abnormally high value only in 20-30% and creatinine phosphokinase only in 1-5%. The triad thought to be typical of pulmonary embolism, namely elevated LDH, normal GOT and elevated bilirubin, occurs only in 10-15% of patients with pulmonary emboli.

Arterial oxygen tension measurements

Recent studies contribute pathognostic significance to arterial oxygen tension measurements. It has been found that in most patients with significant pulmonary emboli, the oxygen tension of the arterial blood was below 80; only in 11.5% was it above 80 and particularly never above 90 mmHg. This test, however, also lacks specificity because in other shock-stages, such as in massive myocardial infarction, low oxygen tensions are also common.[4]

Radiogram of the chest

While these biochemical tests have been downgraded, the conventional radiogram of the chest has gained value. This, however, can be appreciated only in institutions where there is a close exchange of clinical information between the physician in charge of the patient and an experienced radiologist aware that pulmonary embolization may lurk in the background of the clinical picture. According to the National Heart and Lung Institute trial study, the two most common features on the radiogram are high diaphragm on the embolized side and pulmonary consolidation. It has to be noted, however, that this study included only patients with large pulmonary emboli and high diaphragm and pulmonary consolidation, together with pleural effusion usually signified either as a well developed infarction or infarction in progress. Other x-ray signs which may call attention to the presence of a massive pulmonary embolus are: dilatation of the pulmonary artery, or to the contrary an abnormally small hilus, hypovascularity, cutoff of the peripheral vessels and secondary cardiac enlargement.[5]

Electrocardiogram

The value of the electrocardiogram has been a controversial issue. Both left and right ventricular changes have been described, and the electrocardiographic picture of pulmonary embolism may be confused with those of myocardial infarction. The typical EKG picture of an acute cor pulmonale occurs in only 31% of the patients and only if about 60% of the pulmonary arterial tree is obstructed. The recent consensus on EKG appears to be that it is a very sensitive test in pulmonary embolism but it is not very specific. Its main value lies not so much in the verification of pulmonary embolization but rather in its distinction of a massive myocardial infarction.

Other diagnostic tests

There are a number of diagnostic tests which are not aimed to demonstrate the presence of blood clots in the pulmonary vasculature but to establish the clinical diagnosis of phlebothrombosis of the lower extremities: radioactive fibrinogen test, impedance phlebography, Doppler ultrasound and contrast phlebography. The diagnostic yield of these tests could be quite high in experienced hands. Naturally, because of the close association between deep vein thrombosis and pulmonary embolism, if the presence of phlebothrombosis is proven in a patient suspected of pulmonary embolism, the likelihood of the latter is quite convincing.

While the diagnostic studies heretofore listed are largely nonspecific, there are two tests which are considered to be virtually specific in the diagnosis of pulmonary embolism: perfusion lung-scanning and pulmonary angiography.

Lung-scanning

It is generally recognized that if a patient has a strong possibility of pulmonary embolism, multiple-view lung-scanning should be performed immediately. This examination provides useful information on both the regional and quantitative pulmonary flow. It is simple and safe, even for patients in poor general condition. Most isotopic studies use iodine-131 tagged albumin macroaggregates or microspheres of albumin tagged with technetium. On the scanogram perfusion deficits are clearly outlined, and pulmonary emboli of mod-

erate-to-large sizes are easily recognized. The specificity of pulmonary perfusion scanning has been recently further improved by combining it with radioactive gas-washout. This is done by making the patient inhale radioactive gas (Xenon 133) in a closed breathing system. Pulmonary embolus will produce perfusion deficit only; parenchymal lung disease will result in both perfusion and ventilation defect.[6]

Pulmonary angiography

The "last word" in the laboratory diagnosis of pulmonary embolism is undoubtedly pulmonary angiography. While even this examination is not absolutely free of diagnostic mishaps—abnormalities associated with tumors, emphysema and bronchiectasis may cause difficulties in the interpretation—this examination is the most specific tool available for verification of pulmonary embolism. Done by experienced hands in a well prepared laboratory, the risk of this examination does not exceed that of pulmonary scanning, and, while the scan outlines the perfusion deficit of the pulmonary parenchyma, the angiogram visualizes the anatomy of the pulmonary vasculature. Another advantage of angiography is the feasibility of added hemodynamic studies using the same catheter and the possibility of continued monitoring of the pulmonary arterial pressure by an indwelling catheter. In our experience, normal pulmonary arterial pressure excludes life-threatening pulmonary embolism, and gradual increase of the pulmonary pressure, if embolism is diagnosed, indicates progression of the thrombus and/or deterioration of the circulation.

OPTIMAL THERAPY

The last problem to be mentioned is the optimal therapy for pulmonary emboli.

Most physicians agree that the treatment for acute, not very severe, pulmonary embolization is medical. Controversy, however, exists about the management of patients with major embolization, with recurrent embolization and/or with contraindications to anticoagulation.

Intravenous heparin therapy

As a rule, intravenous heparin therapy should be initiated as soon as the diagnosis of pulmonary embolus is made or strongly suspected. The administration of heparin may be every four hours through an indwelling catheter or by continuous infusion. A large dose of 10,000 IU should be given initially followed by 4,000-8,000 IU maintenance doses to maintain the clotting time 30-40 minutes. It is mandatory that the Lee-White clotting time be determined daily, reported without delay and acted upon immediately. Therapeutic regimens in which the first clotting time is taken 24 hours after the initiation of the therapy, reported on the following morning and acted upon a day later are without clinical value.[7]

Thrombolytic therapy

There have been recent clinical trials to combine intravenous heparin with thrombolytic therapy. Urokinase or streptokinase have been given for an initial period of 12 hours with promising clinical results. The disadvantages of thrombolytic therapy are the relatively high occurrence of complications and the scarcity of thrombolytic agents.

If the embolization is not severe and the episode does not recur, the patient should remain on intravenous heparin therapy for not less than seven days and probably not exceeding two weeks. He should be ambulatory and wearing elastic stockings from the third day unless symptoms of phlebothrombosis exist. If they do, the phlebitis should be treated concomitantly with bed-rest, elevation of the involved extremity and warm soaks.

Oral anticoagulants

If the patient's condition does not deteriorate and embolization does not recur, heparin is gradually substituted by oral anticoagulants, preferably by sodium warfarin. Intravenous heparin is discontinued, however, only after the patient's prothrombin time reaches double that of the control in seconds. He should be maintained on a well supervised oral anticoagulant for four to six months.[8]

Supportive management

If the initial episode of pulmonary embolization was severe, the patient is in need of active and conscientious supportive management. He should be transferred to the intensive care unit where heart rate, electrocardiogram, respiration, arterial, central venous and pulmonary arterial pressures are continuously monitored. The diagnosis of the embolization should be confirmed and its extent determined not only by lung scan but by angiography. Oxygen should be administered throughout the critical period to maintain arterial pO_2 above 60. If oxygen delivered by mask is not effective enough, consideration should be given to tracheostomy and assisted respiration. We strongly believe that adequate digitalization is essential in the management of acute cor pulmonale secondary to pulmonary embolism.

Pulmonary embolectomy

If continued deterioration of vital signs indicates that the above measures are not sufficient, if arterial pO_2 remains unacceptably low, pulmonary hypertension worsens, heart rate increases, etc., pulmonary embolectomy should be performed without delay. Early consideration should also be given to pulmonary embolectomy if the angiogram shows massive occlusive changes involving both pulmonary arteries. Under no circumstances should the patient be prepared for pulmonary embolectomy unless the diagnosis is confirmed by angiography.[9]

While pulmonary embolectomy is the only recourse in certain otherwise hopeless situations, it is a measure which could and should be applied infrequently. It is a heroic operation with an operative mortality rate of 40-50% and should be chosen with utmost consideration and intelligent evaluation. Experiences indicate that if the patient survives the first 30 minutes of embolization, which is long enough to institute adequate supportive management and anticoagulant therapy, he will most likely recover without operative intervention. Naturally, if the patient has a massive embolus,

which leaves only a lobe or less functioning, and if his condition continues to deteriorate on energetic supportive therapy, there is no alternative but a speedy embolectomy on cardio-pulmonary bypass.

Caval interruption

The other surgical procedure applied in patients with pulmonary embolization is interruption of the inferior caval vein. This operation is not aimed to treat pulmonary emboli but to prevent their recurrence. As in pulmonary embolectomy, the surgical indication of caval interruption has narrowed considerably in the past few years. The reason is the high morbidity rate—the venous stasis in the lower extremities increases in 30-40% of the patients. Ten years ago the indication for cava ligation was simply the suspicion of pulmonary embolism. The most frequent question concerned method: with simple ligation, different ways of plication or clamping devices; that is, how to do it? This matter now is fairly well settled. It has been shown that plication procedures, extra- and intra-caval devices designed to reduce postoperative stasis, offer little or no advantage over simple ligation, and they may be associated with a slight increase in recurrent embolization.[10]

Nowadays the most frequent question concerns timing and circumstances for ligating the inferior vena cava; that is, when to do it?

Patients who have repeated embolization while adequately anticoagulated are obvious candidates for vena cava ligation. Another possible candidate is the patient whose initial pulmonary embolus was massive and whose cardiopulmonary status remains in such a precarious condition that a second embolus probably would be fatal. Cava ligation should also be considered after pulmonary embolectomy. Cava ligation should be avoided, if possible, in patients with chronic indurated edema and skin discoloration due to lymphatic and venous stasis. Such patients respond to caval interruption with further severe deterioration of their circulatory stasis. The diagnosis of pulmonary embolism should always be confirmed by lung scan and/or (preferably) by pulmonary angiography before cava ligation is recommended.

SUMMARY

Pulmonary embolization should be suspected even when "typical" symptoms of this disease are absent. The diagnosis of pulmonary embolization should be confirmed by lung scan and/or pulmonary angiography. Initial episodes of pulmonary embolus should be treated with anticoagulant therapy and general supportive measures; only rare cases of massive embolization require pulmonary embolectomy. Vena cava ligation is recommended for repeated cases of pulmonary embolization in patients who are adequately anticoagulated.

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It is highly probable that different portions of the alimentary canal are endued with different *kinds* of sensibility or rather excitability. The sensibility of the stomach is in accordance with the presence of *undigested* food, when first swallowed, which would and does occasion much inconvenience in the duodenum and other intestines; while we know that the presence of bile in the duodenum produces no unpleasant effect there; whereas, if it regurgitate into the stomach, it disorders the whole system. The organic sensibility of the large intestines is very different in kind from that of the small. The presence of faecal matters in the colon and rectum produces no sensation; but if substances pass down undigested from the stomach, the whole line of the intestines is irritated—although the effects are often not felt *there*, but in various other parts of the body from sympathy. Onions, chestnuts, and a hundred other things, eaten in the evening, will disturb the organic or special sensibility of the stomach and bowels, producing what is called the fidgets, restlessness, incubus, and sundry other disagreeable effects, in parts of the body far remote from the actual seat of irritation.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 4.

Assets and Liabilities of Helicopter Evacuation in Support of Emergency Medical Services

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INTRODUCTION

STIMULATED by the reduction in mortality and morbidity through helicopter evacuation of battle casualties, the civilian community has frequently envisioned a parallel achievement in civilian emergencies.

The MAST (Military Assistance to Safety and Traffic) helicopter program of North Carolina offers an opportunity to assess the helicopter's role in these areas, since the medical aspects of all cases evacuated are reviewed by a physician.

Previous studies of civilian demonstration projects[1,2] have dealt with the technical aspects of aviation and the cost of operation. Although these are important aspects for study, data vary from one locale to another. Moreover, these reports fail to address themselves to the major aspect of the problem—"What was the benefit to the patient?"

The following report analyzes a year's missions by the North Carolina MAST program. Excluded are missions involving military personnel and their dependents as well as "practice" missions prior to formal inauguration of MAST in November, 1973.

OPERATION PLAN

The 57th Medical Detachment (RA), Ft. Bragg, North Carolina, supports the North Carolina MAST program. Federal guidelines limit MAST coverage to a 100 nautical mile radius of Ft. Bragg. Five large receiving hospitals have been designated at the periphery of the area (Fig. 1). Helicopters fly from Ft. Bragg to the pickup area, then to the closest receiving hospital.

Since the MAST area includes 89 community hospitals and 240 ambulance providers, the patient is first taken by ground vehicle to a local hospital for initial care. This system allows a physician to make the initial assessment of the need for air evacuation. If air evacuation is desired, the referring physician calls the MAST coordinating physician. Only after the medical aspects of the case have been reviewed does the MAST physician request a Medevac. Arrival times at the referring and receiving hospitals with details of the patient's condition are related by telephone, supplemented by radio (155.340 mhz, 155.280 mhz), allowing helicopters to communicate directly with hospitals and ambulance providers.

DATA ANALYSIS

The period from November, 1973, to November, 1974, was selected for study. Evaluation included a review of the medic's in-flight patient log and times of mission request, liftoff, arrival at the referring hospital, airborne with the patient and arrival at the receiving hospital.

The total time of the mission (mission request to arrival at receiving hospital) and patient transfer time (time from referring to receiving hospital) were compared with known driving times for ground ambulances between referring and receiving hospitals.

The patient's medical status was assessed in terms of the etiology of the emergency, major area of body or organ system affected and whether in the authors' estimation the helicopter evacuation affected patient morbidity or mortality.

Morbidity and mortality determi-

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North Carolina MAST Program supported by the North Carolina Department of Human Resources, Division of Facility Services, Office of Emergency Medical Services; North Carolina Regional Medical Program; Department of Surgery, University of North Carolina School of Medicine and the North Carolina Memorial Hospital; North Carolina Department of Transportation, Governor's Highway Safety Program; and 57th Medical Detachment, Ft. Bragg, North Carolina.

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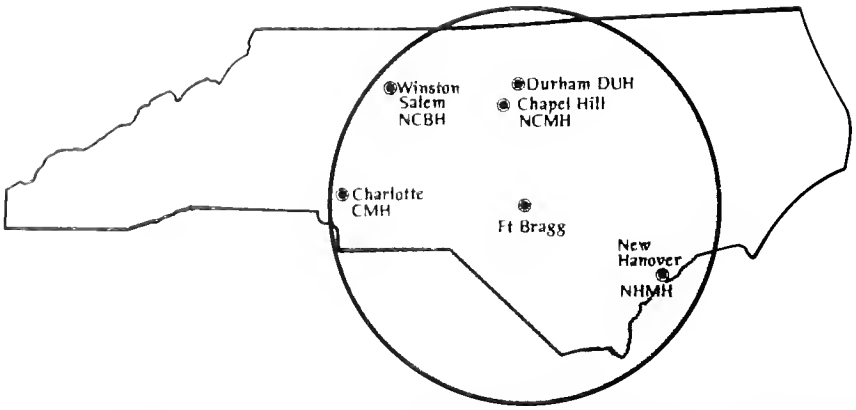

Geographic area covered by the North Carolina MAST Program. CMH = Charlotte Memorial Hospital, NCBH = North Carolina Baptist Hospital and the Bowman Gray School of Medicine, DUH = Duke University Hospital and the Duke University School of Medicine, NCMH = North Carolina Memorial Hospital and the University of North Carolina School of Medicine, HNMH = New Hanover Memorial Hospital.

nations were based on data from the medic's record of the patient's condition in flight, a review of the patient's hospital chart at the receiving hospital and, where further clarification was necessary, a review of the patient's hospital chart at the referring hospital. Whenever possible, physicians who actually cared for a patient were interviewed.

Mortality and morbidity were said to be lessened if any of the following were present:

A. A rapidly deteriorating or unstable patient who probably would have died during the known driving time to the receiving hospital. For example, a patient with a proven epidural hematoma with a dilated pupil 1.5 hours from the receiving hospital.

B. A patient requiring in-transit care capable of being rendered by the Army medic but not possible in North Carolina under the present statutes governing emergency medical technicians (EMTs). For example, the necessity to regulate, independent of a physician's direction, an isoproterenol drip to maintain heart rate in cases of complete heart block.

C. Inadequacy of ground vehicles. For example, roads impassable due to inclement weather, multiple patients exceeding local vehicle capacity or cumbersome medical equipment physically impossible to fit into a conventional ambulance.

If a patient subsequently expired for any reason, he was counted as a mortality with no credit for reduction in morbidity despite the possible presence of one or more of the above criteria.

Employing a scale of 0 (poor) to 10 (excellent), patient data were further examined for accuracy of the initial diagnosis and appropriateness of initial treatment before evacuation.

The appropriateness of the receiving hospital selected by the referring physician in terms of patient transit time was also noted.

RESULTS

During the study period, 116 requests for helicopter evacuation were made. Six were refused by the MAST coordinating physician, who concluded the medical condition was not severe enough to warrant a helicopter. Four requests were approved but could not be flown due to weather. Two missions were canceled when the patients expired before the helicopter arrived. One of these patients had sustained massive thoracic and cranial trauma after a vehicle accident; the second was in septic shock after a criminal abortion. Both were moribund at the time a helicopter was requested. One request accomplished the transfer of frozen blood for kidney transplantation and was not considered further.

The remaining 103 missions evacuated 110 patients. Complete data concerning time and distance traveled were available in 100 (91 percent). Documentation of the medical condition was complete for 93 (85 percent).

With the exception of the six requests refused by the MAST physician, all requests seemed valid on the basis of telephone information. Subsequent review of patient records revealed six additional cases clearly not severe enough to warrant helicopter evacuation. Two of these patients, a hysterical conversion reaction presenting as a rapidly progressive quadriplegia and a strangulating cryptorchid testicle diagnosed as myocardial infarction, were clearly the result of misdiagnosis. In the other four cases, the diagnosis was correct but did not appear to be as severe as initially described.

The diagnostic accuracy on the part of the referring physicians was generally correct and in 83 percent of the cases either all or a significant portion of the referring diagnosis was supported by the findings at the receiving hospital.

Only 55 percent of patients, however, had been appropriately treated to minimize morbidity and mortality during transfer. Chest tubes and intravenous infusions were most frequently correct; immobilization of fractures and adequate provision for an airway were most frequently neglected.

In 32 percent of the evacuations, the receiving hospital selected by the referring physician was not the closest and mission time was prolonged.

For ease of analysis, the 87 patients judged to be valid helicopter evacuations were arbitrarily divided into four groups (Tables I-IV). Traumatic cases were further analyzed in terms of the most serious of their various diagnoses (Table V).

A review of the medic's in-flight record of the patient's condition and the treatment he rendered indicated 10 patients improved in transit, four deteriorated and the remainder did not appear to change. Improvement in condition was most often the result of intravenous infusion of fluid to elevate blood pressure. Deterioration of the four patients resulted from conditions beyond the con-

rol of the medic. Three of the patients had sustained severe cranial trauma. One was pronounced dead on arrival despite intubation and manual ventilation by the medic and the other two subsequently expired. The fourth patient was also dead on arrival with a massive hemothorax and a traumatic rupture of the thoracic aorta.

It is apparent from Tables II and V that 13 of the 23 mortalities were associated with central nervous system problems. The two deaths in the gastrointestinal bleeding group (Table IV) were cirrhotics with bleeding esophageal varices. Both died in hepatic coma after bleeding had been controlled.

Three lives were thought to have been saved as a result of helicopter evacuation: a gastrointestinal bleeder transported in shock who received four units of blood during her 50-minute evacuation; a traumatized patient with a depressed skull fracture and an epidural hematoma with uncal herniation following a 25-minute evacuation; and a patient with preinfarction angina and ventricular premature beats who underwent coronary angiography and emergency coronary artery bypass surgery upon arrival at the receiving hospital.

The greatest reduction in morbidity was clearly in the cardiac group (Table II). Morbidity was reduced in the embolus (Table II) and reimplantation groups (Table I) due to the average (77-minute) reduction in ischemia time (comparing the total helicopter time to the driving time).

Despite an average response time of 25 ± 15 minutes, the mean total time consumed by helicopter evacuation from request to arrival at the receiving hospital of 119 ± 43 minutes was significantly less than the calculated driving time of 162 ± 51 minutes. The mean time from referring to receiving hospital of 53 ± 24 minutes was faster than the driving time for obvious reasons. In only 19 instances was the total helicopter time longer than the estimated driving time.

Ten of these 19 patients (53 percent) expired, compared to a mortality of 20 percent for the 66 pa-

Table I
Distribution of Trauma Cases According to Etiology

Etiology	Number	Mortality	Morbidity Reduced	Morbidity Increased	Morbidity Indefinite
Vehicle accident	22	7	7	1	7
Gunshot wound	7	2	2	0	3
Stab wound	1	0	0	0	1
Blunt instrument	1	0	0	0	1
Falls	4	2	0	0	2
Traumatic amputation (re-implantation)	2	0	2	0	0
Operative mishap	2	1	0	0	1
Sports	1	0	0	0	1
Tetanus	1	0	0	1	0
Burns	4	0	2	0	2
Total	45	12	13	2	18
%	—	27%	29%	4%	40%

Table II
Distribution of Cases Considered Cardiovascular

Etiology	Number	Mortality	Morbidity Reduced	Morbidity Increased	Morbidity Indefinite
Myocardial infarct	6	0	6	0	0
Stokes-Adams	5	0	5	0	0
Embolus	2	0	2	0	0
Ruptured abdominal aneurysm	2	2	0	0	0
Dissecting thoracic aneurysm	2	1	1	0	0
Subarachnoid bleeding	3	2	0	0	1
Arteritis	1	0	1	0	0
Total	21	5	15	0	1
%	—	24%	71%	0%	5%

Table III
Distribution of Illness in Newborn Infants

Etiology	Number	Mortality	Morbidity Reduced	Morbidity Increased	Morbidity Indefinite
Respiratory distress syndrome	5	1	2	0	2
Cyanotic heart disease	1	1	0	0	0
Total	6	2	2	0	2
%	—	33%	33%	0%	33%

Table IV
Miscellaneous Illnesses

Etiology	Number	Mortality	Morbidity Reduced	Morbidity Increased	Morbidity Indefinite
Renal failure	3	0	0	0	3
G-I bleeding	5	2	1	0	2
Pneumonia	2	0	1	0	1
Status epilepticus	1	0	0	0	1
Metastatic cancer	2	1	0	0	1
PAM inhalation	1	1	0	0	0
Septic shock	1	0	1	0	0
Total	15	4	3	0	8
%	—	27%	20%	0%	53%

Table V
Distribution of Trauma Cases According to Major Diagnosis

Diagnosis	Number	Mortality	Morbidity Reduced (%)	Morbidity Increased (%)	Morbidity Indefinite
Acute subdural or epidural hematoma	4	2	2	0	0
Cerebral or brain stem contusion	13	7	2	0	4
Spinal cord injury	5	2	0	0	3
Penetrating abdominal	3	0	1	0	2
Blunt abdominal	3	0	1	1	1
Penetrating thoracic	2	0	2	0	0
Blunt thoracic	5	1	1	0	3
Multiple fractures	3	0	0	0	3
Burns	4	0	2	0	2
Re-implanted extremity	2	0	2	0	0
Tetanus p laceration	1	0	0	1	0
Total	45	12	13	2	18
%	—	27%	29%	4%	40%

tients evacuated in a reduced time. Four of the 10 fatalities might have been prevented by faster evacuation. The remaining six patients, all with severe brain stem contusions, probably had fatal injuries and would have died regardless of evacuation time.

In two cases (Table I and V) it was judged that helicopter evacuation increased morbidity. Both consumed more time in helicopter evacuation than the estimated driving time.

DISCUSSION

We have presented a simple, reliable system of helicopter evacuation which functions well in a rural area such as North Carolina. Physician cooperation was excellent; inappropriate utilization was rare; and the mission completion rate was high despite adverse weather.

At the inception of the MAST program in North Carolina, the majority of ambulance attendants possessed only basic American Red Cross first aid skills (26 hours) and ambulance vehicles were poorly equipped. It was evident that, in addition to speed, evacuation by helicopter had the possible added advantages of better patient care en route and a better equipped vehicle. As a result of efforts by the Office of Emergency Medical Services, nearly 2,000 ambulance attendants were certified at the 81-hour EMT level during 1974 and ambulance equipment was upgraded to standards set by the American College of Surgeons Committee on Trauma. Thus, comparing the helicopter to the existing ground capability in North Carolina, morbidity was reduced in only 10 cases (six cardiac, four traumatic) as a result of in-flight care; whereas, in the majority of instances in which morbidity and mortality were favorably affected, speed was either the sole or major factor. Further efforts appear to be warranted to reduce both total mission time (faster response) and patient transport time (referral to a closer hospital).

From the inception of the program it has been emphasized to physicians that although the total time involved in a helicopter evacuation might exceed the driving time for a given transfer, the period of time in which the patient was not under a doctor's care in a favorable environment would be greatly reduced. Such is the case when one compares the 53-minute helicopter time to the 162-minute estimated mean driving time. It is interesting to note that despite the added distance from Ft. Bragg to the referring hospital, the total mission time was still less than the estimated driving time in the majority of patient transfers.

The 71 percent reduction in morbidity in cardiac cases indicates that helicopter evacuation should be emphasized for patients of this type and that consideration should be given to additional training of medics and to more sophisticated equipment such as cardiac monitors, defibrillators and electronic blood pressure monitors. On the basis of these data, it is impossible to single out any other category of patient as being particularly appropriate for helicopter evacuation.

Lack of speed probably contributed to four of the deaths. Although this was obviously a judgment decision by the reviewer, the possibility of error was no greater than in the three judgments in which it was claimed the helicopter saved a life. In this study, therefore, there did not appear to be any effect by the helicopter on patient mortality. The overall mortality of 28 percent reflects the severity of illness in the patients evacuated.

The criteria for reduction in patient morbidity, although rigorously applied, were still subjective and are thus open to criticism. The 38 percent overall reduction in morbidity claimed for the helicopter, while not the panacea expected by some, appears realistic, is possibly a minimal figure and compares favorably with other therapeutic modalities accepted by the medical community and the public. It should be remembered that this report compares the helicopter to existing ground transportation in a given geographic locale; extrapolation to other locales should be done cautiously.

ACKNOWLEDGMENTS

The authors wish to acknowledge the efforts of Major Robert Rose, commanding officer, Captain Terrance Muldoon, Warrant Officer Joseph McDonald and the pilots and crews of the 57th Medical Detachment, Ft. Bragg, North Carolina; Colonel Robert E. Mathias, Commanding Officer, 44th Medical Brigade; and Colonel Albert L. Gore, Commanding Officer, Womack Army Hospital, Ft. Bragg, North Carolina. Our appreciation also is extended to Noel B. McDevitt, M.D., George Johnson, Jr., M.D., and Stanley R. Mandel, M.D., for their services as MAST coordinating physicians.

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Anton Chekhov: A Physician-Genius in Spite of Himself

Part IV

—Conclusion—

Richard E. Cytowic

Chekhov's Doctors

IT is interesting that Anton Chekhov, whom history has shown to be a literary genius, accomplished physician and a famous personality during his own era, should look upon himself as a failure. The connection between Chekhov and his fictional physicians is a deprecatory self-image. Common to his doctors is an acceptance of the tedium based on the belief that nothing can change the way things are.

One such person is Dr. Ragin of "*Palata No. 6*" ("Ward No. 6," 1892). He is the ineffective director of the insane ward in a provincial hospital, a haven of filth, inadequacy and generalized misery. Eager in his early career to institute reform and improve efficiency and treatment, Dr. Ragin grows content to leave patients to a degrading existence among the vermin, disease and beatings of the cruel guard Nikita, who also steals what little allowance they have.

Dr. Ragin consoles himself by rationalizing that "there is nothing on earth so fine that it has not had some filth at its origin." He is caught in a circle of specious logic, arguing that doctors should not keep people from dying since death is the normal, legitimate end for everyone, and that "suffering is said to lead man to perfection." He gradually withdraws from his duties, seeking solace in vodka and the reading of philosophy.

His only medical journal is *Vratch (The Physician)*, which he reads backwards. He is amazed at the transformation that medicine has undergone in 25 years. Regarding it as little more than alchemy or metaphysics as a student, Dr. Ragin is now aroused with wonder and enthusiasm. "What unexpected brilliance, what a revolution!" He marvels at modern anesthesia with which one can perform operations that even the great Pirogov once considered impossible. A cure for syphilis, theories of heredity, hypnotism, the discoveries of Pasteur and Koch, modern humane treatment of psychotics—it is all a new world to Ragin. Still, he cannot accept it, cannot believe anything has changed:

> There's antiseptics and Koch and Pasteur, but the essence of the work hasn't changed a bit. Illness and mortality exist just the same. . . . It's all rubbish and bustle, and the difference between the best Viennese clinic and my hospital is, in effect, nonexistent.

He befriends one of the patients, a paranoid schizophrenic, who is intelligent enough to recognize and point out Dr. Ragin's foibles. "My illness," he says, "is that in twenty years I've found only one intelligent person in the whole town, and he's a lunatic." His ambitious assistants (one of whom owns a single book, "New Prescriptions of the Vienna Clinic") slowly undermine his position, force his resignation and observe his financial demise. Ultimately, he is judged insane and committed to Ward No. 6, where he dies of a stroke after being brutally beaten by Nikita.

Dr. Startsev, in "Ionych" (1898), succumbs to bourgeoise materialism rather than allowing himself a demise such as Dr. Ragin's. He is a sycophant of the Turkin family, the pompous pseudointellectuals of their small provincial town. Startsev proposes to their daughter, Katerina, although she is more interested in her career as a concert pianist and wants nothing to do with him. Rejected, he sublimates his desire and builds up a large practice despite his inadequacy as a physician. He accumulates much wealth and gains prominence among the local intelligentsia, although, deep down, he detests the provincial residents and his life among them. When Katerina returns from the conservatory, having insufficient talent to launch a career, she suggests marriage to Startsev. The old bachelor has lost his original vis-

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ion and, instead of accepting the idea of marriage, he throws a bucket of cold water on Katerina. He is resigned not to change his way of life since he is already established among the citizenry.

In "*Supruga*" ("The Companion," 1895) one finds a nameless physician already married to a capricious, adulterous wife. Working long hours to support her and her tastes, he becomes exhausted and contracts tuberculosis. He suggests divorce in order to live his last few years alone in peace. He even agrees to appear the guilty party and provide alimony. But the wife refuses because she is afraid of losing her social position. Typically, the doctor accepts his fate without argument and continues to work himself to death.

Chekhov practiced no sex discrimination when creating his melancholy characters. "*Khoroshyie Lyudi*" ("Excellent People," 1886) shows Doctoress Semionova slaving through a medical practice that she finds distasteful. The solution enabling her to tolerate this predicament is to detach all emotion from her clinical practice, and, in fact, from her personal life as well. She is cold, disinterested, and calmly accepts her boring life. She shows no emotion as she watches her brother die of an acute illness. Chekhov aptly compares her to an ill animal warming itself in the sun.

Many of Chekhov's fictitious physicians find escape from their ennui and sense of futility in death. Such is the case of Dr. Dymov in "*La Linotte*" (1891). He works hard as an assistant physician in one hospital and as an autopsy prosector in another. Since he has few private patients, these jobs are necessary to support himself and his frivolous wife. She is unfaithful and serves as a constant source of criticism. When Dymov becomes seriously ill, one of his colleagues tells her that he has aspirated the diphtheric membrane from a young boy with that disease. Dymov contracts diphtheria in his nose and lapses into cardiac failure. After he dies, his wife realizes what a wonderful husband he had been and blames herself for his death.

Dr. Sergievich provides a student with another type of escape, this time drugs, in "*Strokh*" ("Terror," 1892). After visiting the Moscow brothels with some friends, the law student Vassilev is overcome with both disgust and empathy for the women he has seen. He feels sick for living in a world where human beings can be driven to such low, vile levels of existence. The psychiatrist obtains a complete personal history and tests his tactile sensibility with a bizarre instrument. Vassilev sinks to the floor, crying because he can do nothing to change the way things are, for himself or the prostitutes. Dr. Sergievich understands and sends Vassilev home with prescriptions for bromides and morphine.

The doctors of Chekhov's stories are discontented men, seeing the need for change in their lives and the lives of those about them. But they lack any vision of how that change can be brought about constructively. Their impotence is mirrored by the doctors who appear as key characters in all but one of Chekhov's plays.

In *Chayka (The Sea Gull,* 1896), the elderly Dr. Dorn is shown as an impotent, ineffective hanger-on in the Sorin household. A 55-year-old bachelor, Dorn used to be the ladies' favorite, mainly because of his skill as a physician. Now all he can do is prescribe valerian drops and quinine for any ailment about which his attention is sought. He regrets his life, but realizes that it is too late for him to change anything:

> Life has to be taken seriously, but when it comes to taking cures at sixty, and regretting that you don't get enough enjoyment out of life when you were young—all that, forgive me, is just futile (II,i).

He is an empathetic observer of Trepilov's love affair with Masha but more fascinated by Trepilov's play. He admits that although he has lived a varied and discriminating life, he would like to have been an artist and experience the true joy and excitement of creativity. Dorn has never been a man of vision or imagination, though, and his problem is not that of teaching an old dog new tricks—simply knowing what tricks to learn. He would gladly help the disconsolate Masha, and everyone else, but is paralyzed with ignorance: "What can I do, my child? Tell me what can I do? What?" (I,i).

This same sense of futility appears again in *Dyadya Vanya (Uncle Vanya,* 1890, revised 1898). In this play, Chekhov's answer to boredom and depression is "work!" Although the play takes its title from Ivan (Vanya) Voinitsky, its main protagonist is clearly Dr. Astrov, who believes that "only God knows what our real vocation is" (I,i). Astrov is a prototype ecologist who plants forests and manages wildlife and wonders what will become of them in future years. He is one of the few people left who can appreciate the simplicity and beauty of life around him:

> Anyone who can burn up all that beauty in a stove, who can destroy something that we cannot create, must be a barbarian incapable of reason. . . . When I hear the rustling of the young trees I planted with my own hands, I'm conscious of the fact that if mankind is happy in a thousand years' time, I'll be responsible for it even though only to a very minute extent (I,i).

Astrov receives no satisfaction or recognition for his work, and is not solaced by Nanny's consolation: "If people won't remember, God will" (I,i). He hopes to make a better world for future generations, even though his is personally one of misery and self-deprecation:

> As for my own life, God knows I can find nothing good in it at all. . . . I work harder than anyone in the district—you know that—fate batters me continuously, at times I suffer unbearably. I'm not expecting anything for myself any longer (II,i).

He visits in a household of unhappy people that is set into commotion by the return of Professor Serebriakov and his new wife Yelena, who is young, beautiful, and bored. She is too weak to resist the advances of Dr. Astrov, who fawns on her beautiful emptiness, and she alone realizes him as a visionary:

> He has breadth of outlook. He plants a tree and wonders what will come of it in a thousand years' time, and speculates on the future happiness of mankind. Such people are rare, and we must love them. . . . A talented man can't stay free from blemishes in Russia (II,i).

This vision is lost to Sonya, who in her love for Astrov can only marvel: "He's so clever. He can do anything. He treats the sick and plants forests too!" (II,i). Vanya admires Dr. Astrov too, who is able to dissuade him from suicide but can offer no reason for living. "What can I do? What can I do?" asks Vanya; "Nothing," is Dr. Astrov's only reply (IV,i). This exchange is crucial because it shows Astrov as a pathetic person who can see nothing positive other than trees. As for himself, Astrov is reduced to the vague hope "that when we're at rest in our graves we may see visions—perhaps even pleasant ones" (IV,i).

In *Tri Syostry* (*The Three Sisters*, 1901), the last of Chekhov's stage doctors, Chebutykin, transcends illusions to attain nonexistence. At 60, he admits to being "a lonely, utterly unimportant old man" (I,i). He is a permanent "guest" on the sisters' estate. A good doctor 25 years ago, Chebutykin has forgotten everything he once knew. He curses the other characters because they expect that he can treat any ailment just because he is a physician. He counteracts his ignorance and insecurity with vodka and, like a true existentialist, wails over his very being:

> I've forgotten everything I used to know. I remember nothing, nothing. . . . Perhaps I'm not a man at all, but I just imagine that I've got hands and feet and a head. Perhaps I don't exist at all, and I only imagine that I'm walking about and eating and sleeping. [*Cries.*] Oh, if only I could simply stop existing! (III,i).

This article has given a new perspective to Chekhov, showing him as a doctor who was a writer rather than a writer who was a doctor. Hopefully, it sheds some light on the doctors he created and shows how they are, in part, projections of Chekhov's own concerns of the weaknesses of his own world and his inability to change anything about it. Even his concern as a playwright was, through his doctors, a curing of the ills he saw in the society around him.

> All I wanted to say honestly to people was: 'Have a look at yourselves and see how bad and dreary your lives are!' It is important that people realize this, for when they do, they will most certainly create another and better life for themselves. I will not live to see it, but I know that it will be quite different, quite unlike our present life. And so long as this different life does not exist, I go on saying to people again and again: 'Please, understand that your life is bad and dreary!'.[11]

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The physiological action of food and drink on the stomach is shown more on other organs and parts than in the stomach itself. When the quantity is moderate and the quality simple, there is nothing more experienced than a general sense of refreshment, and the restitution of vigour, if some degree of exhaustion have been previously induced. We are then fit for either mental or corporeal exertion.* But let a full meal be made, and let a certain quantity of wine or other stimulating liquor be taken;—we still feel no distinct sensation in the stomach; but we experience a degree of general excitement or exhilaration. The circulation is quickened—the face shews an increase of colour—the countenance becomes more animated—the ideas more fluent.—

*I should, perhaps, except the *dinner* meal, which is always followed by some degree of mental and corporeal inaptitude for exercise, however temperate the repast, especially in civilized, or artificial modes of life.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 5.

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…gallon bottle.

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Editorials

SUGGESTIONS FOR AUTHORS

The NORTH CAROLINA MEDICAL JOURNAL welcomes original contributions to its scientific pages, expecting only that they be under review solely by this JOURNAL at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this JOURNAL.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The NORTH CAROLINA MEDICAL JOURNAL follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere. Costs in excess of $15.00 for illustrations are borne by the author. Costs for setting of tables are also borne by the author as are charges for art work which might be needed for proper printing of figures.

5. Style

The style followed by this JOURNAL will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. Talbot, M.D., director. All manuscripts are subject to editorial revision for such matters as spelling, grammar, and the like.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the NORTH CAROLINA MEDICAL JOURNAL.

OF SEX AND SCIENCE

Sometimes it is a relief to turn from the animal world (R and X-rated movies, television shows about prostitutes with hearts of gold, the underwhelming novels of Harold Robbins, and surveys about premarital intercourse in mixed college dormitories) to the plant kingdom where such matters are so neatly ordered as not to be responsive to manipulation of the media. On closer examination we find that plants have had to cooperate with animals to ensure survival of the species just as a man sometimes has to "say it with flowers."

Recently, the Journal has seen fit to comment on the intimate relationship between milkweed and monarch butterfly which allows the animal to protect itself from predators by feeding in its larval stage on the plant from which it sequesters cardenolides. Danaids continue their dependence on plants during later life feeding on some containing pyrrolizadionone or related heterocyclic compounds which are chemicals related to the male sex attractants—pheromones. A similar association has now been observed between black oak leaves from which pheromones in complex combination have been identified chromatographically and the destructive male oak leaf roller moth who may even try to copulate with leaves damaged by feeding larvae which, if to be females of the species, might be extracting the attractant compounds from the leaves.[1] Some 21 isomeric tetradecenylacetates have been found in the sexual attractant fraction of the female moth; activity is confirmed by using the antennae of the male moth as a test organ and measuring its response. Apple leaves contain similar compounds and the fruit tree tortix moth cannot be reared in the laboratory without apple leaves—experimental confirmation of an ancient Near Eastern myth.

These findings have extensive ecological implications. If synthetic sex pheromones can be made available, specific plant pests can be controlled without harm to the innocent. For example, the Douglas-fir tussock moth recently returned to the Northwest and DDT was used, despite protests, to eradicate the pest although it appears that moth populations were already declining when it was applied. A synthetic Z isomer, seemingly much more effective than the synthetic E isomer of the pheromone of this moth, is now available and may be the means of preventing the periodic drastic defoliations caused when they get hungry.[2]

The emergence of behavioral endocrinology[3] with its promising antipollutional potential can only be welcomed, particularly if it will allow us to abandon dangerous pesticides and herbicides. There is little likelihood that we need worry about trying to control

the human population with synthetic sex attractants but we may have more effective, safer and cheaper contraceptive agents as a result. Still we must be cautious. That the Food and Drug Administration has enough to do and enough undone probably won't prevent congressional attempts to assign it control of perfumes, colognes and pheromones. Still it might be better to leave it to the FDA, than to the Pentagon or to the CIA.

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Bulletin Board

NEW MEMBERS
of the State Society

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WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

February 7-8

Endoscopy Workshop (re-scheduled from December 6-7, 1975)
Place: Berryhill Hall
Sponsors: Department of Medicine and the Office of Continuing Education, UNC School of Medicine
Fee: $75; enrollment limited to 100
Credit: AAFP credit applied for
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

February 11

Wingate M. Johnson Memorial Lecture
Place and time: Babcock Auditorium, 11:00 a.m.
Speaker: Dr. Grant Liddle, Professor and Chairman, Department of Medicine, Vanderbilt University School of Medicine
Credit: 2 hours
For Information: Emery C. Miller, M.D., Associate Dean for Con-

tinuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 21-22

Clinical Application of Biochemical Determination in Drug Treatment of Affective Disorders
For Information: Joseph Parker, M.D., Department of Psychiatry, Box 3837, Duke University Medical Center, Durham 27710

February 23-27

The Management of Craniofacial Pain
Sponsors: UNC School of Dentistry, School of Medicine, Dental Research Center and School of Nursing. Presented by UNC Pain Clinic
Fee: $200; enrollment limited to 80 participants
Credit: 29 hours; AAFP credit applied for
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

February 26

Cosmetic Surgery
Place: Country Club of Southern Pines (Elks Club)
Sponsors: Moore Memorial Hospital & UNC School of Medicine
Fee: $11.50
Credit: 2 hours: AMA Category 1 and AAFP approved
For Information: C. H. Steffe, M.D., P.O. Box 3000, Pinehurst 28374

March 5-6

General Diagnostic Radiology Updated
Fee: $100
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 19-20

E. C. Hamblen Symposium in Reproductive Biology and Family Planning
For Information: Charles B. Hammond, M.D., Box 3143, Duke University Medical Center, Durham 27710

March 22-26

Radiology of the Urinary Tract — A Tutorial Postgraduate Course
Program: Emphasis on personalized small group tutorial type teaching. Subject matter will cover all facets of urinary tract disease, including comprehensive coverage of diagnostic techniques
Fee: $300
Credit: 30 hours
For Information: Robert McLelland, M.D., Radiology, Box 3808, Duke University Medical Center, Durham 27710

March 25-26

Medical Alumni Day and Scientific Meetings
Place: Berryhill Hall
Sponsor: Office of Continuing Education and Alumni Affairs
Credit: To be announced
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 26

Symposium on Alcoholism
Fee: $25
Credit: 6 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 29-30

Obstetrics and Gynecology Postgraduate Course
Fee: $35
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 9-10
(note change of date)

Annual Arthritis Symposium
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 9-10

Practical Pediatrics
Fee: $35
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 16-17

Practical Nuclear Medicine: Emphasis Oncology
Fee: $75
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 22

New Bern Annual Medical Symposium — 1976, "Pulmonary Medicine"
Place: Ramada Inn, New Bern
Sponsor: Craven - Pamlico - Jones County Medical Society
Credit: 5 hours; AAFP credit applied for
For Information: Zack J. Waters, M.D., Box 1089, New Bern 28560

April 23-24

Perinatology Post-Graduate Course
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 23-30

Medical Symposium — Cruise to Bermuda
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 30-May 1
(note change in date)

Diving Deafness and Related Physiology
Fee: $35
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 6-9

122nd Annual Session of the North Carolina Medical Society
Place: Pinehurst Hotel and Country Club, Pinehurst
For Information: William N. Hilliard, Executive Director, North Carolina Medical Society, Box 27167, Raleigh 27611

May 7-9

Pulmonary Infections in Pediatric Patients
Place: Quail Roost Conference Center, Rougemont
Registration: Limited to 50 participants
Credit: 11 hours; AAFP credit applied for
For Information: Alexander Spock, M.D., P.O. Box 2994, Duke University Medical Center, Durham 27710

May 12-13

Breath of Spring '76: Respiratory Care Symposium
Fee: $25
Credit: 12 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 27-28

The 27th Scientific Session and Annual Meeting of the North Carolina Heart Association
Place: Benton Convention Center and the Winston-Salem Hyatt House, Winston-Salem
Sponsors: The North Carolina Chapter of the American College of Cardiology will be one of the co-sponsors of the sessions, and will hold its sessions, which are open to all physicians, on May 28. Special concurrent sessions will be held for nurses, emergency medical technicians, and cardiology technologists
For Information: Thomas R. Griggs, M.D., North Carolina Heart Association, P.O. Box 2408, Chapel Hill 27514

ITEMS OF SPECIAL INTEREST

Series of Postgraduate Medical Programs

The First Medical District, in cooperation with the UNC Medical School's Office of Continuing Education, will sponsor a series of continuing medical education meetings, with dates and places as follows:

February 4 Elizabeth City
February 11 Edenton

Presentations will be from 4 to 5 p.m. and from 7:30 to 8:30 p.m., with dinner served in the interim.

Credit (for the series) is 12 hours; AAFP credit applied for

For information contact Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

Continuing Education for Nurses

(The meetings listed below will be held in Carrington Hall, UNC School of Nursing, Chapel Hill, unless otherwise indicated. The numbers in parantheses indicate the number of course contact hours.)

February 9-13: Preparation for Implementing the Problem-Oriented Medical Record System (30)
February 24-25: Nursing Audit (12)
February 25-26: A New Look At Patient Teaching (13)
February 25-26: (at Hickory); Oncology and Enterostomal Therapy
April 21-22: (at Salisbury); Oncology and Enterostomal Therapy
April 5-9: Practical Approaches to Diabetic Care (35)
April 20-21: Primary Care Nursing (12)
April 26-30: Nursing Process (30)
April 29: Toward More Effective Diabetic Teaching (6)
April 29: (at Boone); Neonatal Workshop — Immediate Care of the High Risk Infant
July 12-15: (at the Blue Ridge Assembly, Black Mountain); Challenge and Change in Lung Disease

For Information on the above programs contact the Continuing Education Program, UNC School of Nursing, Chapel Hill; for programs number 4, 5 and 10 contact Mrs. Judy Soper, Nursing Education Director, Northwest AHEC, Bowman Gray School of Medicine, Winston-Salem 27103. For the last program contact C. Scott Venable, Executive Director, North Carolina Lung Association, 916 West Morgan St., Box 127, Raleigh 27602

Cancer Seminars

"Principles in Clinical Oncology," a series of seminars on patient-care related topics in cancer research and treatment, is being presented as part of the Clinical Cancer Education Program (CCEP) at the UNC School of Medicine, Chapel Hill. Topics range from carcinogenic factors to the clinician's relationship with the cancer patient and the patient's family.

Seminar dates are January 13, 20 & 27, and February 3. Meeting time is 7:30 p.m. in the Board Room of the North Carolina Memorial Hospital, Chapel Hill. Meetings are open to all interested students, staff, faculty and practicing physicians.

For further information contact Dr. James F. Newsome or Dr. James Lea, UNC School of Medicine, Chapel Hill 27514

Hypertension Seminars for Dentists

The North Carolina Regional Medical Program, the North Carolina Heart Association, the North Carolina Medical Society and the UNC School of Dentistry are cosponsoring a series of hypertension seminars to be held throughout the state of North Carolina. Dates and places of the remaining seminars are as follows:

February 7 ..... Charlotte
February 28 ..... Greenville
March 20 ..... Wilmington

For Information: North Carolina Heart Association, P.O. Box 2408, Chapel Hill 27514

University of Maryland CME

The Program of Continuing Education of the University of Maryland School of Medicine has a broad range of two and three day CME courses available to interested physicians. The schedule through the 1975-1976 academic year includes such topics as neuropathology, dermatology, gastroenterology, blood diseases, pulmonary conditions, psychiatry for the family physician, internal medicine, sexual abuse, obstetrics, child development, drug abuse and a family practice review course.

For Information: Steven L. Barber, Educational Coordinator, Program of Continuing Education, University of Maryland School of Medicine, 29 South Greene Street, Baltimore, Maryland 21201

PROGRAMS IN CONTIGUOUS STATES

February 5-6

Symposium on Recent Advances in Bacterial & Viral Gastroenteritis
Sponsors: Department of Continuing Education and the Department of Microbiology
Fee: $50
Credit: 12½ hours; AMA Category 1; AAFP credit applied for
For Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, Richmond, Virginia 23298

February 15-21

Seventh Annual Family Practice Refresher Course
Place: Mills Hyatt House Hotel, Charleston, S.C., with visits to various units of the Medical University complex for tours and demonstrations
Program: Topics covered will include internal medicine, pediatrics, surgery, psychiatry and community health
Fee: $150 payable on or before February 1; fee includes social hour and banquet to which spouses are cordially invited. Participant enrollment is limited to 75
Credit: 40 hours; AAFP approved
For Information: Dr. Vince Moseley, Director, Division of Continuing Education, Medical University of South Carolina, 80 Barre Street, Charleston, S.C. 29401

May 10-13

The Frontiers in Cardiology
Place: Royal Coach Motor Hotel, Atlanta, Georgia
Sponsors: Council on Clinical Cardiology, American Heart Association; Department of Medicine, Emory University School of Medicine in cooperation with the Georgia Heart Association
Fee: ACC members $125; non-members $175
Credit: AMA Category 1
For Information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

Medical College of Virginia

The number in parenthesis, following the title, indicates the number of hours for that particular course.

February 5-6 Symposium on Recent Advances in Bacterial and Viral Gastroenteritis (12½)
February 18 Pediatric Menatology — Oncology for the Practicing Physician (4)
February 29-March 4 Radiology of the G. U. Tract (24) (This program will be held in Williamsburg, Virginia)
March 18 Neonatology for the Practicing Physician (4)
March 25-26 29th Annual Stoneburner Lecture Series—Neurology for Primary Care Physicians (12)
April 1 Pediatric Cardiology for the Practicing Physician (4)
April 22 Medico-Legal Workshop (5) (Place: Virginia Baptist Hospital, Lynchburg, Virginia)
May 17-18 EEG Symposium (14)
May 21 Annual Spring Forum for Child Psychiatry (4)
June 2 Pediatric Nephrology for Practicing Physicians (4)

For further information on the above CME opportunities write to the Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, Richmond, Virginia 23298

The items listed in this column are for the six months immediately following the month of publication. Requests for listing should be received by WHAT? WHEN? WHERE?, P.O. Box 15249, Durham, N.C. 27704, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

In September the state auxiliary president, Mrs. Charles Herring, made her report to the executive council of the North Carolina Medical Society. The highlights of her report deserve repetition.

MEMBERSHIP

Auxiliary membership is at an all-time high of 2,890, with 2,867 also members of the auxiliary of the American Medical Association. Sixty-nine of North Carolina's 100 counties are organized into 51 auxiliaries.

The year's activities began in May with a leaders' workshop emphasizing legislation, family and community health and health education. Additional workshops were held in September—in Kinston for the eastern counties and in Winston-Salem for the rest of the counties—with 150 auxiliary leaders attending.

LOANS, GRANTS AND DONATIONS

Five student loans of $500 each were made by the auxiliary last year. Three more have been given since June 1975, and another is being processed. None of the auxiliary's outstanding 60 loans is past due. Since June of 1964, 28 loans in the amount of $13,450 have been repaid.

This year's interest of $1,350.76 from the auxiliary's $20,000 Mental Health Research Endowment Fund was given to the Department of Psychiatry at the University of North Carolina at Chapel Hill for use in the area of child mental health.

The auxiliary is striving to improve cooperation and communication between old and new members so that projects such as the AMA-ERF can be more effective. Last year the state auxiliary gave $23,950.71 to AMA-ERF, small in comparison to donations by other state auxiliaries.

LEGISLATION AND EDUCATION

The auxiliary's state legislation chairman, Mrs. Charles Hoffman, is working closely with the medical society's Steve Morrisette on all legislative matters and keeping the auxiliary informed as to what action to take.

The auxiliary is working in school systems to improve the caliber of health education. A committee of five auxiliary members is working with five representatives of the medical society and the Department of Public Instruction in this area.

The auxiliary is promoting a new film series, "Self Incorporated," along the same lines as last year's "Inside/Out" series carried by public broadcasting.

In keeping with the celebration of the bicentennial, the auxiliary is collecting the histories of medicine in counties throughout the state.

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News Notes from the—

UNIVERSITY OF NORTH CAROLINA
DIVISION OF HEALTH AFFAIRS

Dr. Thomas L. Hall has been named director of the Carolina Population Center (CPC) at the University of North Carolina at Chapel Hill. He has served as acting director of the Carolina Population Center (CPC) since early 1974.

Dr. Hall came to Chapel Hill in 1971 from the Johns Hopkins School of Hygiene and Public Health. He joined the UNC faculty as an associate professor in the department of health administration in the School of Public Health and as deputy director of the CPC. In 1974 he was promoted to professor.

As an interdisciplinary unit within the University of North Carolina at Chapel Hill, the Carolina Population Center supports a comprehensive program of research, education and service in the population and family planning fields. CPC began operations in July, 1966. Currently it supports and gives cohesion to the participation in population activities of more than 150 faculty associates in a number of schools, departments and institutions on the UNC-CH campus.

The center is one of the largest and most diverse university-based population programs in the world.

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Dr. Ralph H. Boatman of the University of North Carolina at Chapel Hill is the new president-elect of the American Society of Allied Health Professions (ASAHP), an umbrella organization for over 200 allied health professions.

Boatman is director of the Office of Continuing Education in Health Sciences and administrative dean and director of the Office of Allied Health Sciences at UNC.

Boatman was elected in the Society's first general election at its eighth annual meeting. He will serve on the board as president-elect until November, 1976, when he will be installed as the Society's 10th president at the annual meeting in San Francisco.

* * *

Two new departmental chairmen have been appointed at the University of North Carolina School of Medicine at Chapel Hilll.

Dr. James Neil Hayward, who comes to Chapel Hill July 1 from the Reed Neurological Research Center of the University of California at Los Angeles, will direct the department of neurology.

Dr. Edward J. Shahady heads the department of family medicine. Formerly director of the family practice residency program at Akron City Hospitals and chairman of family medicine at the College of Medicine of Northeastern Ohio Universities, he joined the UNC faculty on Jan. 1.

The University of North Carolina School of Medicine at Chapel Hill has been awarded seed money for a new scholarship fund.

Called the Carolina Country Family Medicine Scholarship Fund, it has been established through the efforts of James A. Chaney, former editor of *Carolina Country* magazine.

According to Chaney, the fund was started "to stimulate among North Carolinians a willingness to contribute whatever they can towards scholarships or financial assistance for medical students interested in going into family practice in rural North Carolina."

In addition to individual contributions, seed money for the fund will come from sales of the book "Carolina Country Reader," a collection of articles Chaney wrote during his eight-year editorship of the magazine.

Dr. William L. Fleming of the University of North Carolina School of Medicine at Chapel Hill has been presented the William Freeman Snow Award by the American Social Health Association (ASHA).

The award, named after a founder of ASHA, recognizes those men and women who have made outstanding contributions to humanity. Since 1938, the association has recognized 34 individuals and one corporation.

Fleming and Dr. Bruce P. Webster of New York received the 1975 awards. Each was honored as "a man who devoted decades to lessening the fierce onslaught of venereal disease against man- and woman-kind."

* * *

Dr. Frank C. Wilson, chief of orthopaedic surgery at the University of North Carolina School of Medicine at Chapel Hill, has been installed as president of the N.C. Orthopaedic Association.

Dr. Edward C. Curnen Jr., first chairman of pediatrics at the University of North Carolina School of Medicine at Chapel Hill, was honored here Nov. 14-15.

Curnen's colleagues and former students and housestaff gathered in Chapel Hill for the dedication of the Edward C. Curnen Pediatric Library and Conference Room at The North Carolina Memorial Hospital.

The program in Curnen's honor was the highlight of a two-day pediatric scientific meeting.

New Faculty

Curtis Harper, associate professor, department of pharmacology, School of Medicine, has been a senior staff fellow in the pharmacology branch of the National Institute of Environmental Health Sciences in the Research Triangle Park since 1972. He has been an adjunct associate professor at UNC since 1973. He holds the B.S. and M.S. degrees from Tuskegee Institute, the M.S. degree from Iowa State University and the Ph.D. degree from the University of Missouri.

Ramon U. Florenzano, assistant professor, department of psychiatry, School of Medicine, also will

be chief of the Alcoholism Program at the Orange-Person-Chatham Mental Health Center. A native of Chile, he earned his B.A. and M.D. from the University of Chile and his M.P.H. from UNC-CH this year. Since 1973 he has been a part-time staff psychiatrist at the Orange-Person-Chatham Mental Health Center.

North Carolina physicians with epileptic patients under their care now have access to the only state-supported anticonvulsant drug analytical laboratory in the country.

Funded by the Department of Human Resources, the Epilepsy and Anticonvulsant Drug Research Laboratory (EADRL) at the University of North Carolina at Chapel Hill offers inexpensive drug level determinations and free consultations to any physician in the state. It is directed by Drs. Kenneth H. Dudley and Larry W. Boyles.

An epilepsy workshop was held Dec. 13 to inform physicians of the latest techniques for managing epilepsy and to introduce the laboratory's facilities and services.

* * *

Dr. Joseph S. Haas, a widely known expert on glaucoma, delivered the 14th annual McPherson Lecture Dec. 13 at the University of North Carolina School of Medicine at Chapel Hill.

The lecture was named in honor of the late Dr. Samuel Dave McPherson Sr., founder of McPherson Hospital in Durham.

* * *

Twelve of Africa's most distinguished medical educators were in Chapel Hill in December for a two-week workshop on curriculum planning in family health.

The workshop is part of the African Health Training Institutions Project, a five-year, $3 million program administered by the Office of Medical Studies at the University of North Carolina School of Medicine at Chapel Hill and the Carolina Population Center.

Funded by the U.S. Agency for International Development, the project was established two years ago to give African mothers and children better health care by enhancing teaching programs in African medical, nursing and midwifery schools.

Participants in the workshop will design curricula to meet their countries' needs. These curricula will cover such aspects of family health as preventive pediatrics, nutrition, infectious diseases, family planning, maternal and child health and health care delivery.

* * *

The William N. Creasy Memorial Lecture on Clinical Pharmacology was presented Nov. 19 at the University of North Carolina School of Medicine at

Chapel Hill. Dr. Rubin Bressler of the University of Arizona Medical Center is the Creasy Visiting Professor in Clinical Pharmacology. While in Chapel Hill, Bressler met with students, faculty and housestaff for informal teaching sessions.

Sponsored by The Burroughs Wellcome Fund, the visiting professorship is one of 10 awarded to medical schools across the country.

* * *

Dr. Frank C. Wilson, chairman of orthopaedic surgery at the University of North Carolina School of Medicine at Chapel Hill, was a guest speaker Nov. 12-16 at the 1975 convention of the New Jersey Orthopaedic Association held at Paradise Island in the Bahamas. Dr. Wilson spoke on "The Pathogenesis and Treatment of Ankle Injuries" and "Replacement of the Knee Joint."

Three faculty members of the University of North Carolina School of Medicine at Chapel Hill were key participants Nov. 2-7 at the national meeting of the Association of American Medical Colleges in Washington, D.C.

Dr. Merrel Flair, Director of the Office of Medical Studies, is chairman of the Group on Medical Education which is made up of five representatives from each member medical school.

C. N. Stover Jr., associate dean for administration at the medical school, is chairman-elect of the Group on Business Affairs (GBA). Stover will assume chairmanship of the group in November 1976.

Dr. Kenneth Sugioka, chairman of anesthesiology, is president of the Society of Academic Anesthesia Chairmen, a group of anesthesia department chairmen from all AAMC member schools.

* * *

Dr. Ernest Craig, Henry A. Foscue Distinguished Professor of Cardiology at the University of North Carolina at Chapel Hill, gave a paper Dec. 12-13 at the "Symposium on Newer Diagnostic Methods in Heart Disease" in Belgium.

He discussed "Genesis of Heart Sounds: Echophonocardiographic Studies."

Dr. Colin G. Thomas Jr., professor and chairman of surgery, presented a paper entitled "Evaluation of Dominant Thyroid Masses" at the Dec. 8-10 meeting of the Southern Surgical Association in Hot Springs, Va.

* * *

Dr. D. Gordon Sharp, professor of bacteriology and immunology, gave a lecture on "The Effects of Virus Particle Aggregation on the Disinfection of Water by Halogens" at the Third Annual Water Quality Technology Conference Dec. 7-9 in Atlanta.

Daniel A. Okun of the University of North Carolina at Chapel Hill was honored Dec. 3 by the New York Academy of Sciences for his outstanding contributions in environmental sciences.

Okun, Kenan Professor of Environmental Engineering, received the Gordon Y. Billard Award during the annual banquet meeting of the Society in New York. The citation read:

"The Gordon Y. Billard Award for Research in Environmental Sciences: $500 and a Certificate of Citation for outstanding contributions embodying original work for research in Environmental Sciences."

Okun's 38-year career has spanned education, research and consulting on environmental problems on every continent.

* * *

Dr. Sidney Shaw Chipman, retired public health professor at the University of North Carolina at Chapel Hill, received the Martha May Eliot Award Tuesday (Nov. 18) at the annual meeting of the American Public Health Association in Chicago.

He was cited for his leadership in the maternal and child health field. Chipman received a $1,000 honorarium and a bronze plaque bearing the likeness of Dr. Eliot.

Chipman, founder of UNC's department of maternal and child health in the School of Public Health, retired in 1970 after 20 years on the UNC faculty. He also has been a clinical professor of pediatrics at the UNC School of Medicine

* * *

Harriet H. Barr of the University of North Carolina at Chapel Hill is the newly elected vice-president of the national Society for Public Health Education, Inc.

Barr, an assistant professor and director of public relations for the School of Public Health, will serve a one-year term. For the past two years, Barr has served on the society's executive committee representing the North Carolina Chapter.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. C. Edward Buckley III, an associate professor of medicine and assistant professor of immunology, has been named to a four-year term as an advisor to the National Institute of Allergy and Infectious Diseases.

He is one of five new appointees whose selection was announced by Donald S. Fredrickson, director of the National Institutes of Health, a division of the Department of Health, Education and Welfare.

The advisory council is made up of 15 leaders in the fields of biomedical science, education, health care and public affairs.

* * *

A heart specialist here says artificial pacemakers may be able to protect some heart attack survivors against later, fatal attacks.

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The specialist is Dr. James J. Morris, an associate professor of cardiology. He has received a $22,000 contract from Medtronic, Inc., of Minneapolis to test his theory.

"We're going to see if we can predict which heart attack patients are at very high risk of sudden death from cardiac arrest and could be benefitted by a pacemaker," Morris said in an interview.

* * *

Plans to construct a $6-million cancer treatment building at the medical center were announced by Dr. William W. Shingleton, director of the Comprehensive Cancer Center.

The building is expected to be completed by the end of 1977 and will be the last of three new buildings which will comprise the regional cancer center.

The National Cancer Institute granted up to $4.24 million for the building. The medical center will make up the remaining costs.

Bringing together most of Duke's clinical cancer specialists under one roof, the structure "will make the latest methods of cancer detection and treatment available to more individuals," Shingleton said. As yet unnamed, the building will be added onto the northwest wing of the existing Duke Hospital and will contain more than an acre of usable space.

Cancer clinics are now scattered throughout the medical center, often in cramped quarters. This limits the number of outpatients who can be treated, Shingleton said.

More than 1,000 cancer outpatient treatments a week will be possible in the new facility, up from the nearly 650 treatments now given every week at Duke.

* * *

Arrangements have been made to provide chartered airplane service to Washington, D.C., and to areas around North Carolina frequently visited by physicians and other university personnel.

The charter service has been initiated to facilitate and to speed transportation to the selected destinations.

All flights are in twin-engine aircraft with two qualified pilots in accordance with the highest FAA "Air Taxi, Commercial Operator" standards.

* * *

Three Distinguished Teaching Awards and four Distinguished Alumni Awards were presented during Medical Alumni Weekend.

The teaching awards, presented by the alumni, went to the late Dr. Elijah Eugene Menefee Jr., who died last May in Arizona; Dr. Thomas D. Kinney, former

chairman of the Department of Pathology who stepped down last year as associate provost of the university and director of medical and allied health education; and Dr. Edward S. Orgain, professor of medicine and director of the cardiovascular disease service.

Distinguished Alumni Awards went to Dr. Rubin Bressler, chairman of pharmacology, professor of medicine and chief of clinical pharmacology at the University of Arizona; Dr. Nathan Kaufman, chairman of pathology at Queen's College in Kingston, Canada; Dr. Arthur H. London Jr., a Durham pediatrician; and Dr. Jack D. Myers, professor of medicine at the University of Pittsburgh.

* * *

A Duke physician has become the first North Carolinian ever elected to the Board of Regents of the American College of Surgeons.

He is Dr. David C. Sabiston, chairman of the Department of Surgery.

The 18-member Board of Regents directs the affairs of the professional scientific organization.

Sabiston is James B. Duke Professor of Surgery. He also has served as chairman of the Board of Governors of the American College of Surgeons, chairman of the American Board of Surgery and president of the Southern Surgical Association.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Initial results of a study at the Bowman Gray-Baptist Hospital Medical Center indicate that when early treatment of acute myloblastic leukemia includes transfusions of blood cells matched to the patient's blood, the patient has far fewer problems with internal bleeding and infections.

Infections are the major killer of leukemia patients. Internal bleeding, once the major killer, is still a serious problem.

Sixty-five per cent of the 50 patients in the medical center study also experienced complete remissions of their disease after receiving both chemotherapy and the early transfusions. That compares with only 27 per cent among patients receiving chemotherapy and transfusions of non-matched blood cells.

Physicians in the study believe that the matched transfusions strengthen the patient so that more chemotherapy can be given over a longer period of time. Remissions are the direct result of chemotherapy and not the transfusions.

Transfusions given as part of the medical center study contain platelets and leukocytes which are matched to the patient's blood in exactly the same way that tissue is matched for kidney or heart transplants.

The matching greatly reduces the chance that the patient will have an adverse reaction to the transfused blood.

The donated blood cells are used to counter the suppression of the body's production of platelets and leukocytes. That suppression is due to the effects of the leukemia and the adverse effects of the chemotherapy.

The transfused leukocytes do not provide complete protection from infection, but work with powerful antibiotics if infection develops.

The process of using matched platelets and leukocytes potentially can be beneficial to patients being treated for other kinds of cancer and for other kinds of diseases which suppress production of those blood cells.

* * *

Surgeons at the medical center have performed their first transplant of parathyroid glands.

The surgeons removed all four of the parathyroid glands from a Forsyth County woman, sliced up one of the glands into 20 pieces less than an eighth of an inch in size and transplanted the pieces in the muscle of the woman's lower left arm.

Kidney disease, which required the woman to have a kidney transplant at Baptist Hospital over a year ago, caused an overactive condition of the woman's parathyroids.

The new procedure, only recently described in medical literature, involves just one operation on the throat and permits easy access to the transplanted tissue if some of that tissue has to be removed. Success with the procedure also relieves the patient of a life time of having to take calcium and vitamin D pills.

The operation is of potential benefit to recipients of new kidneys who have overactive parathyroids which do not return to normal and to those with overactive parathyroids resulting from other medical problems.

* * *

Dr. James A. Chappell, associate professor of community medicine, has been reappointed by the Forsyth County Commissioners to a three-year term as a member of the Forsyth-Stokes Area Mental Health Board.

* * *

Dr. William D. Wagner, assistant professor of neurosurgery, has been appointed to a four-year term on the Research Review Sub-Committee of the Medical and Community Program Committee of the North Carolina Heart Association.

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, has been appointed to the editorial board of the *World Journal of Psychosynthesis*. He also was appointed chairman of the Board of Census for the North Carolina Neuropsychiatric

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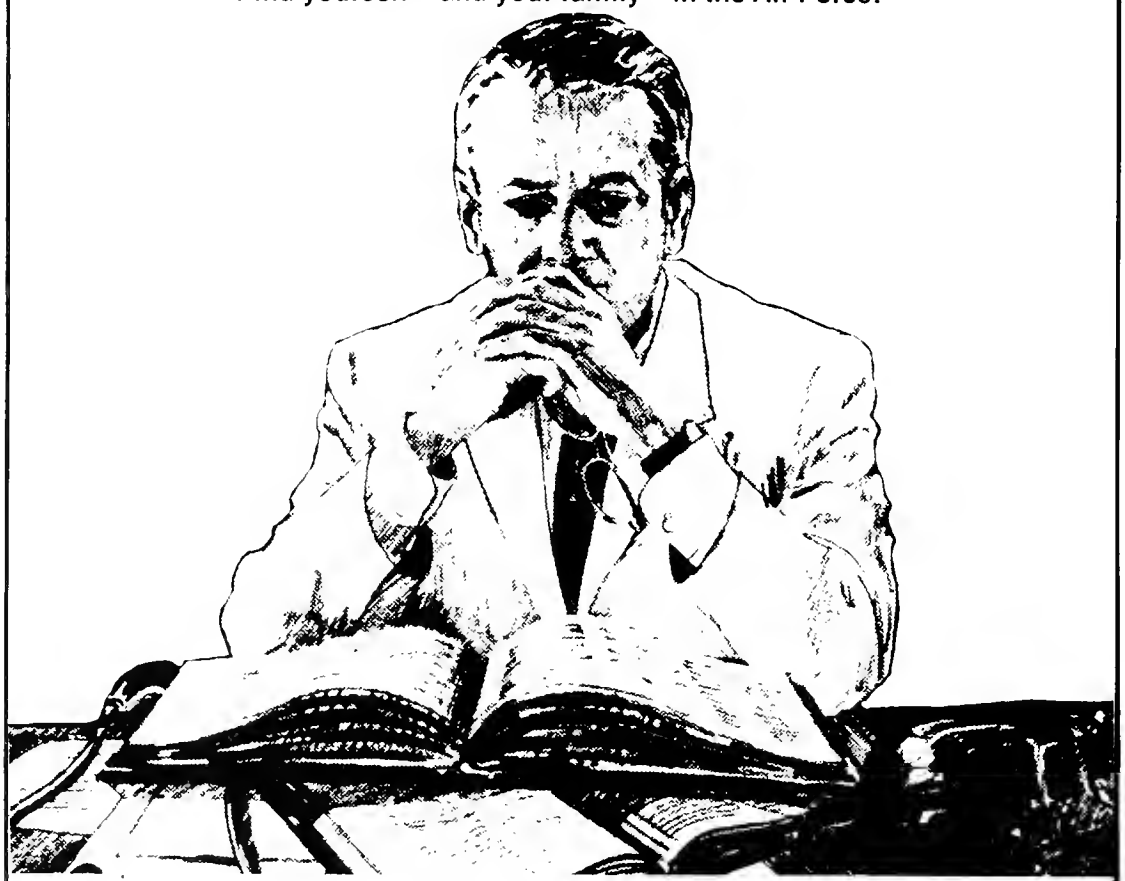

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Association and has been named to the North Carolina District Board of the American Psychiatric Association.

AMERICAN COLLEGE OF PHYSICIANS

Ten North Carolinians are among 325 new fellows of the American College of Physicians, a 60-year-old international society representing specialists in internal medicine and related fields.

They are Victor L. Stotka, M.D., of Camp Lejeune; James F. Alexander, M.D., of Charlotte; Harvey J. Cohen, M.D., John D. Hamilton, M.D., John P. Tindall, M.D., and Malcolm P. Tyor, M.D., of Durham; John A. Lusk III, M.D., of Greensboro; Charles M. Ramsdell, M.D., of Greenville; William B. Kremer, M.D., of Lakeland; and Robert S. Brice Jr., M.D., of Winston-Salem.

The new fellows were elected at a recent meeting of the Board of Regents. Robert G. Petersdorf, M.D., of Seattle, president of the American College of Physicians and chairman of the department of medicine at the University of Washington School of Medicine, said the new fellows have earned the honor through scientific accomplishments and through acceptance by fellow practitioners as leaders in their specialty.

In addition to Petersdorf, college officers who will serve until the 57th annual session in Philadelphia April 5-8 are Jack D. Myers, M.D., of Pittsburgh, president elect, and Maxwell G. Berry, M.D., of Kansas City, vice president. Serving five-year terms are Edward J. Stemmler, M.D., of Philadelphia, treasurer, and Richard W. Vilter, M.D., of Cincinnati, secretary general. Edward C. Rosenow Jr., M.D., of Philadelphia is executive vice president.

DISABILITY DETERMINATION UNDER SOCIAL SECURITY AND THE NEW SUPPLEMENTAL SECURITY INCOME PROGRAM

CONTRASTS AND SIMILARITIES

Wiley M. Cozart, M.D.

On January 1, 1974, a nationwide program of direct federal payments to aged, blind or disabled persons with limited income and resources went into effect. Known as "Supplemental Security Income" (SSI), the new program has uniform eligibility requirements for such persons to replace the multiplicity of requirements existing under the old federal-state public assistance programs. The title of the program indicates that benefits are expected in most cases to supplement income from other sources, including Social Security benefits.

The Supplemental Security Income Program is wholly financed from federal general tax revenues. Responsibility for administering the program has been given to the Social Security Administration (SSA) not only because of their experience in managing a monthly benefit payment program and the existing SSA advanced data processing system, but also because of the well-established nationwide network of SSA offices and program centers.

The SSI program generally uses the same definitions of disability and blindness used in the social security disability insurance program for determining eligibility in new claims. To help simplify and speed the processing of disability decisions and to insure uniform treatment of all applicants, no matter where they live, the medical evaluation criteria developed for the Title II disability insurance program (Social Security) with the aid of practicing physicians, medical organizations and the Medical Advisory Committee to the Social Security Administration have been generally adopted for the SSI program. In terms of symptoms, signs and laboratory findings, the evaluation criteria describe impairments that reflect the level of severity that would prevent most people from working for a year or longer. These criteria are constantly being refined to reflect advances in medicine and to take into account disability program experience.

If an applicant has an impairment or a combination of impairments that meets or equals the criteria, and he is not working, he would generally be considered

From the Division of Social Services, Department of Human Resources, Raleigh, North Carolina 27602

disabled. Most allowances are based on medical considerations alone—that is, the claimant's impairment meets or equals the level of medical severity in the criteria. It is also possible for an impairment to be slight or minimal, thereby resulting in a denial strictly on a medical basis. However, for workers who have impairments which fall short of the listed level of severity but which prevent them from doing their previous or customary work, consideration is given to their ability to do any other work in light of their remaining capacity and of their age, education, training and work experience. In these cases, the individual must not only have an impairment which prevents him from doing his usual work, or work he has done previously, but also other kinds of work for which he is reasonably suited. In the situation where an older worker with a marginal education and long history of arduous unskilled physical labor has an impairment which prevents him from doing his usual work, he may be considered under a disability.

Since the criteria for evaluation of disability under Social Security presupposes a work history and, since many SSI applicants have never worked or the past work has no current vocational relevance due to being too remote, too brief or not substantially gainful, the applicant's ability to work must be evaluated considering both his medical and vocational circumstances. To be allowed, the claimant must first have an impairment of significant severity to prevent him from performing his customary activity and secondly, considering his impairment and vocational circumstances, there must be no substantial activity available to him in the national economy that he can do. For example, a claimant retaining the ability to do a wide range of light work, not of advanced age, and able to speak, read and write at the elementary level, may be considered in the competitive labor market even if he doesn't have special experience or skills. He would have the residual functional capacity to perform a wide range of light work for which he could be trained. A claimant who is of advanced age, or approaching advanced age, is illiterate and unskilled would not generally be expected to achieve a vocational accommodation even though he retains the capacity for light or sedentary work. The primary reason for an individual being unable to work under both Title II claims and Title XVI claims remains his medically demonstrable impairment. Secondary consideration is given to vocational factors. Title II claimants, having contributed of their wages to the program and having thereby earned insured status by virtue of their past work, are evaluated from the standpoint of both their medical impairment and their work history. Title XVI (SSI) claimants, having, in most instances, no work history are evaluated from a standpoint of their medical demonstrable impairment and their ability to work. All persons whose applications for determinations of disability are adjudicated in a state disability determination unit are considered for referral to the State Vocational Renabilitation Agency.

Although generally the same guides apply under Title II and Title XVI there are some differences. Fo example:

1. No Waiting Period Under Title XVI (SSI)—A individual who is determined to be blind or disable will be eligible for payment for the first month in whic he has filed an application and is disabled. (Unde Title II, a five-month waiting period must be serve after the onset of disability).

2. Presumptive Disability—The law provides tha an applicant for disability benefits who is found to b "presumptively disabled" may be paid, under certai conditions, for as many as three months while forma determination of his disability is being made.

3. Childhood Disability—With the implementatio of the SSI program, the Social Security Administra tion will, for the first time, be responsible for disabilit evaluations and payments for children who are unde the age 18. A child of a family with limited income an resources will be found disabled if the child has medically determinable physical or mental impair ment which can be expected to result in death or whic has lasted or can be expected to last for at least 1 consecutive months and is of comparable severity t that which would prevent an adult from engaging i substantial gainful activity. The question of vocationa assessment and concomitant ability to engage in sub stantial gainful activity is generally not relevant i evaluating disability during childhood because, i most situations, the child will not be of age where h could reasonably be expected to enter the workin population. Thus, in childhood cases, a finding o disability will be made solely on the basis of medica considerations. There are, for example, severe im pairments unique to childhood cases which are no now specifically described in the Social Security List ing of Impairments. Because of their effect on th child's growth and development, these are usuall easily identified and can be fairly equated with a expected capacity for work.

4. Blindness—The criteria for establishing blind ness under SSI are identical to those required to estab lish statutory blindness under the Social Security Dis ability Insurance Program. Unlike Title II, however engagement in substantial gainful activity will not pre clude SSI payments if the statutory definition o blindness is met, although the SSI payments may b reduced under the income test. Also, since there is n duration requirement for blindness under SSI, there can be a favorable decision based on temporary blind ness.

Since the implementation of this program o January 1, 1974, there has been an unprecedente influx of applications requiring the development o medical evidence for their adjudication. While th Disability Determination Section is not allowed to pa for existing medical evidence in processing Title I claims, we are allowed to pay up to $10 for evidence o record on SSI claims. The claimant will continue t furnish, at his expense, initial medical evidence unde the regular disability program. Please note that on letters of inquiry under both programs are requests fo

vailable evidence of record. Often, it appears that the ttending physician interprets our inquiry as a request or current examination and study.

We have found that many of the SSI applicants have ever had continuing treatment or in-depth medical tudies. Some have not seen a physician for several ears. For these patients, available medical evidence imply does not exist. We have, therefore, developed review examination, less extensive in its scope than ur usual comprehensive consultative examination, et thorough enough to enable us to make a disability ecision or to direct further study of the applicant. A at fee of $30 has been established in keeping with udgetary limitations as a reasonable reimbursement r this service.

There has been no significant decrease in our need r comprehensive examinations requiring complete arrative reports. We welcome inquiries from those of ou who have the time and facilities to provide us with ese.

In summary, the Disability Determination Section f the North Carolina Department of Social Services, hich administers the disability provisions of the So- al Security Act in this state, has been since January 1974, responsible for the administration of the upplementary Security Income (SSI) Program (Title VI). Similarities and variations in the two programs, Title II and Title XVI, are reviewed. A plea is voiced for the assistance of the practicing physicians of the state in obtaining medical evidence on which sound decisions can be based. Three areas of need are outlined: (1) the provision of existing medical evidence, when available, (2) the performance of screening examinations on applicants with little or no existing medical evidence and, (3) the performance of comprehensive consultative examinations where indicated.

With implementation of the SSI program, new areas of concern with respect to the medical community are constantly surfacing. Your inquiries and comments are invited. Please contact Dr. Byron D. Casteel, Chief Medical Consultant, Disability Determination Section, Post Office Box 243, Raleigh, North Carolina 27602, or telephone (919) 829-7613, station-to-station, collect.

WINSTON-SALEM HEALTH CARE PLAN, INC.

Dr. E. Reid Bahnson, a Winston-Salem physician since 1948, has been named medical director of the Winston-Salem Health Care Plan, Inc. The announcement was made by the organization's board of directors.

The Winston-Salem Health Care Plan, Inc., is a nonprofit organization which will begin administering

a group health care plan for Winston-Salem-area employees of R. J. Reynolds Industries, Inc. and its subsidiaries in the spring of 1976. Under the plan, participating R. J. Reynolds employees will receive primary medical care through Winston-Salem Health Care Plan physicians located in the organization's facility in Stratford Executive Park.

In his new position, Dr. Bahnson, who is also an assistant professor of clinical internal medicine at Bowman Gray School of Medicine, will supervise the organization's medical staff.

"We feel very fortunate to have a man of Dr. Bahnson's caliber as medical director," said Rodney Austin, a member of the board of directors of Winston-Salem Health Care Plan, Inc. "He is a highly skilled physician who is dedicated to insuring the finest in medical care."

A 1934 graduate of R. J. Reynolds High School, Bahnson received his A.B. degree from the University of North Carolina at Chapel Hill and his M.D. degree from the University of Pennsylvania School of Medicine.

He is a past president of both the Forsyth County Medical Society and the medical staff of City Memorial Hospital (replaced by Forsyth Memorial Hospital) and a former chief of the division of medicine at Forsyth Memorial Hospital. His professional memberships include the American Medical Association, the Forsyth County and North Carolina Medical Societies and the American Society of Internal Medicine.

Bahnson is also a member of Home Moravian Church and the Board of World Mission, Moravian Church of North America.

In addition to Bahnson, two other local physicians, Dr. Henry L. Valk and Dr. Benjamin F. Huntley, are members of the board of directors of the Winston-Salem Health Care Plan, Inc.

Month in Washington

The continual improvement in our health system, with its ever-increasing responsiveness to the people's needs, must not be stifled by adopting foreign-flavored elements into a national health insurance plan, the American Medical Association has told the Congress.

"When considering a national plan for this country, it is necessary to take cognizance of the strengths of our own method of health care delivery. . . this will assure that our excellent system will continue to improve and will not suffer the stifling effects experienced in other countries," AMA president Max H. Parrott, M.D., testified before a subcommittee of the House Ways and Means Committee.

Pointing to the large problems involved in creating a national health insurance program, Dr. Parrott, a Portland, Ore., practitioner, said that the public attitudes toward it are changing steadily.

"These problems have been brought into better focus as a result of evidence of the effects of governmentally administered and controlled programs both here and abroad.

"Our national priorities have also shifted because of the effects of the changing economy, and the devastating effects of inflation on all segments of our society.

"The public has expressed among its major priorities a concern with inflation, with the state of the economy, and with crime. National polls have indicated that national health insurance is of low concern.

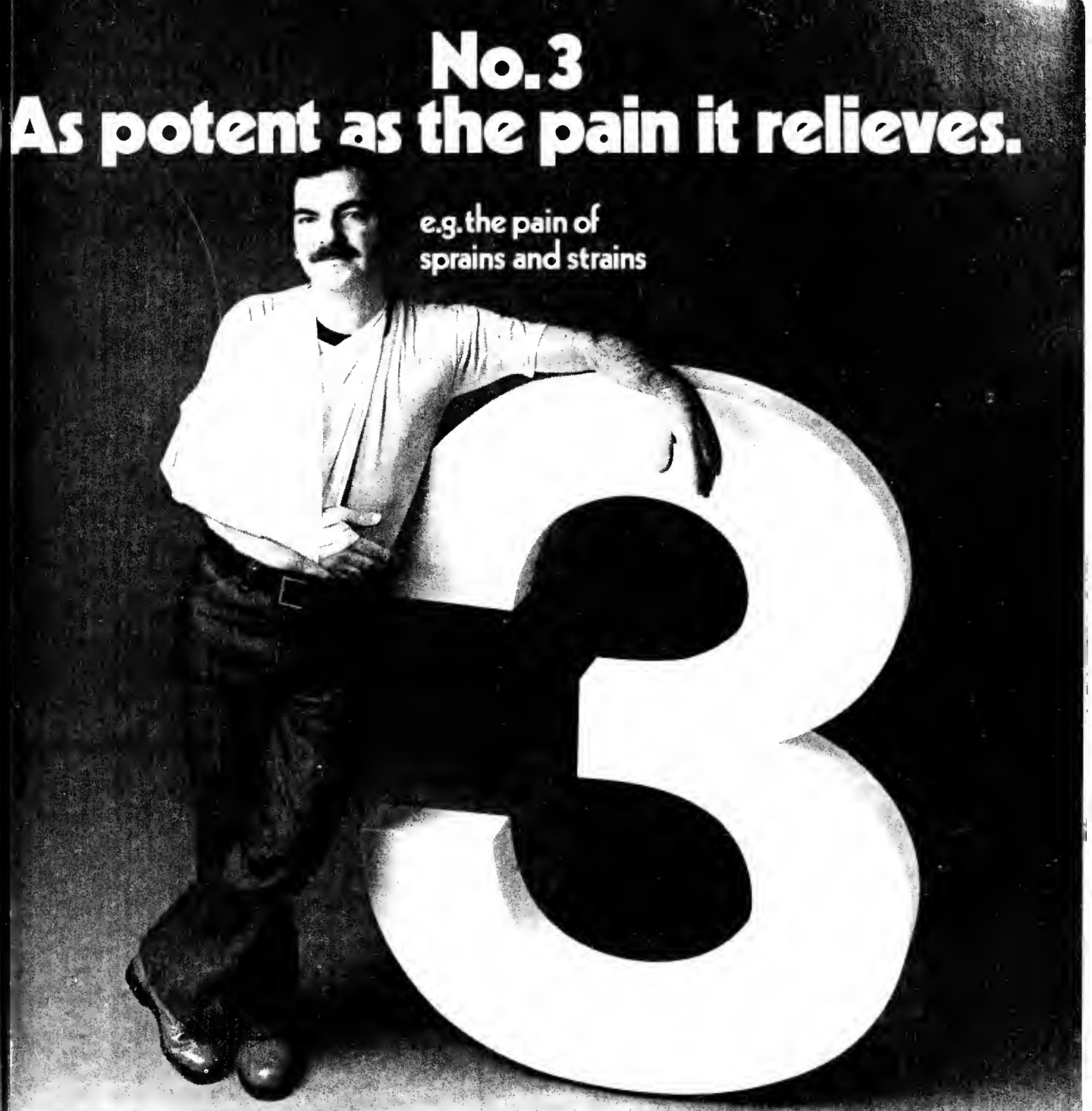
"During this same period of time significant changes have taken place in our health system through increased manpower programs, increased facilities construction, increased levels of private health insurance coverage, and a variety of other programs. There is fuller realization and acknowledgment that this country's health system—under attack by many in the course of the NHI debate—is indeed superior to any other in the world," Dr. Parrott said.

Dr. Parrott and Richard E. Palmer, M.D., o Alexandria, Va., and Chairman of the AMA Board of Trustees, reminded the subcommittee members of the medical profession's national health insurance plan (H.R. 6222) which builds on the structure of the present system of employer-employee group health insurance plans, mandating each employer to provide comprehensive and catastrophic benefit coverage with the employer picking up at least 65 percent of the cost.

Dr. Palmer pointed out that in pressing for the adoption of any particular NHI proposal, sincerity must not be confused with objectivity—"We cannot afford to have a program of such importance fail!

"We must avoid the mistake inherent in proposals such as H.R. 21 (Kennedy-Corman) which would lock medicine into a rigid, monolithic, no-choice bureaucratic system. Such a creation would be impossible to reverse. It would be an undertaking full of promise but empty of fulfillment. Establishment of cost control through fixed budgets including arbitrary fee schedules would result in curtailment of care and discourage participation by providers. A look at the cur-

No. 3
As potent as the pain it relieves.



NOT TOO LITTLE

as potent as the pain you need to relieve in patients with fractures, sprains, strains, wounds, contusions, and the pain of surgical convalescence
unlike acetaminophen/codeine combinations, it does not sacrifice anti-inflammatory action

NOT TOO MUCH

potent—yet not excessive ■ addiction liability low

NOT TOO EXPENSIVE

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odeine phosphate* 32.4 mg. gr
ach tablet also contains aspirin gr 3 phenacetin gr 2½ caffeine gr ½ *Warning—may be habit-forming

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Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4

The insomnias most often occurring in young and older adults

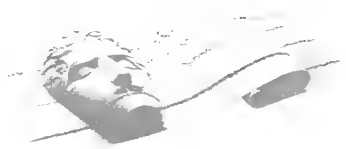
For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories.[1-4]

The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia

Awake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

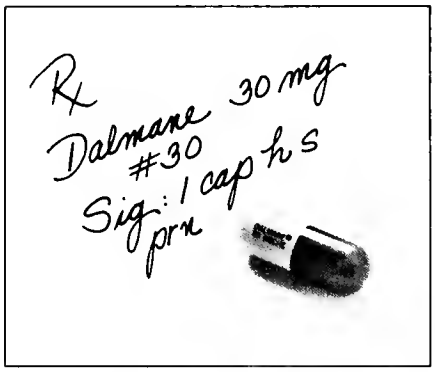
- induces sleep rapidly
- reduces nighttime awakenings
- lengthens total sleep time

ROCHE

Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) Ⓒ IV



Objectively proved in the sleep research laboratory, Dalmane

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

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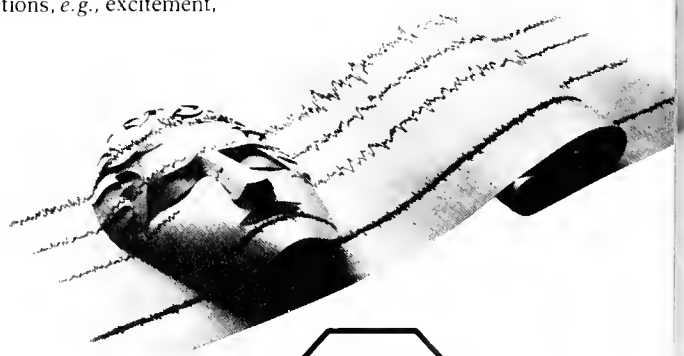
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971

3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ



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rent trouble of the British health care system impels a close re-examination of the alleged need for such drastic action, as is embodied in H.R. 21. In our opinion justification for such a program is totally lacking!"

Alluding to other measures aimed at providing catastrophic health insurance alone, Dr. Palmer observed that 135 million Americans under 65 carried major medical insurance in 1974.

"This is the most rapidly growing form of health insurance in the nation, and the trend for such added coverage is fostered by an increasing public awareness. Consequently, we must question the need to impose on the American taxpayer and consumer a costly universal federal program of free-standing catastrophic insurance."

* * *

The National Health Insurance hearings on Capitol Hill have been marked so far by a notable lack of excitement or sense of urgency. The national news media has ignored the first legislative hearings of the year on NHI, underscoring contentions by many witnesses that the public doesn't rate NHI high on its scale of worries or interests.

Nonetheless, the recently announced decision that the House Interstate and Foreign Commerce Committee's Subcommittee on Health will conduct NHI hearings, brings into the open anew the odd jurisdictional dilemma that perplexes Congress in its quest for action on NHI. Rep. Paul Rogers (D-Fla.) has announced his House Commerce Subcommittee on Health will start NHI hearings. He plans to call first the chief Congressional sponsors of the major NHI bills to testify. Rogers is telling the House Ways and Means Committee in unmistakable terms that he wants a piece of the NHI action, perhaps the big piece.

The Ways and Means Subcommittee on Health, headed by Rep. Dan Rostenkowski (D-Ill.), will end six weeks of hearings on NHI just as Rogers gets started. Relations between the rival panels and their staff members are strained.

Since Ways and Means traditionally has had prime jurisdiction, the chief sponsors of the NHI bills in the House are for the most part members of the Ways and Means Committee. Examples include Ways and Means Chairman Al Ullman (D-Ore.), sponsor of the American Hospital Association's plan, Rep. John Duncan (R-Tenn.) a chief sponsor of the American Medical Association's NHI proposal, Rep. Omar Burleson (D-Texas), foremost House backer of the Health Insurance Companies' measure, and Rep. James Corman (D-Calif.), sponsor of Labor's Health Security Act.

None are anxious to go before the Rogers' Subcommittee in behalf of their bills, thus lending support to Rogers' jurisdictional claim.

The way health jurisdiction has been parcelled out in the House this year, Rogers can lay valid claim to much of the benefit and structural side of NHI legislation while Ways and Means has acknowledged hold on all tax financing aspects. But the question remains: Can these be separated? Most believe they can't and some special joint-committee setup will have to be formed to avoid a divisive squabble in the House pitting one major committee against another.

* * *

A Congressional committee trying to ascertain the causes of a large hike in premium costs for the huge Federal Employees Health Benefits Program (FEHB) has been told by the American Medical Association that physicians' long-run prices have paralleled price changes elsewhere in the economy.

Williams C. Felch, M.D., of Rye, N.Y., a member of the AMA Council on Legislation, told the House Civil Service Subcommittee that professional liability expense "has increased far beyond any other economic indicator."

Dr. Felch said "this skyrocketing of professional liability premiums is of necessity reflected by higher fees." He continued:

"The most recent premium increases are staggering. Increases of 100 percent are frequent, with increases ranging up to 600 percent."

Premiums of $10,000 are not unusual today, Dr. Felch told the lawmakers. "Amounts in the range of $25,000 to $30,000 in the high risk specialties are not rare, as compared with $6,000-$7,000 a year ago. Some premiums have been reported as high as $45,000 annually."

The other major factors in medical fee rises are the lingering effects of the economic stabilization program and economy-wide inflation, the physician said. Physicians' fees were under price controls from August, 1971, through April, 1974, he noted.

Consumer price figures for 1975 show that the percentage increase in physicians' fees has been lower than the price increases in the hospital industry but higher than the price increases in the economy in general, according to Dr. Felch.

"During the first nine months in 1975, physicians' fees increased 8.4 percent. In the same time period other health care costs were as follows: hospital service charges up 10.2 percent, semi-private room charges up 12.0 percent and operating room charges up 10.4 percent."

Dr. Felch also said utilization of physician services has risen with progress of medical technology, rising incomes, increased insurance coverage, and a rising proportion of elderly in the population. "These factors no doubt have combined to increase the costs in the Federal Employees' Benefit Program. We understand that the FEHB as well as other plans have experienced sharp rises in utilization."

Another reason for increased utilization may be more extensive tests and services as a result of threats of liability lawsuits, he said.

Dr. Felch said the AMA has recently approved the creation of a high level commission to study the problem of rising health care costs. This Commission on the Cost of Medical Care will include top level representatives of health care providers and of the public,

reflecting a broad spectrum of interest in health care. "It is our desire that through the joint efforts of all members of the Commission, the causes for health care cost increases will be better understood."

* * *

The Administration has had a change of mind and now backs legislation that would bar unions from requiring members to join federally-subsidized Health Maintenance Organizations (HMO's).

Referring to a provision in the HMO bill recently passed by the House, Theodore Cooper, M.D., Assistant HEW Secretary for Health, said, "This amendment would assure that each individual employee would have the right to choose to participate before joining."

Dr. Cooper's statement before the Senate Health Subcommittee represented a switch in Administration policy. Only a month ago, the HEW Department issued regulations on HMO's that allowed unions at the collective bargaining table to choose an HMO or regular private health insurance on behalf of the entire union membership.

The original HMO measure approved by Congress specified that all employers with more than 25 workers had to offer the "dual option" of HMO or regular insurance to their employees in areas where HMO's were situated and sought this option. However, this clause caused confusion and was viewed by labor—backed by the Labor Department—as interfering with Labor's present collective bargaining rights to pick a single health benefit package. In issuing final regulations on HMO's last month, HEW went along with Labor's viewpoint.

As the Senate Health Subcommittee headed by Sen. Edward Kennedy (D-Mass.) opened hearings on the House-passed amendments to the HMO law, Dr. Cooper said, "We endorse the clarification of existing law which provides that an employer offer an HMO option under 'dual choice' first to the employees' representative, if any, and, if accepted by the representative, then to the individual employees."

The House measure retained Labor's collective bargaining opportunity to select a regular private health insurance program as the sole health benefits program, but said that employees could not be forced to accept an HMO.

The problem with the Labor Relations Act and the "dual option" may eventually have to be settled by the courts. A key issue is whether union membership can be required in total to join a plan that is federally subsidized. A non-subsidized HMO or pre-paid group practice plan may, of course, be selected by Labor for all members without question.

* * *

Federal controls dictating where medical graduates practice, rationing of residencies, and federal licensure and re-licensure of physicians have been strongly opposed by the American Medical Association.

Further governmental regulations may "have adverse effects on the forces which are bringing about desired changes without regulatory intervention," said Tom Nesbitt, M.D., speaker of the AMA's House of Delegates.

Dr. Nesbitt told the Senate Health Subcommittee headed by Sen. Edward Kennedy (D-Mass.) that the AMA supports continued capitation and other aid for medical schools, but provisions requiring students to repay the government in money or in shortage area service in return for the capitation aid are "coercive and unprecedented."

"Such requirements would place an unconscionable burden on students," Dr. Nesbitt declared.

The Senate Subcommittee is finishing hearings on health manpower legislation and is expected to draft legislation shortly. The House last fall approved a health manpower bill extending federal aid for medical schools but imposing the compulsory payback on all students. A provision mandating allocation of residencies, however, was defeated on the House floor.

From the standpoint of the medical school finances, the battle over whether federal capitation support will continue has already been won, with the pro-support HEW Department finally getting the upper hand in an intra-administration dispute with the Office of Management and Budget which wanted to end federal subsidies for medical schools.

Dr. Nesbitt told Kennedy's Subcommittee that federal scholarships should continue, not only those tied to service in the Public Health Service and National Health Service Corps, but scholarships with no strings attached for students in severe financial need from the socio-economic disadvantaged. Funds for student loans also are needed, he said.

Proposals to regulate the total numbers of first year residency provisions, their geographic location, and their distribution by specialty were labelled "unnecessary and unwise" by the AMA official.

The number of residency positions is declining at the same time the number of medical school graduates is increasing, Dr. Nesbitt noted. "It is a particularly inappropriate time to establish arbitrary legislative ceilings on total residency positions."

The goal of such allocations is to increase the number of "primary care" physicians. However, Dr. Nesbitt pointed out that last year 58 percent of graduate students entered "primary care" specialties, more than the 50 percent goal set by the AMA previously. What Congress is seeking is already being accomplished without legislation, he said.

* * *

The House Ways and Means Committee has approved four technical amendments to the Medicare law including one which would forestall rollbacks in some physicians' Medicare reimbursement.

An unintended effect of the HEW Department's new Medicare reimbursement index tying physicians' Medicare fees to a cost-of-living-type formula was to cause some reimbursement levels to be less this year than last despite rises in the cost of living. The Ways and Means amendment would prevent any reimbursement to be less this fiscal year than allowed previously.

The AMA had urged this change. The other amendments dealt with reimbursement for teaching hospitals, the Federal Employees Health Benefits Program, and extension of an exemption for certain nurse staffing requirements in rural hospitals.

* * *

Two broad philosophical principles—the right of privacy and the public's right to know—are colliding in Federal health programs. The dilemma was pointed up recently when the Federal Medicaid program decided the Freedom of Information Act required it to release upon request the names of physicians who collected more than $100,000 yearly from Medicaid payments.

The HEW Department said 207 physicians last year received more than $100,000 from Medicaid. The names of 13 New Jersey physicians were released immediately and all other names will be made public, HEW officials said. The names were requested by the *New York Daily News* and other newspapers on the basis of the Freedom of Information Statute designed to open up the workings of the Federal Government to public scrutiny.

Medicaid officials made clear that the figures were gross receipts and that there was no suggestion of any abuse or impropriety. Dr. Keith Weikel, Federal Medicaid Director, told a small group of newsmen that he was concerned that disclosure of the physicians' names might discourage some physicians from treating Medicaid patients, but he added that the Agency felt the information law required release.

* * *

The military medical school is still in jeopardy. The school, to be located on the Bethesda, Md., grounds of the Naval Medical Center, was opposed last year by a special White House task force that concluded taxpayers would save $100 million without it. The House recently approved funds for the school, but the Senate asked the General Accounting Office to make a study of the cost effectiveness of the Uniformed Services University of the Health Sciences compared with the present military medical scholarship program. Sen. William Proxmire (D-Wis.) told the Senate $15 million has already been spent on the school and Congress should allow it to go ahead. The AMA has opposed the establishment of the school since its conception a number of years ago.

In Memoriam

T. C. BOST, M.D.

Dr. T. C. Bost was a master surgeon, financier and philanthropist.

Born in Midland, a suburb of Charlotte, in 1886, he received his medical degree from George Washington University. After completing his internship and residency in the Washington area, he volunteered for military service. This was before the United States entered World War I. An appointment signed by King George V granted Dr. Bost a commission as captain in the Royal Army and he was assigned to Dartford Hospital. It was there that while operating on a young officer with multiple wounds the patient suffered cardiac arrest. Dr. Bost opened the chest and by heart massage ("cardiac compression," he called it) the heart started beating and the officer was restored to life. *Lancet*, the oldest English language medical journal, reported this case as the first of its kind. Dr. Bost later practiced at Dartford and in London.

When he returned to Charlotte, he was appointed chief of surgery for life at Mercy Hospital, and although he worked at all of Charlotte's hospitals, Mercy was his first love. He probably operated on more doctors and their families and on more Catholic sisters than any surgeon. His unusual dexterity and profound surgical judgment made him a very fast surgeon and his fame spread quickly.

Dr. Bost wrote extensively in surgical journals. There was a young man brought to Mercy Hospital from a traffic accident. He had a good-sized piece of timber through his abdomen. Dr. Bost removed the timber and after a series of operations (there were no antibiotics in those days) the man not only recovered but served in the military in World War II.

Dr. Bost had an inherent ability of knowing just what the stock market was doing and what it was going to do. He invested heavily and very successfully. Just a few years ago he gave Duke University a trust fund of a million dollars to be used for medical research and student loans. He said, "If a person is going to give, give enough to do some good."

Dr. Bost operated on many charity patients, both adult and children, and gave freely of his time to them. He was especially active in the Scottish Rite and was advanced to KCCH and later awarded the 33d degree. He was the most noble of the nobility of the Shrine.

With all this, his life-style was simple and unpretentious. He cut red tape to the bone and went directly to the point, losing very few words, and very little time and energy. His conversation was sprinkled with a dry wit which endeared him to his many friends and patients.

When a man reaches 89 years of age, he has very few friends left to mourn his passing, but Dr. Thomas C. Bost must go down in the annals of Charlotte and Mecklenburg County as one of our most distinguished citizens and a beloved and leading surgeon.

MECKLENBURG COUNTY MEDICAL SOCIETY

ALLYN BLYTHE CHOATE, M.D.

Allyn Blythe Choate, M.D., died on October 2, 1975, after serving Charlotte, Mecklenburg County and the state of North Carolina long and well, not only as a physician but as the organizer of several social services that have made invaluable contributions to the whole community. The mental health programs and the heart programs are only two examples of his farsightedness. Therefore, Bob Choate will be missed not only by his medical colleagues, his patients, and his friends, but by the many people associated with him in these endeavors.

Born in Huntersville on April 12, 1903, Allyn Blythe Choate was the son of Joseph Lee and Harriet Blythe Choate. He was educated in the Huntersville schools and attended Davidson College for two years. He was graduated with an A.B. degree from the University of Richmond in 1925.

His medical education was obtained at the Medical College of Virginia where he was granted the M.D. degree in 1929. His postgraduate training included an internship at Memorial Hospital in Richmond and residencies at Baltimore City Hospital and Church Home and Infirmary in Baltimore, Maryland.

He then came to Charlotte where he began the practice of internal medicine and became a member of the Mecklenburg County Medical Society, the North Carolina Medical Society and the American Medical Association in 1932. He later became a Fellow of the American College of Physicians. He served as the chief of staff of Mercy Hospital. On the state level, he served on the North Carolina Medical Society's Committee on Mental Health from 1950-1973 and was chairman of this committee from 1950 to 1962.

Soon after returning to Charlotte, Dr. Choate met Sarah Glover and they were married in 1939. They had two sons, Allyn Blythe Choate Jr., and Fred Glover Choate. The whole family became interested in horses and every summer while the boys were growing up, the Choates spent their weekends at horse shows. Bob was not only a dedicated physician, an active partici-

)ant in many community projects, but a devoted hus-)and and father.

Dr. Choate was a pioneer in the field of mental ıealth and actively served in this area throughout his ıedical career. In the early 1930s he was active in)rganizing the first mental health program in North Carolina, known as the Charlotte Mental Hygiene Society, serving as one of its first presidents. He also ıelped organize the North Carolina Mental Health Association and served a term as president. He was a 'ormer chairman of the North Carolina Mental Health Council, a state-appointed board of coordinating ıetal health organizations.

In the 1940s, Dr. Choate started the first heart pro-;ram in Charlotte and served as volunteer director of ın outpatient heart clinic at Charlotte Memorial Hos-)ital. In 1955 he was president of the first Charlotte Heart Association, known then as Heart Services, vhich became The Community Health Association in 967. He died on the day following the 20th anniver-ary of the opening of the first Heart Services office in he Doctors Building on October 1, 1955. He was also trustee of the Augusta M. Wray Heart Services 'und.

Among other social welfare programs with which he vas associated was the Social Planning Council, vhich he served as president. Dr. Choate also was hairman of the budget committee of the United Community Chest and a member of the board of direc-ors of the Family Service Association. The most per-onally rewarding position Dr. Choate held was the)residency of the North Carolina Conference for So-ial Service.

Dr. Choate was a deacon of the old Second Pres-)yterian Church, a member of Covenant Presbyterian Church, a Mason and a member of the Charlotte Country Club.

Allyn Blythe Choate will be remembered not only as ı respected physician but as a doctor whose concern 'or his fellow man went beyond the realm of the physi-al into all facets of life. He performed this service vith quiet dedication, a sense of humor and great liplomacy. His contributions have made Charlotte a)etter community and we are grateful for his life of ervice here.

MECKLENBURG COUNTY MEDICAL SOCIETY

ERNEST WASHINGTON FRANKLIN, JR., M.D.

Dr. Ernest Washington Franklin, Jr., 70, died in a local hospital October 25, 1975, after a prolonged illness. Dr. Franklin was born in Raleigh on April 13, 1905, the son of Ernest Washington Franklin and Ettie Williams Franklin. He received his elementary education in Raleigh and a bachelor of science in medicine from the University of North Carolina in 1928. He received his M.D. degree from the University of Pennsylvania in 1930. He served an internship at the Chestnut Hill Hospital in Philadelphia from 1930 to 1931 and a residency in obstetrics and gynecology at Kings County Hospital in 1933.

Dr. Franklin married Miss Tempie Williams of Louisburg, North Carolina, in 1930, and he began the practice of obstetrics and gynecology in Charlotte in 1933. He was certified by the American Board of Obstetrics and Gynecology in 1930. He was a member of the staffs of Charlotte Memorial, Presbyterian and Mercy Hospitals, and was president of the visiting staff of Charlotte Memorial Hospital in 1956 and 1957. He served as president of the Mecklenburg County Medical Society in 1960. He was an active member of the Myers Park United Methodist Church, the Dilworth Rotary Club and the Charlotte Country Club. He was also a member of the North Carolina Medical Society, the South Atlantic Association of Obstetricians and Gynecologists, the American College of Obstetrics and Gynecology, the Southern Gynecological and Obstetrical Society and the Southern Medical Association.

Dr. Franklin is survived by his son, Dr. Ernest W. Franklin, III, of Atlanta; a daughter, Mrs. Allen O. Maxwell, Jr., of Charlotte, and two brothers, Dr. Roy Franklin of Croydon on the Hudson, New York, and Worth Franklin of Raleigh.

Dr. Franklin was a genteel, kind and understanding person and was loved and admired by his patients and friends. His main professional interest was gynecological surgery with special emphasis on procedures for the correction of urinary incontinence. He was very much interested in art and occasionally did some scientific paintings as a hobby in his leisure time.

Dr. Franklin will be greatly missed by the medical community and will be long remembered by his many friends and associates.

MECKLENBURG COUNTY MEDICAL SOCIETY

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EMERGENCY MEDICINE: Northeastern North Carolina; four, 12-hour evening rotations per week. Paid malpractice, vacation, professional dues. $45,000 annual remuneration. Contact Drs. Cooper or Spurgeon toll free 1-800-325-3982.

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Staff Psychiatrists, located in Piedmont, N. C., young mental health staff serving 180,000 residents in three county area. No restrictions on private practice after hours. Good fringe benefits. Contact Larry Parrish, Area Director, Tri County Mental Health Complex, 165 Mahaley Avenue, Salisbury, N. C. 28144. Telephone collect (704) 633-3616.

Index to Advertisers

LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

- prompt and specific action
- documented benefit-to-risk ratio
- three dosage strengths to meet most therapeutic needs

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

LIBRIUM®
chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules

Please see following page.

LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

Yesterday's decision to use Librium for a clinically anxious patient was based on several good reasons. Safety. Effectiveness. Versatility. And the reasons you chose it yesterday are as valid today.

Librium has accumulated an unsurpassed clinical record. A record validated in several thousand papers published both here and abroad.

Librium, when used in proper dosage, rarely interferes with a patient's mental acuity or ability to perform. However, as with all CNS-acting agents, good medical practice suggests that patients be cautioned against hazardous activities requiring complete mental alertness.

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So when you consider antianxiety therapy, consider Librium. It's a good choice. For today. And tomorrow.

ROCHE

PROVEN ADJUNCT FOR CLINICAL ANXIETY

LIBRIUM® C IV

chlordiazepoxide HCl/Roche

Please see preceding page for summary of product information.

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY □ □ □ February 1976, Vol. 37, No. 2

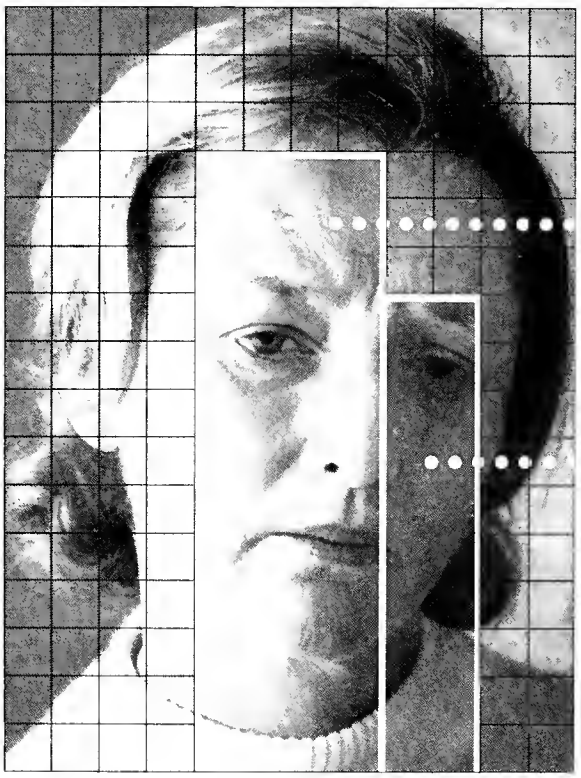
NORTH CAROLINA
Medical Journal

IN THIS ISSUE: Medical Management of Rheumatoid Arthritis, Nortin M. Hadler, M.D.; Surgery of the Lower Limb in Rheumatoid Arthritis, Frank D. Wilson, M.D.; Medicine-During the Great War of 1914-1918, Adrian M. Griffin

1976 ANNUAL SESSIONS
May 6-9—Pinehurst

1976 Committee Conclave
Sept. 22-26—Southern Pines

Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

Valium®
(diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

North Carolina Medical Society
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$25,000 Major Hospital and Nurses Expense Policy—
75 percent — 25 percent Co-Insurance

	Member's Age	Member	Member and Spouse	Member, Spouse & All Children
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	50-59	182.50	417.00	499.00
	60-64*	286.50	640.00	722.00
PLAN B **$300 DEDUCTIBLE**	Under 40	$ 50.00	$114.00	$150.00
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PLAN C **$500 DEDUCTIBLE**	Under 40	$ 31.50	$ 69.00	$ 91.50
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PLAN D **$1,000 DEDUCTIBLE**	Under 40	$ 23.50	$ 51.50	$ 68.50
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35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

All Children—$12 annually. $2,500 after age 6 months

The above plans quality for use in the Professional Association.

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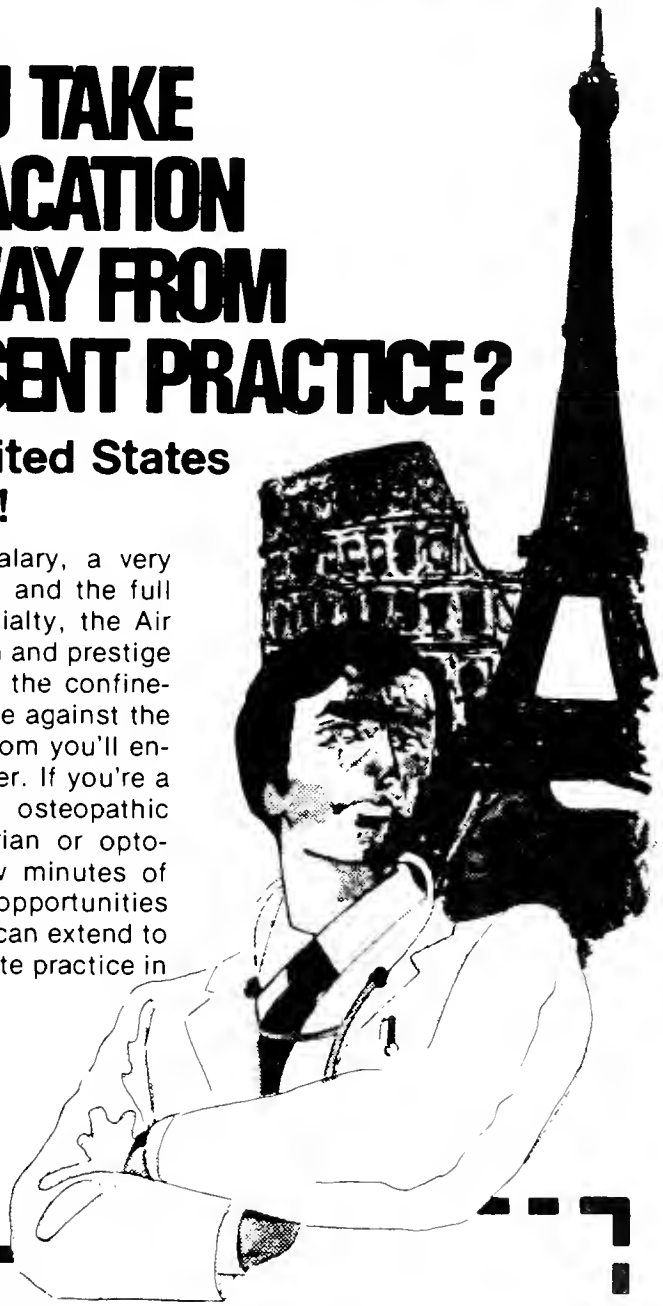

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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina Medical Society

February 1976, Vol. 37, No. 2

NORTH CAROLINA MEDICAL JOURNAL, 300 S. Hawthorne Rd., Winston-Salem, N. C. 27103, is owned and published by The North Carolina Medical Society under the direction of its Editorial Board.

Address manuscripts and communications regarding editorial matter to this Winston-Salem address. Questions relating to subscription rates, advertising, etc., should be addressed to the Business Manager, Box 27167, Raleigh, N. C. 27611. All advertisements are accepted subject to the approval of a screening committee of the state Medical Journal Advertising Bureau, 711 South Blvd., Oak Park, Illinois 60302 and or by a Committee of the Editorial Board of the North Carolina Medical Journal in respect to strictly local advertising. Instructions to authors appear in the January and July issues. Annual Subscription, $10.00. Single copies, $1.00. Publication office: Edwards & Broughton Co., P.O. Box 27286, Raleigh, N.C. 27611. *Second-class postage paid at Raleigh, North Carolina 27611.*

Contents listed in *Current Contents/Clinical Practice*

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

lund useful in the management of vertigo* associated with
ses affecting the vestibular system.
(n relieve nausea and vomiting often associated with vertigo.*
lual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
/so available as Antivert (meclizine HCl) 12.5 mg. scored
ts, for dosage convenience and flexibility.
Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for
ea, vomiting and dizziness associated with motion sickness.

SUMMARY OF PRESCRIBING INFORMATION

DICATIONS Based on a review of this drug by the National Academy of
ces—National Research Council and/or other information, FDA has classified
ndications as follows:
fective: Management of nausea and vomiting and dizziness associated with
on sickness
ssibly Effective: Management of vertigo associated with diseases affecting the
bular system
nal classification of the less than effective indications requires further
stigation.

CONTRAINDICATIONS Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children Clinical studies establishing safety and effectiveness in children have not been done, therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy See "Contraindications"

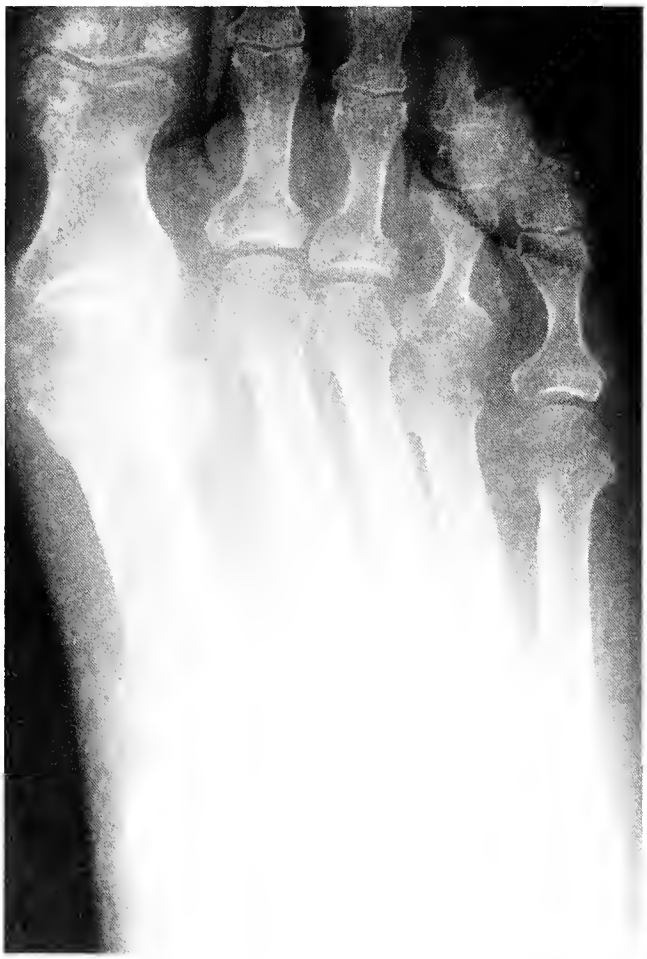
ADVERSE REACTIONS Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

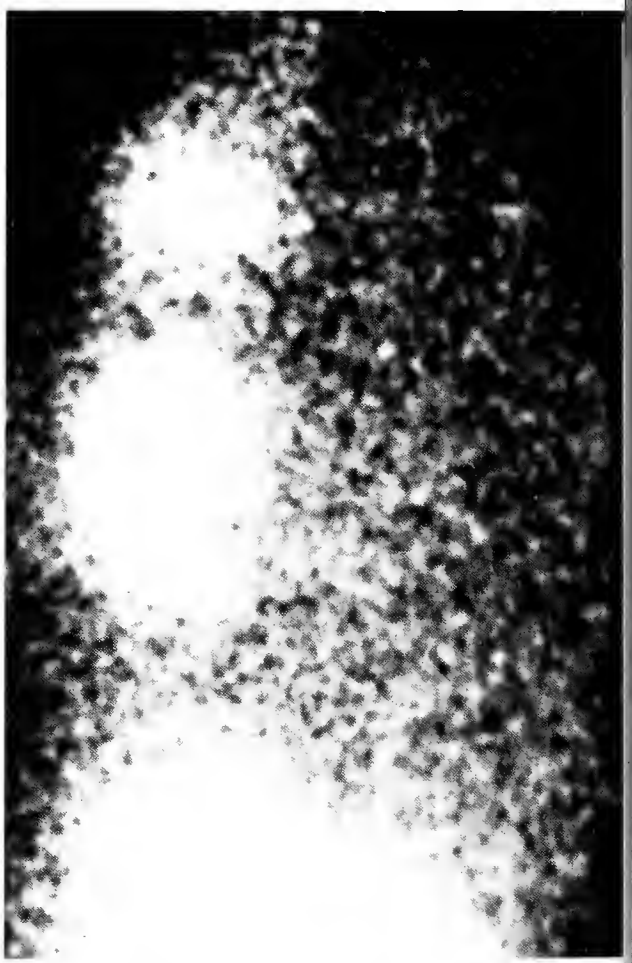
ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

VISUAL FOCUS ON ACUTE GOUTY ARTHRITIS



Foot of patient with acute gouty arthritis as seen by conventional x-ray.



Scintiphotogram of same foot reflects inflammatory process.

The scintiphotograph on the right shows increased uptake of radiotechnetium polyphosphate in the metatarsophalangeal joint and the proximal interphalangeal joint of the great toe of a patient with acute gout arthritis. This increased uptake probably results fror increased vascularity in the affected areas.

For a more detailed description of scintiphotography, see "addendum" at right.

THERAPEUTIC FOCUS ON

CAPSULES, 25 mg and 50 mg

INDOCIN®

(INDOMETHACIN | MSD)

helps relieve pain and other symptoms of inflammation in acute gouty arthritis in selected patients

INDOCIN is a potent drug with anti-inflammatory, antipyretic, and analgesic properties. It should not be used in conditions other than those recommended. Although INDOCIN does not alter the progressive course of the underlying disease, in selected patients with acute gouty arthritis it has been found highly effective in relieving pain and in reducing fever, swelling, and tenderness.

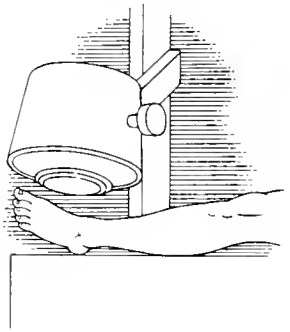
MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

addendum

MSD
MERCK SHARP & DOHME

Facts about Scintiphotography



In recent years a variety of radiopharmaceuticals have been employed to aid in the diagnosis of bone and joint disorders. The joint-imaging technique consists of injecting technetium polyphosphate intravenously, and imaging is performed with the scintillation camera two hours after the administration of the radionuclide. In general, for joint surveying, the shoulders, elbows, hands, wrists, knees, ankles, feet, and vertebral column are mapped. The entire scanning process takes approximately one hour. The criterion for a positive image is a higher concentration of radioactivity in a joint region than in adjacent nonarticular bone. In effect, each patient serves as his own control.

INDOCIN®
(INDOMETHACIN | MSD)

helps relieve pain
and other symptoms
of inflammation
in acute
gouty arthritis
in selected patients

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considere a simple analgesic and should not be used in conditions other than thos recommended. The drug should not be prescribed for children becau safe conditions for use have not been established.

Because of the high potency of the drug and the variability of its potenti to cause adverse reactions, the following are strongly recommende 1) the lowest possible effective dose for the individual patient should b prescribed. Increased dosage tends to increase adverse effects, parti ularly in doses over 150-200 mg per day, without corresponding clinic benefits; 2) careful instructions to, and observations of, the individu patient are essential to the prevention of serious and irreversible, i cluding fatal, adverse reactions, especially in the aging patient.

Contraindications: Children 14 years of age and under; pregnant wome and nursing mothers; active gastrointestinal lesions or history of recurre gastrointestinal lesions; allergy to aspirin or indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, times, severity of gastrointestinal reactions, be continuously alert for ar sign or symptom signaling a possible gastrointestinal reaction. The risl of continuing therapy with INDOCIN in the face of such symptoms mu be weighed against the possible benefits to the individual patient. Gastr intestinal effects may be reduced by giving the drug immediately aft meals, with food, or with antacids. Use greater care in aging patients.

Ocular Effects: Corneal deposits and retinal disturbances, including thos of the macula, have been observed in some patients on prolonged therap Discontinue therapy if such changes are observed. Ophthalmologic exar ination at periodic intervals is desirable in patients on prolonged therap

Central Nervous System Effects: INDOCIN may aggravate psychiatr disturbances, epilepsy, and parkinsonism, and should be used with co siderable caution in patients with these conditions. If severe CNS adver reactions develop, discontinue the drug.

Precautions: Blurred vision may be a significant symptom that warrants thorough ophthalmologic examination. Patients should be cautioned abo engaging in activities requiring mental alertness and motor coordinatio as driving a car. Headache which persists despite dosage reduction r quires complete cessation of the drug. May mask the usual signs a symptoms of infection; therefore, the physician must be continually the alert for this and should use the drug with extra care in the presenc of existing controlled infection. After the acute phase of the disease under control, an attempt to reduce the daily dose should be made r peatedly until the patient is off entirely.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcer tions of the esophagus, stomach, duodenum, or small intestine, includir perforation and hemorrhage, with fatalities in some instances; rarely, inte tinal ulceration has been associated with stenosis and obstruction; gastr intestinal bleeding without obvious ulcer formation; perforation of pr existing sigmoid lesions (diverticulum, carcinoma, etc.); rarely, increase abdominal pain in ulcerative colitis patients or development of ulcerati colitis and regional ileitis; gastritis, which may persist after the cessatic of the drug; nausea, vomiting, anorexia, epigastric distress, abdomin pain, and diarrhea.

Eye Reactions: Corneal deposits and retinal disturbances, including thos of the macula, have been observed on prolonged therapy; blurring vision.

Hepatic Reactions: Rarely, toxic hepatitis and jaundice, including son fatal cases.

Hematologic Reactions: Aplastic anemia, hemolytic anemia, bone marro depression, agranulocytosis, leukopenia, and thrombocytopenic purpur Since some patients manifest anemia secondary to obvious or occult ga trointestinal bleeding, appropriate blood determinations are recommende

Hypersensitivity Reactions: Acute respiratory distress, including dyspne and asthma; angiitis; pruritus; urticaria; angioedema; skin rashes; purpur

Ear Reactions: Hearing disturbances, deafness, tinnitus.

Central Nervous System Reactions: Psychic disturbances including ps chotic episodes, depersonalization, depression, and mental confusio coma; convulsions; peripheral neuropathy; drowsiness; lightheadednes dizziness; syncope; headache.

Cardiovascular-Renal Reactions: Edema, elevation of blood pressur hematuria.

Dermatologic Reactions: Loss of hair, erythema nodosum.

Miscellaneous: Rarely, vaginal bleeding, hyperglycemia, glycosuria, ulce ative stomatitis, and epistaxis.

Note: In patients receiving probenecid, plasma levels of indomethacin a likely to be increased.

Supplied: Capsules containing 25 mg indomethacin each, in single-ur packages of 100 and bottles of 100 and 1000; capsules containir 50 mg indomethacin each, in single-unit packages of 100 and bottl of 100.

For more detailed information, consult your MSD representative or se full prescribing information. Merck Sharp & Dohme, Division of Merc & Co., Inc., West Point, Pa. 19486

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I am interested in learning more about the program of Disability Income Protection available to me.

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Testing in Humans: Who, Where & When.

e weight of ethical opinion:

Few would disagree that the effective- and safety of any therapeutic agent evice must be determined through ical research.

But now the *practice* of clinical re- h is under appraisal by Congress, the s and the general public. Who shall inister it? On whom are the products tested? Under what circumstances? how shall results be evaluated and ized?

The Pharmaceutical Manufacturers ciation represents firms that are sig- ntly engaged in the discovery and opment of new medicines, medical es and diagnostic products. Clinical rch is essential to their efforts. Con- ntly, PMA formulated positions h it submitted on July 11, 1975, to ubcommittee on Health of the Sen- bor and Public Welfare Committee, official policy recommendations. are the essentials of PMA's current ing in this vital area.

. PMA supports the mandate and on of the National Commission for otection of Human Subjects of edical and Behavioral Research and to establish a special committee osed of experts of appropriate lines familiar with the industry's ch methodology to volunteer its e to the Commission.

PMA supports the formation of an endent, expert, broadly based and entative panel to assess the current f drug innovation and the impact t of existing laws, regulations and dures.

When FDA proposes regulations, ld prepare and publish in the *Fed- egister* a detailed statement assess- impact of those regulations on nd device innovation.

PMA proposes that an appropri- ualified medical organization be aged to undertake a comprehen- udy of the optimum roles and sibilities of the sponsor and physi- hen company-sponsored clinical h is performed by independent investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005

OFFICIAL CALL
HOUSE OF DELEGATES

pursuant to the Bylaws, Chapter IV, Section 1:

HOUSE OF DELEGATES
Meetings scheduled

Notice to: **Delegates, Alternate Delegates, Officials of the North Carolina Medical Society, and Presidents and Secretaries of county medical societies.**

Sessions of the HOUSE OF DELEGATES will convene in the Cardinal Ballroom, Pinehurst Hotel, Pinehurst, North Carolina, at the following times:

Thursday, May 6, 1976—2:00 p.m.—Opening Session

Saturday, May 8, 1976—2:00 p.m.—Second Session

A member of the CREDENTIALS COMMITTEE will be present at the Desk in the Hotel Lobby, Thursday, May 6, 1976, from 8:30 a.m. to 12:30 p.m. to certify Delegates. Delegates are urged to bring their Credential Cards for presentation at the Registration Desk. Delegate Badges must be worn to be seated in the HOUSE OF DELEGATES.

REFERENCE COMMITTEE HEARINGS

Reference Committee hearings are scheduled to begin Friday, May 7, 1976, at 2:00 p.m.

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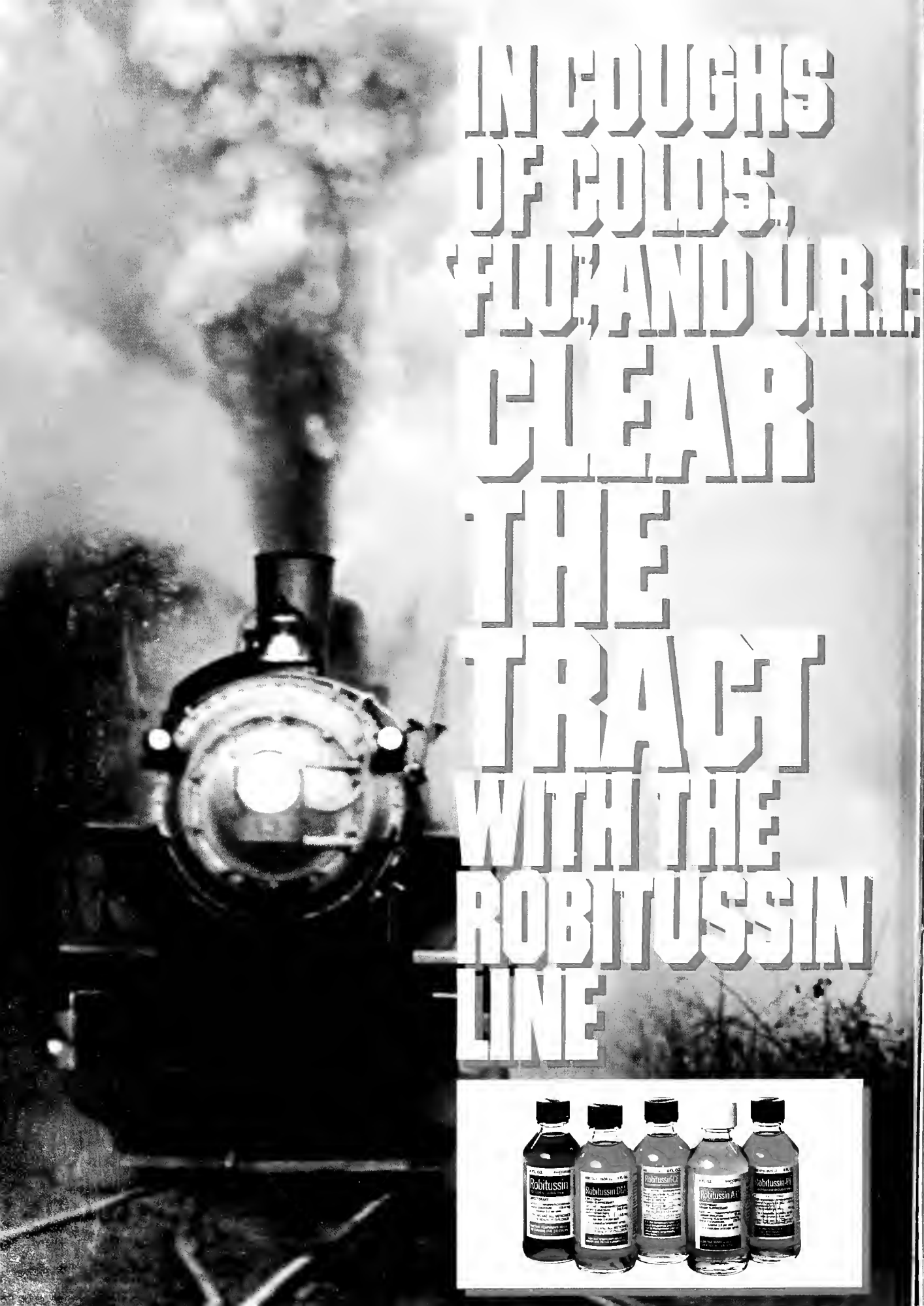
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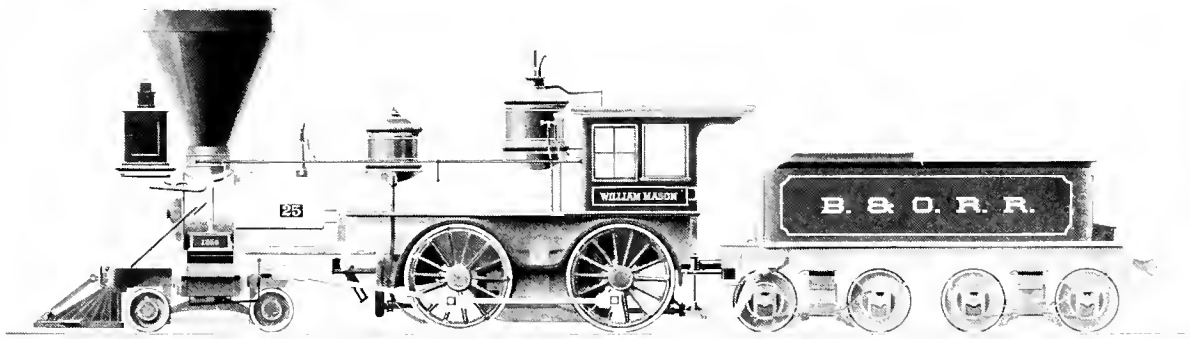

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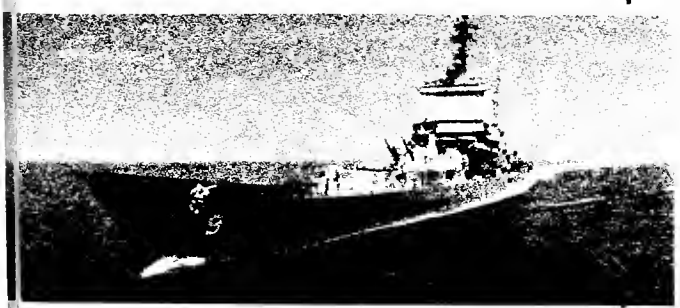

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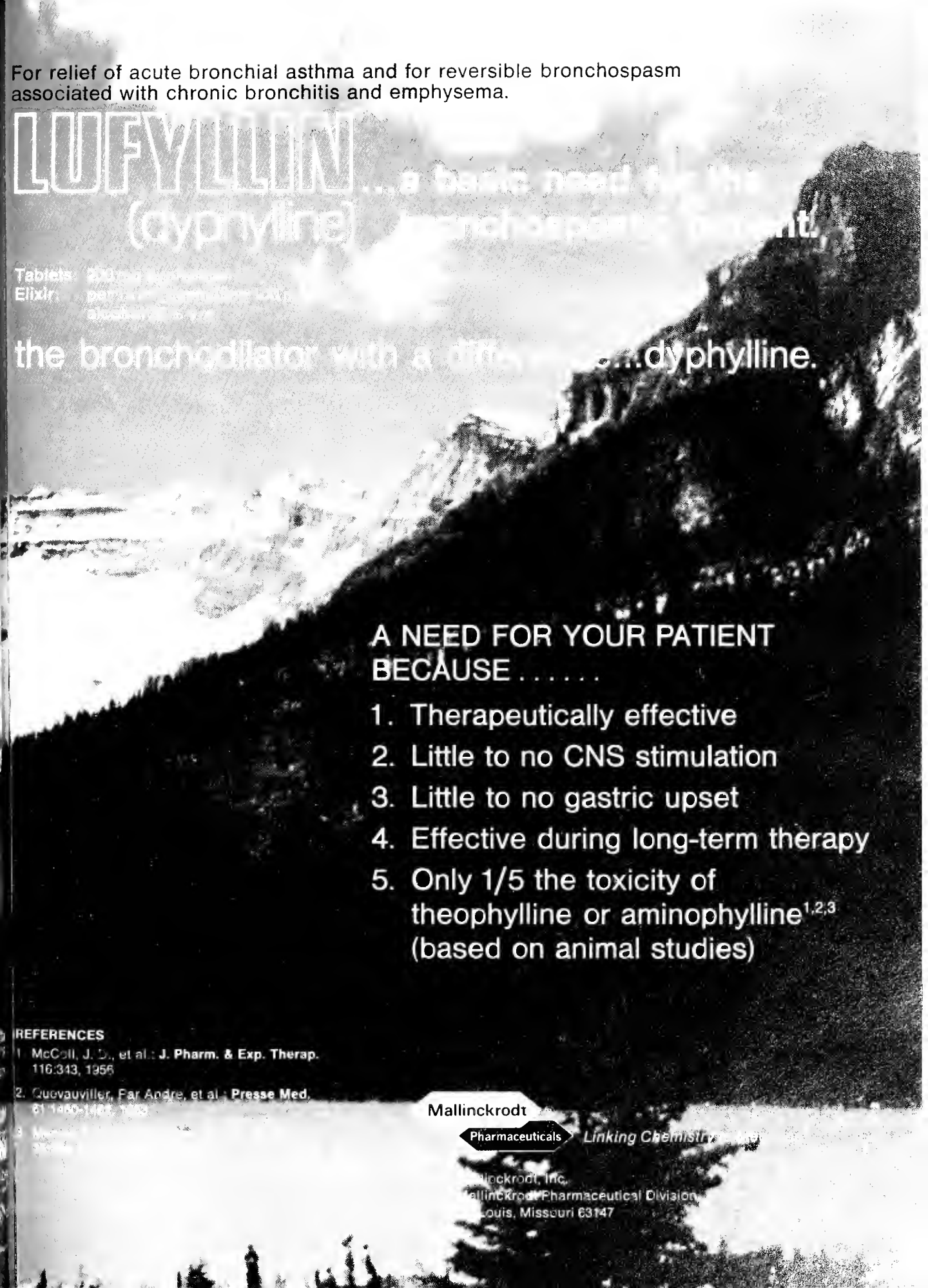
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REFERENCES
1. McColl, J. D., et al.: J. Pharm. & Exp. Therap. 116:343, 1956
2. Quevauviller, Far Andre, et al.: Presse Med.
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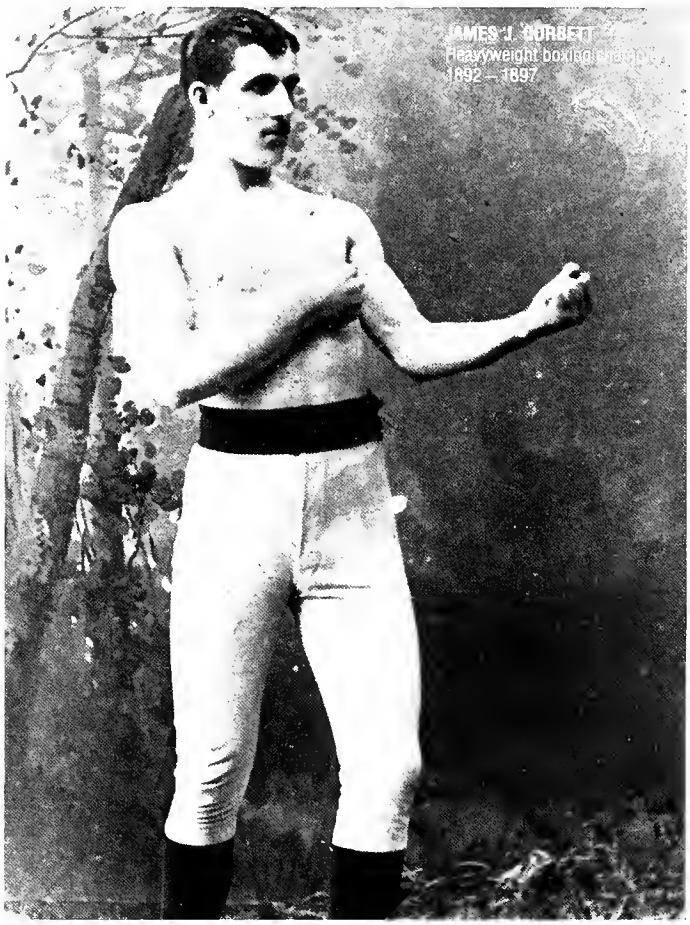

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Medical Management of Rheumatoid Arthritis

Nortin M. Hadler, M.D.

INTRODUCTION

THE atmosphere surrounding the medical management of rheumatoid arthritis was summarized in an exchange some 20 years ago between two giants of 20th Century American medicine:[1] After a national meeting, Fuller Albright, the endocrinologist, approached Walter Bauer, the pioneer rheumatologist, with the remark that soon he would know all there was to know about rheumatoid arthritis except what causes it and how to cure it.

This condemnation has lingered to provide a challenge to the investigator. To the clinician, it can be counter-productive. Rheumatoid arthritis is a common affliction with considerable morbidity. Yet we know that the majority of patients with rheumatoid complaints do not seek medical advice.[2] Could it be that the medical community is not only non-aggressive in seeking out such patients but is less than receptive to their collective suffering? The thesis I will attempt to develop in this discussion is this: Medicine has available to it today an armamentarium capable of significant modulation in the pattern and the impact of this disease.

Department of Medicine
Division of Rheumatology and Clinical Immunology
University of North Carolina School of Medicine
Chapel Hill, North Carolina 27514

Reprint requests to Dr. Hadler

CONSERVATIVE MANAGEMENT

Scientific definitions will not suffice in discussing the management of rheumatoid arthritis. The social ramifications of an affliction which includes malaise, morning stiffness, intense articular pain and deformity and a variety of extra-articular manifestations are enormous. The disease tries the emotional strength, patience and ingenuity of the sufferer in every aspect of his daily life. These elements demand attention in any attempt to formulate a program of management. The primary physician should assume a pivotal role in helping his patient restructure his life consummate with the patient's functional capacity. In many communities a considerable degree of expertise is available from the allied health professions of social service and occupational therapy. The awareness of long-handled combs or specially designed kitchen utensils can make a considerable difference in the daily life of a patient with rheumatoid arthritis. Maneuvers such as these can modulate the impact of this disease. Is it possible to modulate the course of the disease?

Answering this question requires some grasp of the natural history. The classic studies attempting to define the prognosis from the time of onset in patients managed conservatively are now almost 30 years old and are still relevant.[3] It is clear from these studies that most patients do *not* deteriorate over five years of conservative management. Furthermore, there are few features that distinguish those patients who are at greatest risk.

Several lessons can be gleaned from data such as these. The future need not be bleak if the patient is afforded conservative therapy alone. The pattern of remissions and relapses—as well as their severity—is extraordinarily variable and unpredictable. I should point out that with conservative therapy, a remission implies dramatic improvement, as total absence of inflammation rarely occurs.[4] This variability and unpredictability create a considerable challenge when trying to formulate a program of pharmacologic intervention. The challenge is compounded when we examine the available drugs. The obvious implication is that the essence of intervention is to minimize the psychosocial impact, alleviate pain and preserve function. That is what is meant by conservative manage-

ment. Management beyond that is not dictated by the diagnosis itself but by the course of the individual patient.

What are the elements of a program of "conservative management"? Clinical experience and corroborative data support a number of maneuvers as effective intervention with minimal side effects. These include rest, exercise and agents with analgesic and anti-inflammatory effects.[5]

The rest-exercise paradox has caused confusion for years. Total immobilization of the limbs by prolonged splinting results in only a transient decrease in range of motion and muscle strength; yet it is associated with a decrease in signs of inflammation.[6] Such a maneuver is impractical. An attempt to compare complete bed rest with limited activity documented no such effect.[7] Furthermore, I can find no convincing evidence that splinting in the adult impedes the progression of deformity or joint destruction. From observations such as these, a rather empirical approach has evolved. The patient with rheumatoid arthritis suffers both from pain on use of an inflamed joint and from a number of systemic manifestations including malaise. Periods of rest during the course of daily activities are palliative. The use of simple splinting devices such as resting splints for wrist and knee at night and "cock-up" wrist splints during activity can reduce the patient's discomfort. On the other hand, muscle atrophy about inflamed joints occurs early in rheumatoid arthritis and these para-articular structures are integral to the biomechanical integrity of the joints with which they are associated. It follows that preservation of this mechanism should spare the inflamed, particularly weight-bearing, joint additional trauma. Simple exercises — particularly non-weight-bearing exercises — are essential to the therapeutic milieu. These can be expedited by consulting physical and occupational therapists with reference to several standard textbooks.[8,9] Patient and family education, rest, maintenance of muscle bulk and tone, palliative splinting and psychosocial support comprise the foundation of management in all patients with rheumatoid arthritis. These cannot be overemphasized and are not supplanted by the available drugs.

TABLE 1
DRUGS DISCUSSED

Generic Name	Proprietary Name(s)
Acetaminophen	Tylenol, Tempra
Phenacetin	Acetophenetidin
Phenylbutazone	Butazolidin
Oxyphenbutazone	Tandearil
Indomethacin	Indocin
Hydroxychloroquine	Plaquenil
Mefenamic Acid	Ponstel
Ibuprofen	Motrin
Gold Salts	Solganal, Myochrysine
Cyclophosphamide	Cytoxan

However, a cornerstone of conservative therapy is to use drugs to ameliorate pain, if not reduce inflammation. Furthermore, in managing a chronic disease which alters life expectancy so little, considerable thought should be given to choosing agents with "side effects" considerably less than the potential ravages of the disease. This red flag should be raised when considering any agent where clinical experience is limited compared to the individual patient's life expectancy. Often, the issue is not clearcut, so that it is worth our while to consider several categories of new and old drugs in detail. Table 1 lists the generic name as well as some proprietary names of some of these agents.

Aspirin

Aspirin has withstood the test of time in spite of precious little scientific documentation. Synthetic aspirin, acetylsalicylic acid, was introduced in 1899 and rapidly found its way into the life style of the civilized world. Some 30 tons are consumed in the United States daily. Taken sporadically, and in low doses, it is antipyretic and analgesic. It is the experience of astute clinicians for almost a century that in patients who take high doses only, one can observe an anti-inflammatory effect in rheumatoid arthritis. Short-term controlled clinical trials document this result.[10] There are no long-term controlled trials, nor does any study examine the rate of progression of erosions during aspirin therapy. Nonetheless, the clinical utility of high-dose aspirin therapy is established. In many patients this intervention results in dramatic relief from pain and stiffness and permits considerable functional improvement.

Several aspects of the pharmacology of aspirin are worth attention. The drug is uncharged in the acid environment of the stomach and readily traverses the mucosal membranes. Renal clearance is markedly enhanced when the urine is alkaline, so that the use of absorbable antacids prevents attaining the sustained high serum salicylate level necessary for anti-inflammatory effect.

The half-life of salicylate in the blood is quite variable, ranging between 3 and 8.5 hours. Thus, statements that one needs 5 g/D divided in four-hourly doses are approximations. It is necessary to increase the dose gradually and decrease the interval of administration until one sees either an effect or toxicity as manifest by tinnitus or decreased auditory acuity. The serum salicylate level is useful in monitoring therapy and in assessing patient compliance and it certainly should be checked before the patient is considered unresponsive. Because of the variability in half-life, it is difficult to justify the increased expense of timed-release preparations of aspirin.[11]

Another relevant aspect of aspirin pharmacology is that the half-life *increases* as the serum level increases.[12] Thus, it may take a small increment in dose to help a patient who is taking many grams daily without relief. Likewise, a small decrease can often eliminate tinnitus.

For the past several decades emphasis on the side effects of aspirin has eroded understanding of its usefulness. Serious side effects certainly should be considered by physicians prescribing high-dose aspirin therapy but they are common because of the ubiquitous use of aspirin. Let me state my strong personal bias: There is no anti-inflammatory agent currently available that compares favorably with aspirin in terms of cost, effective-

ness and side effects. Newer agents have a role, but they have not replaced aspirin as the drug of choice.

The dose-related complications and toxicity of aspirin are well known.[13] In addition to true idiosyncratic reactions, there is a rare[14,15] syndrome of aspirin intolerance marked by angioedema, rhinitis, nasal polyposis and bronchial asthma. Because of this syndrome and some pharmacologic effects of aspirin such as histamine release, I am cautious in the use of aspirin in asthmatics.

Symptomatic gastritis is the usual impediment to aspirin therapy. Acetylsalicylic acid, on contact with the mucosa, promptly induces erythema and in large doses will increase daily gastrointestinal blood loss from 0.2 to 1.6 ml to 1.2 to 8.4 ml.[16,17] This hazard can be diminished by giving aspirin with food, by manipulating the diet, by increasing the dose slowly and by avoiding other gastric irritants. In the face of peptic ulcer or gastritis, aspirin is contraindicated. Almost *all* anti-inflammatory agents — glucocorticoids for example — must be tried with caution because of their ulcerogenic potential.

Attempts to modify the structure of aspirin to lessen gastrointestinal toxicity while retaining adequate anti-inflammatory potency have been futile. The intriguing comparison is between aspirin (acetylsalicylic acid) which is absorbed intact and sodium salicylate. However, there are circulating hydrolases so that within 15 minutes, 75 percent of circulating salicylate is no longer acetylated[18] so that aspirin is rapidly converted to sodium salicylate. Despite this, therapeutic potency of aspirin is considerably greater than sodium salicylate. Several clues suggest that the *acetyl* group of aspirin is essential to its greater anti-inflammatory potency. During the course of high-dose aspirin therapy, human serum albumin is acetylated[19] and antigenically altered. Aspirin, but not sodium salicylate, can interfere with the complement system. In low doses, aspirin, but not sodium salicylate, prolongs the bleeding time, though this difference is not apparent at high doses. These observations[20] lessen the likelihood of anti-inflammatory effectiveness of salicylates that are not esters of acetic acid. This is unfortunate, since sodium salicylates can be administered *intravenously* without gastrointestinal toxicity.[16] One other salicylate deserves note. Choline salicylate lacks the acetyl group, has fewer gastrointestinal side effects and may have some anti-inflammatory action. In my opinion its cost-effectiveness offers little over low-dose aspirin or acetaminophen.

Para-aminophenols

Many para-aminophenols were introduced before the turn of the century but only two have survived: acetaminophen and phenacetin. The principal metabolic pathway for phenacetin leads to conversion to acetaminophen, the active metabolite. Because prolonged high-dose phenacetin administration, usually in combination with aspirin and caffein, is associated with chronic interstitial nephritis or pyelonephritis and a high incidence of papillary necrosis,[21,22] I do not use phenacetin, particularly not in the long-term management of rheumatoid arthritis.

The same does not hold for acetaminophen, which is not a gastrointestinal irritant and does not interfere with clotting. It is antipyretic and analgesic — perhaps half as potent as aspirin, but neither clinical experience nor laboratory evidence supports *any* anti-inflammatory or antirheumatic effect. This is a "better than nothing" drug. From personal clinical experience, and from a review of the clinical drug trials, one must be impressed by the effect of the "placebo." This is not to advocate sham treatment, but to point out that a physician's positive attitude can do much to encourage the patient to follow conservative regimens faithfully and to persist in the activities of daily living. Acetaminophen can offer some relief in treating the aspirin-intolerant patient and can be incorporated into the conservative regimen.

Phenylbutazone

Like the para-aminophenols, pyrazolon derivatives were introduced before the turn of the century. The congener in use today — phenylbutazone — was introduced in 1949. The structure of this agent tolerates little modification without loss of potency — the exception being the hydroxy derivative, oxyphenbutazone, which works like phenylbutazone with the possible exception of less gastric irritation.

Phenylbutazone is a poor antipyretic and analgesic when compared with aspirin and should not be used for these actions. Experimentally, it is as potent as glucocorticoids as an anti-inflammatory agent although many clinicians feel it is less effective than aspirin in treating classic rheumatoid arthritis. Furthermore, what is the price of this anti-inflammatory benefit? The relative contraindications are legion (Table 2). Sodium retention can be quite significant and the drug is contraindicated in congestive heart failure. The gastrointesti-

TABLE 2
Side-Effects of Phenylbutazone

Target	Mechanism	Relevant Clinical State
1 Kidney	Na^+ retention	Congestive Heart Failure Glaucoma
	Uricosuria	Sulfinpyrazone is used as a 2nd-line agent in management of gout
2 Thyroid	Reduces I uptake	Borderline myxedema
3 GI	Irritant	Hepatitis Nausea, vom.; e.g. diarrhea Peptic ulcer diasthesis
4 CNS	?	Vertigo, insomnia Nervousness, euphoria
5 Mucocutaneous	- - -	Ulcerative stomatitis Rashes
6 Bone marrow	?	Cytopenias including aplastic anemia, agranulocytosis
7 Drug-Drug Interactions		
Coumadin	Competes for binding + ?	Bleeding diasthesis
Sulfonureas	Competes for binding + ?	Prolonged hypoglycemia

nal side effects are at least as frequent and severe as those of aspirin. Central nervous system symptoms are common (particularly in the elderly) as are mucocutaneous side effects. Bone marrow toxicity is not uncommon but is usually slow, dose-related and reversible. However, perhaps 1/50,000 patients suddenly develops the most feared complication, agranulocytosis or aplastic anemia.[23] Finally, let me emphasize two highly significant interactions: The drug can potentiate coumarin in a dramatic fashion so that it is contraindicated in a patient taking these anticoagulants. Even more dramatic is the hypoglycemia induced by the interaction with oral hypoglycemics, sometimes lasting for days and perhaps reflecting the 72-hour biological half-life of phenylbutazone.

Nonetheless, attempts have been made to use phenylbutazone in the long-term management of rheumatoid arthritis. In one study[24] 315 patients with rheumatoid arthritis received an average of 300 mg/D of phenylbutazone. Most stopped the drug within two years generally because of intolerance (usually gastrointestinal) or because the drug was ineffective. The remission rate after four years was similar to that observed in the trials of conservative therapy alone. Phenylbutazone has no role to play in the management of rheumatoid arthritis.

Indomethacin

Introduced slightly over ten years ago, after intensive experimental pharmacological screening, indomethacin is structurally a unique agent — an indole derivative. This is a useful and important drug,[25] almost totally supplanting phenylbutazone in my practice. It is a potent antipyretic that can be effective in patients unresponsive to aspirin and is an effective anti-inflammatory agent, more potent in some animal models than glucocorticoids. It is a highly effective agent for treating the symptoms of acute gout and is worth trying in patients with osteoarthritis and rheumatoid variants such as spondylitis who are unresponsive to aspirin. The same applies for rheumatoid arthritis; indomethacin is worthy of trial in patients unresponsive to full-dose aspirin therapy. Yet no controlled study has shown indomethacin to be superior to aspirin in rheumatoid arthritis. Therefore, because of its expense and our relatively short experience with it, I feel it is a second-line drug.

Some 35 percent of patients will experience side effects and as high as 20 percent will be forced to discontinue indomethacin, most commonly because of gastrointestinal difficulties: nausea, symptomatic gastritis, peptic ulcers. Central nervous system side effects are next in frequency, particularly in the elderly: headaches, dizziness, somnolence, confusion. Bone marrow and liver toxicity is rare in contradistinction to phenylbutazone.

As with aspirin, gastrointestinal side effects may be avoided by gradually increasing dose and by utilizing the buffer capacity of meals and sometimes antacids. Particularly in the elderly, bedtime doses alone are often well tolerated and may relieve morning stiffness.

Anti-malarials

There is an anti-inflammatory agent that is not an irritant to the intestinal mucosa. The drug is chloroquine, or its currently available analogue, hydroxychloroquine. These antimalarial drugs have been used to treat rheumatoid arthritis since 1951—with great enthusiasm until their ocular toxicity was appreciated. A number of controlled trials demonstrate the anti-inflammatory effectiveness of these drugs in rheumatoid arthritis. Interestingly, it takes a month or so for this effect to occur and it may not be apparent for several months.[26] Often the drug will induce diarrhea which is usually transient. Hydroxychloroquine can cause patients with psoriasis to exfoliate. A rare neuromyopathy has been described with chloroquine.

The principal deterrent to the use of hydroxychloroquine is ocular toxicity. The drug accumulates in tissues, notably pigmented tissues including the retina. Associated with this are bilateral, symmetric, progressive degenerative changes principally in the macula. There slowly develops patchy depigmentation of the center of the macula surrounded by a concentric clear zone and then a ring of pigment. Patchy skin pigmentation and loss of hair color may accompany these changes. Discontinuation of therapy may arrest and even reverse these changes — but not invariably.[27]

Fortunately, the ocular toxicity is related to dose and time. Most cases have received considerably higher doses for prolonged periods than are currently employed for anti-inflammatory effect. Ocular toxicity is quite infrequent in patients using hydroxychloroquine at a dose of 200 mg once or twice a day, but ophthalmologic examination by a physician familiar with this drug's toxicity should be performed at least every six months. There is some reason to think that avoiding direct sunlight will reduce the risk of ocular toxicity. One other precaution: these drugs in low doses present a major cardiac-toxic threat to children and care must be taken to avoid accidental ingestion in the home.

There is a role for hydroxychloroquine in the management of rheumatoid arthritis. Only in patients with active ulcer disease do I consider hydroxychloroquine as a sole agent. However, it is available as a useful adjunct therapy.

Steroids

Let us turn our attention to glucocorticoids, the most potent anti-inflammatory agents available. The use of these agents in rheumatoid arthritis and other rheumatoid diseases is a very thorny issue. It is clear that they are a very effective anti-inflammatory agent, a fact which in combination with their mood-elevating potential can result in dramatic palliation. Several passages from a letter[28] to five prominent rheumatologists from Dr. Philip Hench dated February 24, 1949, illustrate this:

"As you may recall, we have been trying for twenty years to identify the 'substance X' which is responsible for the striking remissions induced in rheumatoid arthritis by jaundice and pregnancy. At last we think we

have identified it as a rare chemical, very small amounts of which have been prepared and made available to us. Since last September, we have been studying intensively its physiological action and have administered it to about twelve patients with severe or moderately severe rheumatoid arthritis. The material has striking effects which provide relief almost as dramatically, if not as dramatically, as the effects of jaundice . . . in all patients, within a few days, there is a notable reduction of symptoms and improvement of function of muscles and joints."

The rest is history—Dr. Hench's Nobel Prize and the widespread use of steroids in the management of rheumatoid arthritis. The short-term improvement in symptoms and function was indeed dramatic. But, with time, the medical world came to realize that one disease, rheumatoid arthritis, was being superseded by an equally debilitating and devastating disease — exogenous Cushing's syndrome.

The death-knell for steroids was sounded with the realization that in spite of the dramatic reduction in inflammation, no evidence was forthcoming that destruction of joints was halted. Withdrawal of the agent was met with tremendous patient resistance. It meant withdrawal of pain relief and mood elevation, and finally, withdrawal itself may provoke arthralgias.

It is difficult to discard the most reliable and effective anti-inflammatory agent available. What has evolved is a consensus that there are "special cases" for whom systemic steroid therapy is indicated—but the criteria are not uniformly defined. To state my bias, leaving aside such extra-articular manifestations of rheumatoid arthritis as pericarditis with restriction, these "special cases" are exceedingly rare. In the relatively young patient with severe active disease, I aggressively pursue other options, including combinations of some of the agents we have already discussed, periods of hospitalization for rehabilitation and other options we will come to shortly. Only with the rare active rheumatoid arthritis patient well into the sixth decade of life do I feel systemic steroids is an option. Even here, I use the lowest effective dose and can usually convince the patient to accept the compromise in relief resulting from alternate day therapy.

My negativism toward steroids is only slightly less sanguine when we come to discuss intra-articular steroids in rheumatoid arthritis. There is good data that intra-articular steroids themselves are disruptive to the integrity of the articular cartilage.[29] Therefore, I will not inject the same joint more than once. Furthermore, in classic symmetric disease, intra-articular injections are impractical. I reserve intra-articular injections for the exceedingly unusual patient whose disease pattern is both highly asymmetric and intermittent.

Newer non-steroidal anti-inflammatory agents

As is apparent from the highly effective advertising campaigns that are blanketing our journals, filling our mailboxes and even reaching our patients ahead of us, a number of new non-steroidal anti-inflammatory agents have recently been released. This is just the beginning, for many more are currently at various levels of investigation. Having just reviewed the sad saga of systemic steroids, we should be cautious in our approach to using these agents. On the other hand, it is all too clear that we currently have no potent agent without disadvantages. Therefore, both the magnitude of the need and of the market are obvious. Nonetheless, clinicians have the difficult task of interpreting the carefully worded claims of the marketing teams and of sifting through the statistical exercises provided in the literature.

I want to consider the two new non-steroidal anti-inflammatory agents that are on the market in the U.S. today. Each represents a new class of agents: anthranilic acid congeners, often referred to as the fenamates, have been under study since the early 1960s as anti-inflammatory agents. Several are considerably more potent in some animal models than phenylbutazone or aspirin. One of the agents, mefenamic acid, was released by the FDA in 1966. It is a potent analgesic, but dose-related toxicities include ulcers, hemolytic anemia and bone marrow hypoplasia.[30] For these reasons, its use is restricted to one week as an analgesic agent and it has neither been aggressively marketed nor widely used. It has no role in rheumatoid arthritis.

The phenylalkanoic acids have exploded on the clinical scene in the form of ibuprofen. The parent compound, ibufenac, was introduced in 1968 after extensive clinical trials demonstrating a predictable anti-inflammatory effect similar to that of aspirin. The parent compound was released for commercial marketing, then quickly withdrawn when it was recognized that it could cause jaundice and even death from hepatocellular necrosis.

Before this parent compound had completed its life cycle, the engines of clinical pharmacology were into production and evaluation of a number of congeners. Ibuprofen has been sufficiently studied to satisfy the FDA and is now aggressively marketed. It is intriguing that the only structural modification in the toxic parent compound necessary to produce ibuprofen is the introduction of a methyl group on the organic acid side chain. Nevertheless, no hepatotoxicity or major organ damage has been ascribed to this drug.

Ibuprofen, in animal experiments, is a potent anti-inflammatory agent. The clinical data are less clear, probably because of uncertainty as to the effective dose. It is a fair overview that this drug has a potency similar to that of aspirin, only when used in high doses ranging from 1600 to 2400 mg/day.[31]

Like its parent compound, ibuprofen has the potential for peptic ulcer formation. Nonetheless, it is considerably better tolerated in terms of gastrointestinal toxicity than aspirin — as asserted in the advertising. Perhaps as many as half of the patients intolerant to aspirin will be tolerant to ibuprofen. This drug does not interfere with the clotting mechanism. The agent probably has a role in conservative management, but I will use it sparingly until greater clinical experience is available.

In reviewing the available analgesic and anti-inflammatory agents, I have frequently alluded to

cost-effectiveness. To illustrate my point, I phoned my corner drugstore to obtain prices for a patient. It is clear that maintenance therapy with aspirin wins hands down, costing some $30 per year while the others approach $180.

Gold salts and cyclophosphamide

It is important to emphasize that none of the anti-inflammatory agents discussed has been shown to be truly antirheumatic: they do not impede or stop the erosive, destructive component of rheumatoid arthritis. There are only two agents currently available that may do this—gold salts and cyclophosphamide.

Organic salts of gold were widely used in the treatment of tuberculosis early in this century. By 1930, following the observations of many clinicians, notably Forestier,[32] it was used in the management of rheumatoid arthritis. There was considerable controversy both to the anti-inflammatory effectiveness of this parenteral medication and the incidence of side effects, which was clearly significant. The definitive study addressing these issues was a multicenter, double-blind, controlled trial sponsored by the Empire Rheumatism Council in Great Britain and published in 1960.[33] Only severe dermatitis, including exfoliative dermatitis, was unique to the gold group. Albuminuria occurred with similar frequency in both groups (about 3 percent) but during gold salt treatment this can rarely progress to the nephrotic syndrome. Bone marrow toxicity manifest as cytopenia did not occur in this trial, although it is a well described complication. The study supports the summary that while side effects are significant and not infrequent, the drug can be used relatively safely.

Did it work? Using a large number of subjective and objective measures of function and inflammation, the study shows that gold salt treated patients improved to a greater degree than controls. This difference was apparent at three months and persisted through 12 months. It is to be emphasized that the control group also improved — but we have previously discussed the utility of the "placebo effect." This differential effect was gone at 30 months.

The Empire Rheumatism Council study could demonstrate no difference in the rate of progression in radiographic joint damage. However, in 1974, a study group by the rheumatology divisions at Baylor and the Henry Ford Hospital[34] gave 20 weekly injections of either gold salt or placebo followed by monthly injections for two years and demonstrated that the rate of joint destruction by disease was significantly slower for the population given gold.

Based on such studies, I tell my patients: In most patients with rheumatoid arthritis, gold salts have nothing to offer except nuisance, expense and the potential for side effects; but a significant minority of treated patients can anticipate an anti-inflammatory effect if not an antirheumatic effect after at least two months of therapy. Furthermore, if there is no major improvement after a total dose of 1 g administered as 50 mg I.M. weekly for 20 weeks, such an event is unlikely and the drug should be discontinued. Finally, in the responsive patient, I continue the drug injecting 50 mg at monthly intervals until a better agent is developed.

Who is candidate for gold salt therapy? I must be certain that my patient has rheumatoid or psoriatic arthritis since the drug has nothing to offer in osteoarthritis and such rheumatoid variants as ankylosing spondylitis and may be hazardous if not useless in systemic lupus erythematosus. The patient must have persistent disease activity in the face of conservative therapy for a prolonged period—at least six months. And I must see radiologic documentation of progressive erosive disease—though I will accept very subtle changes.

Finally the physician employing this agent must detect side effects early, most of which will reverse if the course of therapy is terminated. I still employ the 10 mg "test dose" to identify the rare patient with an idiosyncratic or immediate hypersensitivity response. Prior to each of the 50 mg weekly injections, and each injection on the long-term monthly maintenance schedule, the patient is questioned about pruritus, rash, stomatitis, and complete blood count and urinalysis are obtained. It is noteworthy that eosinophilia can be a harbinger of the dermatitis. In the Arthritis Clinic at the North Carolina Memorial Hospital, these procedures are executed by a specially trained registered nurse and barring obvious complications the patient is evaluated by a rheumatologist only once a month.

If there is a rationale for the use of cyclophosphamide, it was stated by Hamlet: "Diseases, desperate grown, by desperate appliances are relieved." This drug, in high doses only, has been demonstrated to be anti-inflammatory and to slow the progression of erosive disease. Its side effects are numerous: bone marrow toxicity, alopecia, cystitis as well as bladder fibrosis and dysplasia, and sterility. In theory it is oncogenic and clearly it impairs host defense mechanisms creating a target for serious sepsis. In short, cyclophosphamide and not rheumatoid arthritis threatens the life expectancy of the patient. The use of cyclophosphamide in articular rheumatoid arthritis is more than heroic. Furthermore the drug is not released by the FDA for this purpose and guidelines for its usage published by the American Rheumatism Association[35] include the mandate for therapeutic protocols approved by peer group review.

STATE OF THE ART

Rheumatoid arthritis is the calling of the generalist at the bedside—where the exactness of the clinical laboratory in no way supplants the judgment, compassion and common sense of the physician.

The state of the art forces us to individualize treatment using all the tools we have. Dr. Charley Smyth of Denver has described a pyramid of interventions[36] in the case of the patient with rheumatoid arthritis similar in form to that illustrated in Figure 1. This is a useful conceptual tool. However, different clinicians

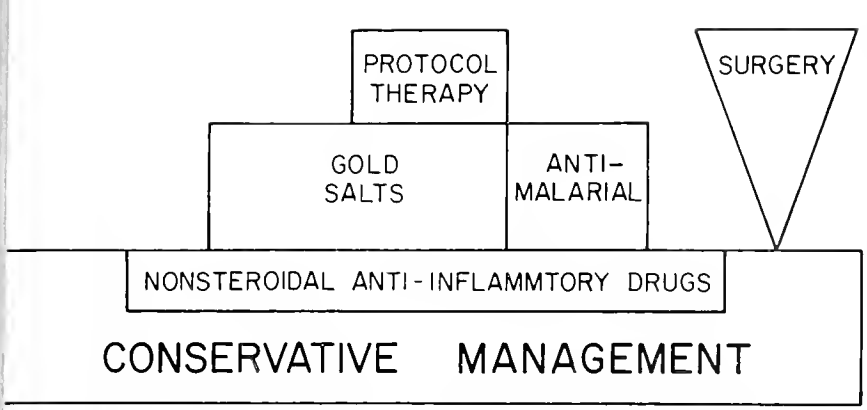

Fig. 1. A pyramidal scheme for the sequential management of rheumatoid arthritis.

fill these boxes somewhat differently. More important, the pyramid builds sequentially during the course of the individual patient's illness. It may grow truncated or lopsided. These are issues of judgment.

Finally, there is an issue of reality in the concept of conservative management I have tried to develop. Such management is extraordinarily demanding of a physician's time. There is considerable aid available from the allied health professions if they are called upon. Furthermore, the need for implementing management programs in arthritis appears to be gaining long overdue nationwide recognition. The funding of the Regional Medical Program has greatly facilitated our current efforts at UNC and a substantial National Arthritis Act has just passed Congress and awaits appropriation of funds. The future is bright.

ACKNOWLEDGEMENTS

This paper was presented at the First Annual Arthritis Symposium held in Chapel Hill, North Carolina, April 12-13, 1975, and sponsored by the North Carolina Chapter of the Arthritis Foundation, North Carolina Regional Medical Program (U.S.P.H.S.) and the Office of Continuing Education of the University of North Carolina School of Medicine. The advice, encouragement and assistance of Dr. Oscar Sapp, Ms. Margaret Honeycutt and Mrs. Betty Neilson are gratefully acknowledged.

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Thus, let some tartar-emetic be secretly introduced with the wine which a man drinks after dinner. Instead of the pleasant sensations usually produced by this beverage, he soon begins to perceive a langour of mind and body—the face grows pale instead of red—the mind is unsteady and depressed—the muscular power is diminished—the head aches or becomes confused—the heart beats slowly or intermits—in short, there is a prostration of all the corporeal and intellectual powers—and all this, in many cases, before any disagreeable sensation is felt in the stomach. At length, nausea and vomiting take place, if the dose be sufficient—the contents of the stomach are ejected—reaction succeeds—and the mental and corporeal energy is once more restored.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 6.

Surgery of the Lower Limb in Rheumatoid Arthritis

Frank C. Wilson, M.D.

INTRODUCTION

SINCE the primary function of the upper limb is mobility and that of the lower limb stability, it would seem that the surgical approaches to each might differ, inclining toward arthroplasty in the upper limb and fusion in the lower. However, because of the tendency of rheumatoid arthritis to produce spontaneous fusion, procedures that preserve motion are preferred in both areas.

DETERMINANTS OF SURGERY

In general, surgery should be considered for any rheumatoid patient persistently disabled by joint pain, deformity or instability.

The contraindications to surgery include:

1. Florid disease, i.e., patients who are systemically ill; however, neither elevation of the sedimentation rate alone nor local joint inflammation is necessarily a deterrent.
2. Any focus of infection.
3. Significant medical or psychiatric problems, which increase the risk of failure.
4. Poor motivation. Active participation by the patient is often necessary to insure successful joint surgery. While motivation cannot be consistently predicted, a patient who did not perform well after a previous operation will probably be a poor performer after a second one.
5. Unrealistic expectation, e.g., the patient with extensive disease who expects significant overall improvement from one operation.

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TYPES OF SURGERY

The decision on what type of surgery should be performed is based largely on findings in the joint. The procedures available are:

1. Synovectomy
2. Osteotomy
3. Arthroplasty
   a. resection
   b. interposition
   c. replacement
      (1) partial
      (2) total
4. Arthrodesis

To be of value, synovectomy must be done before the joint surfaces are damaged. If significant deformity is also present, it may be corrected by the release of contracted soft tissues (tendon, capsule, etc.) or osteotomy. Where there is significant destruction of articular cartilage, it is unlikely that any procedure short of replacement or fusion of the joint will provide long lasting relief of pain or correct deformity.

Any of the joints in the lower limb may be sufficiently painful, deformed or unstable to produce disability; however, the knee most frequently forces patients to a bed-chair type of existence. Next most frequent is the hip and, much less often, the foot and ankle.

The Knee

Synovectomy of the knee is indicated with persistent synovitis, usually manifested by pain and swelling. The fact that synovectomy is carried out in the knee more frequently than in other joints of the lower limb reflects both the greater disability produced by knee involvement and the greater visibility of an effusion in the knee as compared to the hip.

Contraindications to synovectomy of the knee include:

1. A fixed flexion deformity of greater than 15 degrees,
2. Over 15 degrees of mediolateral instability,
3. Less than 90 degrees of knee motion, or
4. Appreciable loss of articular cartilage.

The surgical technique of synovectomy is beyond the scope of this paper; however, it is unnecessary to remove all of the synovium

to obtain benefit from the procedure. Most synovectomies of the knee remove less than 75 percent of the diseased tissue.

Postoperatively, patients are kept in a compression dressing for about three days, following which range of motion and quadriceps strengthening exercises are begun. Weight-bearing is usually deferred until active control of the knee has been achieved and wound healing is secure. These usually take about three weeks.

In general, the degree of improvement after synovectomy of the knee is inversely proportional to the:

1. Severity of the systemic disease.
2. Stage of the joint disease at the time of synovectomy.
3. Length of follow-up.

The synovium regenerates within a few months and eventually resembles the original rheumatoid synovium, although it shows more scarring. It is possible that this increased collagenous tissue forms at least a partial barrier to the infiltration of rheumatoid inflammatory cells, preventing the new synovium from becoming as acutely inflamed as it was before synovectomy.

With careful selection of patients, about three-fourths of them may be expected to have sufficiently long lasting results to justify the procedure. Poor results are usually recurrent synovitis with progressive loss of cartilage space and deformity.

If the cartilage space in either compartment of the knee is preserved, consideration may be given to femoral or tibial osteotomy to shift weight-bearing forces toward the normal compartment; however, this procedure has little effect on the rheumatoid process itself and is useful only to correct associated deformity. As a rule, valgus deformities are treated by distal femoral osteotomies while varus is better corrected by osteotomy through the proximal tibia. The procedure should not be done if there is a flexion contracture of greater than 15 degrees or a range of motion less than 90 degrees.

Excisional and interpositional arthroplasties of the knee have been

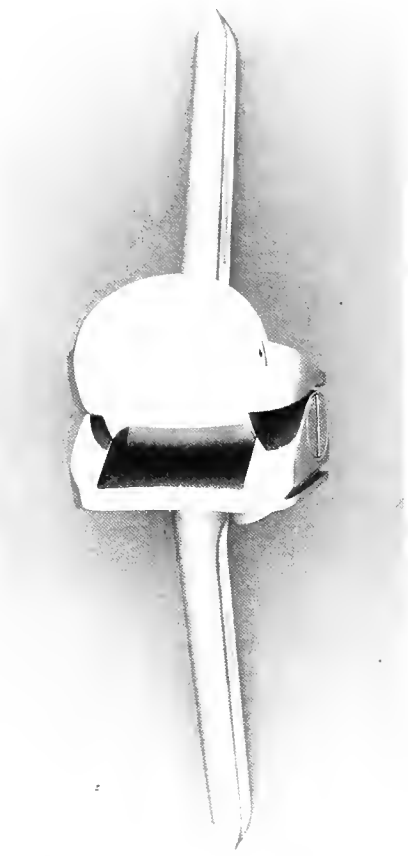

Fig. 1-A. A stabilizing knee prosthesis (Walldiu S.)

largely abandoned because of the difficulties encountered in achieving a proper balance between mobility and stability.

If persistent disabling arthritis is present with destruction of articular cartilage, replacement of the knee is usually the procedure of choice. In general, replacement of only one side of the joint, as with tibial plateau or femoral mold prostheses, has not proved as satisfactory as replacement of both joint surfaces because the disease is not confined to one side of the joint.

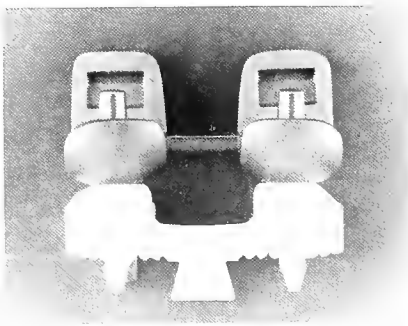

Fig. 1-B. A condylar replacement knee prosthesis (geometric.)

The indications for total knee replacement are the same as those for fusion. It is an end-of-the-road procedure that should be reserved for patients with sufficient joint destruction to make them unsuitable for synovectomy or osteotomy.

Total knee replacement should not be carried out in the presence of:

1. Local or systemic sepsis.
2. Inadequate muscle power, e.g., a non-functional quadriceps muscle.
3. Claudication. The increased activity made possible by joint replacement may lead to increased ischemia and loss of limb.
4. Extensive generalized joint disease—not a definite contraindication but should be carefully considered, since the replacement of any one joint in this kind of case may produce minimal overall improvement.

Although some three hundred different knee joint prostheses have been used throughout the world, there are basically two types: the stabilizing prosthesis, in which stability is inherent in the prosthesis itself (Fig. 1-A) and the condylar replacement prosthesis (Fig. 1-B) in which stability depends on ligamentous integrity. If a flexion contracture of over 45 degrees or over 30 degrees of mediolateral instability exists, a stabilizing prosthesis is preferable. The primary theoretical objection to this type of prosthesis is that it does not allow movement other than flexion and extension; however, the importance of other prosthetic motions in the rheumatoid knee has yet to be determined.

Unless instability or deformity are major problems, a condylar replacement prosthesis, requiring less bone resection, is generally preferred. These prostheses are available in many models. Unlike some stabilizing prostheses, all condylar replacement devices require the use of cement.

With either knee prosthesis, the most striking result is pain relief. About 90 percent of the patients having knee replacement will report either no pain or mild pain (defined as insufficient to produce limitation of normal activities). Adequate sta-

bility (defined as mediolateral motion of less than 10 degrees) is also achieved in over 90 percent of the patients. The range of motion is improved in about 50 percent; more important, in patients with a flexion contracture whatever motion is achieved is put into a more functional range by elimination of the contracture.

Failure of knee replacement may be defined as any complication resulting in removal of the prosthesis. Infection is the most frequent complication, although loosening and technical errors have also led to failure. Peroneal nerve palsies and patellar tendon ruptures have also been worrisome complications. Settling of the prosthesis has not been a problem when cement was used.

About the only indication for fusion of the knee is a failed prosthesis. In unusual circumstances, e.g., a young laborer with long standing monarticular disease, fusion may be considered initially, but in general the progressive, capricious, ankylosing polyarticular nature of the disease makes fusion a poor choice.

The Hip

Surgical approaches to the rheumatoid hip are synovectomy and arthroplasty. There are few reports in medical literature on the results of synovectomy of the hip; nevertheless, it should be considered in cases where the pain is unresponsive to drug therapy and the architecture of the joint is preserved.

The types of hip arthroplasty are interposition (cup), replacement (of the femoral head or the entire joint) and excision. The more complete pain relief and earlier return to normal activities following total hip replacement have all but eliminated other arthroplasties from consideration.

Because of the constraints the disease imposes on activity, age is not a significant contraindication to total joint replacement, although in borderline decisions between synovectomy and replacement, synovectomy is favored in the younger patient.

Unless severe and bilateral, limited motion is not usually an indication for total replacement of the hip.

As with other forms of total joint replacement, pain relief has been the most gratifying aspect in over 90 percent of the patients. Most patients also have improved motion, with the greatest improvement in those patients having the greatest preoperative restriction.

Hip replacement involves use of a metallic femoral component and an acetabulum of high density polyethylene, both cemented in place with methylmethacrylate (Fig. 2).

No discussion of total hip replacement would be complete without mention of the complications. Depending upon the length of follow-up and the care in reporting, at least 25 percent of the patients undergoing this operation develop one or more complications. Infection or loosening are the complications that most frequently necessitate removal of the prosthesis. The patient is left with what is essentially a joint resection; however, resection of the joint is not as disabling as one might imagine. In fact it is sometimes used as a primary procedure in patients with extensive joint involvement or ankylosis of the hips in positions that make perineal care or body posturing difficult.

Fig. 2. Charnley-Meuller Hip Prosthesis. Note metallic femoral component and polyethylene acetabulum.

The Ankle

The rheumatoid ankle has received relatively little emphasis in comparison to the hip and knee, but it will undoubtedly receive more attention as the problems of the hip and knee are solved. Synovectomy is infrequently used, partly because of technical difficulties; however, these objections are not prohibitive, and the procedure probably should be done more often. Where significant cartilage destruction has occurred, fusion may be necessary, but total replacement of the ankle is now under investigation. Since it is technically one of the simplest of the major joints to replace, it is likely that prostheses will replace fusion in the ankle as they have in other joints.

The Foot

Rheumatoid arthritis of the foot may produce deformity either in the hindfoot, forefoot, or both. Hindfoot deformities usually occur as varus or valgus displacement resulting from a combination of joint destruction, weight-bearing and muscle contracture or spasm. If shoe modifications do not control pain and deformity and spontaneous fusion does not occur, triple arthrodesis (in which the joints controlling varus and valgus are fused) may be expected to reduce pain and improve abulation.

Forefoot deformities most commonly involve the metatarsophalangeal joints. The usual deformities are hallux valgus and clawtoes, which, like other rheumatoid deformities, are produced by a combination of synovitis and mechanical forces. The synovitis causes stretching of the ligaments and capsule, allowing normal weight-bearing and muscle action to displace the joint. As progressive clawing occurs, the metatarsophalangeal joints undergo dorsal displacement, which draws the cushioning fat pad forward from

under the metatarsal heads and forces the matatarsal heads downward as a result of shoe pressure on the dorsally prominent proximal phalanx. These effects combine to produce the painful callouses often encountered under the metatarsal heads in rheumatoid feet. If the application of metatarsal bars does not relieve symptoms, surgery may be useful. Hallux valgus and clawtoes are treated by resection of the joints — either the proximal phalanges, metatarsal heads or both. Resection of the joints allows the plantar fat pad to be returned to a more normal position in relation to the metatarsals, thereby reducing symptoms and making shoes fit better. Transmetatarsal amputation has been employed for severe clawing; however, this procedure seems unnecessarily mutilating to most surgeons (and to their patients).

In summary, surgical correction of hindfoot deformities usually requires triple arthrodesis; forefoot procedures include metatarsophalangeal joint resection, or, rarely, amputation of the toes.

SUMMARY

Having discussed the joints of the lower limb individually, it should be pointed out that treatment is rarely so simple because the disease is not often monarticular. When disability results from multiple joint involvement, surgery must be carefully and individually planned. Joint preservation by synovectomy should receive first priority, followed by the staging of reconstructive procedures according to the greatest total gain to be derived by the patient.

In proportion as we have excited the ganglionic system of nerves, or, in other words, the involuntary or vital organs (stomach, heart, & c.), we disqualify the voluntary muscles for action, and the intellectual system for deep thought and other mental operations. In fact, we are then only fit to sit and talk very comfortably over our wine—and ultimately go to sleep. Whether this habit, which is that of civilized life in general, be that which is best adapted for preserving or regaining health, is a question which I shall presently discuss; but, in the mean time, it will be sufficiently evident that pleasurable sensations are diffused over mind and body, by the presence of food and wine in the stomach, *without the existence of any distinct sensation or sensible excitement in the stomach itself*. This is an obvious truth, and it is of great importance to remember it; for if the nerves of the stomach, *in a state of health*, be capable of exciting pleasurable emotions in the mind, and comfortable sensations in the body, on the application of good food and generous wine, we shall find that the same nerves, *when in a disordered state*, are equally capable of exciting the most gloomy thoughts in the mind, and the most painful sensations in the body, on the application of the very same species of refection, either with or *without* an unpleasant sensation in the stomach itself.—*An Essay on Indigestion, or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 5-6.

Medicine During the Great War of 1914-1918

Adrian M. Griffin

THE Great War of 1914-1918 brought far-reaching advances to the field of medicine. The nature of combat itself was transformed and Europeans were caught unprepared for the naval and military tactics developed during the American Civil War. For more than 40 years the British and French armies had fought only colonial wars, and only a small contingent of the German army had ever fired a shot in anger—and that was in China.[1]

A major characteristic of the new warfare was its unprecedented mobilization of scientific and technical skills.[2] And one of the outstanding benefits was improvement in medical services.

The British Empire had only 14,000 hospital beds at the beginning of the war, which left six million sick and two million wounded in Great Britain alone.[3] At war's end the number of beds had increased to 637,746.[4] Despite gross oversights such as the failure to send any dentists with the British Expeditionary Force to France in 1914, the response of volunteers from the medical profession was such that no compulsory enlistment of doctors was required until 1916.[5] Women volunteers formed Voluntary Aid Detachments (VADs) under the auspices of the War Office and the British Red Cross Society and the Women's Imperial Service League under the Belgian, French and Serbian Red Crosses.

"It was not until Spring of 1915 that medical women undertook the full charge of British wounded in England, although in 1914, Dr. Louisia Garrett Anderson established under the French Red Cross a small hospital in Paris which received some British wounded."[6]

Wounds often became infected with gas gangrene and tetanus, probably due to the severity of high velocity projectiles or shrapnel and the filth, lice, mud and damp of the Western Front. After two years it became apparent that the best treatment for tetanus-infected wounds was quick removal of casualties to a hospital for extensive wound debridement.[7] This was often impossible because of the difficulty of retrieving wounded men from "no-man's land" and the Germans' habit of bombarding hospital convoys.

"In 1914 few men received prophylactic antitoxin after being wounded, and the highest monthly incidence was 9.0 cases of tetanus per 1,000 wounded. From 1915 until the end of the war practically every wounded man received antitoxin, and by 1918 the incidence of tetanus had been reduced to about 0.6 per 1,000 wounded. There was also a marked decrease of case mortality in wounded men who developed tetanus.[8]

X-rays of bones became commonplace.[9] And the increased skill in bone surgery[10] led to the founding of the British Orthopedic Society in 1918. Surgery of the eye, face, ear, nose, throat and brain as well as plastic surgery developed because 10 per cent of all injuries were to the head despite the use of steel helmets.[11] Abdominal surgery did not advance, however, probably because no blood transfusion service was evolved and the wounded often could be evacuated to a hospital only with great difficulty. Their wounds became contaminated and they often died of acute sepsis.

"At first we were influenced by the experience of the African War, which seemed to prove conclusively that opium, starvation, and rest in the Fowler position yielded better results in gunshot injuries of the abdomen than treatment by operation."[12]

The concept of healing by third intention had not been evolved; hence, despite surgery and drainage, the majority of men with abdominal wounds died.[13]

Disease produced more casualties than the enemy. But the military axiom from earlier wars that the chance of a soldier's dying from disease was always greater than his chance of being killed by his enemy was to be challenged. For example, in the South African War (1899-

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902) there were 15 non-battle casualties per wounded man in far milder conditions than on the Western Front of World War I, in which there were two non-battle casualties for each wounded man.[14] This was due to the control of waterborne diseases (cholera, typhoid and dysentery) by chlorination of drinking water.[15] Typhoid immunization was begun at the same time and full use made of the principles of the "carrier" as explained by Sir John Charles Grant Ledingham and Sir Joseph Arkwright in *The Carrier Problem in Infectious Diseases*. Later James Glover found a positive relationship between the carrier-rate and the case-rate in infectious diseases. By spacing the beds in military hospitals more than three feet apart Glover was able to reduce both the carrier-rate and the case-rate.[16] Nevertheless, insect-borne diseases remained important in the Mediterranean and tropical theaters. A million deaths in the Balkans were attributed to typhus and in German East Africa more than half the troops were kept out of action by malaria.

The public in Great Britain was indignant and horrified to learn that one soldier in 20 was admitted to the hospital for treatment of venereal disease. (Incidentally, this was no greater than the general population, and it is stated that half the cases were infected before leaving England.) By 1918 public sentiment forced the closing of the "maisons de tolerance" (officially recognized French brothels). One story is that in Le Havre 171,000 men were known to have visited the "houses" in one street in one year.[17] The treatment of venereal disease was primitive and hepatitis was often transmitted when unsterile needles were used. A consequence was the introduction of the venereal disease eradication programs in the United States shortly after the war.[18]

Psychiatric disorders were among the new medical problems which arose during the war. Stress and exhaustion in the trenches produced "shell shock." It was found that while all soldiers suffering from "shell shock" had been under heavy bombardment, only a fifth were involved in the explosions. By the end of the first year of war 10 per cent of the officers and five percent of the soldiers admitted to a hospital in Boulogne were sent back to Britain suffering from "shell shock." Psychiatrists were enlisted to help the British and French armies and in 1917, 91 percent of those patients who had been sent home returned to duty. This contributed to the general recognition of psychiatry as a specialty.

Deserters were subject to death by firing squad. It was found that 89 percent of those sentenced to death were diagnosed as suffering from "shell shock" and they joined others for psychiatric treatment in special institutions or hospitals. In 1921, 65,000 men were still receiving pensions as victims of "shell shock." [19]

Another new disease was trench fever,

> " . . . first described by John Henry Porteus Graham in 1915 as 'a relapsing febrile illness of unknown origin' in troops on the British Front . . . Allan Coats Rankin called it 'trench fever'. By early 1916 it had been comprehensively studied by Sir John William McNee. . . . In German troops it was described by H. Werner, and by William His in Volhynia on the Russian front, who hence called it Volhynian fever. Werner called it two-day fever. It was shown by McNee that the disease could be produced by inoculation with blood from a patient, and it was proved experimentally that lice could transmit the disease. Many points regarding the infection from the louse were cleared up by the War Office Committee, and the causative organism—named Rickettsia quintana—was described by Hans Willi Topfer in 1916." [20]

British troops had been instructed well in cleanliness and were aware of the problems of lice.[21] It is likely that such instruction, despite the conditions in the trenches, helped to control the epidemic of "trench fever."

Gas warfare accounted for some 185,000 casualties. On April 22, 1915, the Germans used chlorine gas north of Ypres and the Allies, though warned, were so surprised that two divisions broke; fortunately the Germans did not press their advantage. Five months later the British, who had protested the illegality and inhumanity of gas, used it themselves at Loos and added to its effect by mixing it with smoke. Three months later the Germans replied with Phosgene, a product easily made from their large dye industry. Diphosgene, chloropicrin and hydrocyanic acid, which attacked the central nervous system, were used by the Germans, who scored a second surprise in 1917 with the use of mustard gas which injured by contact as well as by ingestion. The treatment of gassed soldiers sparked much controversy. Some favored preventing chemical poisoning by having a liberal supply of oxygen available in the trenches for the troops to breathe when subjected to a gas attack.[22] Others tried methods of stimulating expectoration by the gassed, as well as "compression of the thorax, emetics, administration of oxygen, administration of compressed air, and the administration of atropine to diminish secretions." [23] Another routine treatment of gassed soldiers was

> " . . . to ensure an abundant supply of air and warmth, give an emetic of salt and water if the patient was cyanosed and had not already vomited, followed by the administration of ammonium carbonate and vinum ipecacuanhae. If there was a marked case of syanosis and dyspnea, oxygen inhalation was given, opium was added for restless cases to allay the mental strain and pituitary extract and brandy was (sic) added when the heart threatened to fail." [24]

Of the 185,706 British gas casualties in World War I, 5,899 died (these figures do not include British Dominion or Empire dead)[25] because of the blistering and burning action of the gas on the skin or of severe bronchitis resulting in acute congestion and edema of the lungs. The air passages were affected approximately an hour after the gases had been inhaled. The misery and suffering of the gassed were vividly described:

> "The hospital is very heavy now—as heavy as when I came; the fighting is continuing very long this year, and the convoys keep coming down, two or three a night. . . . Sometimes in the middle of the night we have to turn people out of bed and make them sleep on the floor to make room for the more seriously ill ones that have come down from the line. We have heaps of gassed cases present who came in a day or two ago; there are 10 in this ward alone . . . the poor things are burnt and blistered all over with great mustard coloured suppurating blisters, with blind eyes—sometimes temporally (sic), sometimes permanently—all sticky and stuck together, and always fighting for breath, with voices a mere whisper, saying that their throats are closing and they know they will choke. The only thing one can say is that such severe cases don't last long; either they die soon or else improve—usually the former; they certainly never reach England in the state we have them here. . . . " [26]

The chemical warfare stimulated a tremendous amount of research in biochemistry and pharmacology and several new drugs were discovered, such as emetine bismuth iodide which today is one of the better agents for treatment of amoebic dysentery.

In the 19th Century, Germany had been the leader in medicine and surgery but she lost momentum as a result of the war. The disillusion of defeat and the financial attraction of private practice delayed the recovery of German medicine, which was further slowed by emigration of physicians. In Great Britain "specialists" gave a new direction of medicine while in the United States group medical practices were set up because of the success of such units in the war.

Above all, the war introduced new and dramatic medical problems which could be solved only by sustained scientific effort, a fusion of science with medicine which was to transform life in the next 60 years.

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It leads us to divide into two great classes, those symptomatic or sympathetic affections of various organs in the body, dependent on a morbid condition of the stomach and bowels—viz, into that which is accompanied by *conscious sensation*, irritation, pain, or obviously disordered function of the organs of digestion—and, into that which is *not* accompanied by any *sensible* disorder of the said organs or their functions. Contrary to the general opinion, I venture to maintain, from very long and attentive observation of phenomena, in others as well as in my own person, that this *latter* class of human afflictions is infinitely more prevalent, more distressing and more obstinate, than the *former*.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 7.

Editorials

YOUNG DR. FOGY

Told that he is a dirty old man, a senior citizen or two will smile proudly and admit it as a reasonable sequel to his career as a dirty young man. But I've yet to meet someone who will admit being an old fogy. Since medicine spends a lot of time and money nowadays trying to predict whose coronaries will close up, blood pressure rise, car crash or marriage fail, maybe it's time to look at the dread fogyism.

First, what is it? Consensus "old fogies" in this neighborhood seem to share being over 40, slowness of movement and speech, and resistance to new ideas. They are notorious for slow, middle-of-the-road driving. Most fall back on predictable formulas when responding to any proposal that would change the way they conduct their personal or business affairs. Almost all are ill-informed about current events and uninterested in any of the arts. Some are so fogied up that their total response pattern consists of complaint—usually complaints so unoriginal that only the subcategory of bitching applies. As far as I can tell, the obsolete sense of "fogy" associating the pattern with obesity doesn't apply. Our local fogies come in all sizes and shapes, both sexes and all races. One could argue that social groups that rely much on tradition produce what we consider fogies by their very nature. Maybe that is why the Maoists are running around burying Confucius deeper all the time.

Fogyism certainly differs from senility. It is plain old prejudice that places "old" in front of "fogy." That prejudice has been around a long time. I've run into the phrase in George Eliot's *Adam Bede*. Eliot's character, however, gives one reason that hanging "old" in front of fogy became routine. He said, "My part . . . is always that of the old fogy who sees nothing to admire in the young folks."

If that were all that defined fogy, "old" would be essential, but lots of old people have nothing against young folks, and lots of the young consider their own generation rotten. My 80-year-old mother says there is nothing fogyish about her and points out to me what a fogy I am, since I am more conservative than she.

I hope I've separated old and fogy widely enough to show that young fogies can be "identified," as our social-science types like to say. A while back I described local consensus fogies as beyond 40, but that's because of the prejudicial view of fogyism, which is what I'd like to change.

Little kids are pretty fogyish about age two, in many cases. Many of them are slow as the mischief, and their outstanding feature is resistance to new ideas. The predictable formulas that fogies rely on for their reactions are never more predictable than in early childhood. This nonspecific orneriness of the "terrible two" is succeeded in most cases by a latent period. Then fogyism sprouts again with pubic hair. What is usually called teenage rebellion isn't very different from acknowledged old fogyism, though not generally recognized under that gerontophobic heading. Start with a favorite teenage subject, "their" music: can you imagine a more inflexible stance than the one most kids take against any music other than top-forty glitter rock? What archetypal old fogy sitting in the Union League club window could harrumph more resolutely than a blasted-ears young fogy on the subject of music?

Moving on to the later teen years, one finds a variety of young fogyisms. Some young folks are so convinced that the older generation has so poisoned the soil with fertilizer and insecticides that they desperately seek a plot of ground to manure so they can grow food fit for them to eat. And the idea that one must work at something that might be found in a dictionary becomes anathema—even though they would accept a discretely offered allowance to help them along while they gather rosebuds. Most of these young people are ill-informed, uninterested in points of view other than theirs, and as intolerant of older people as George Eliot's old fogy was of the young. To me it is a general dullness that is the essence of the fogy, and I agree wholeheartedly with physician and novelist Walker Percy when, in *Love in the Ruins*, he says, "Nothing is drearier than the ideology of students, left or right." I would add, however, that Dr. Percy is probably describing only the young fogies among the students. This general dullness gradually intensifies, and by the time the afflicted reach the 40s, they emerge as fully developed old fogies.

Specifics about young medical fogies? Our medical center has its share, and they come from all over this and other countries. Some habitually order a certain group of lab tests no matter what newer methods have been developed and brought to their attention. Eccentricities of hair and costume are cherished as lovingly as any old fogy's carpet slippers or sway-backed chair. Virtually to a person they are as protective of their parking places as a total old fogy of his favorite seat for the evening's TV shows. Whatever little tricks of technique they learned during medical school or an earlier house staff post, even if they're hand-me-

downs from Hippocrates, are treated like revealed truth by the nascent fogies in the crowd. A circumscribed group of abbreviations and cliches in the histories and physicals, recurring references to a small selection of journals or texts (especially texts)—all show the young fogy moving along the groove that circumscribes the fogy's beat.

I hate to close without considering possible good aspects of being a fogy, of whatever age. One thing that comes immediately to mind is the traditional military use of the unmodified word fogy—a raise in pay without a raise in rank. If you can't get promoted, at least you can be happy over a little more money, or a "fogy." Besides, fogyism may well be a protective mechanism; to do away with fogyism may be as dangerous as doing away with people's illusions. And then, what would we bright, energetic types do without a few fogies to sneer at?

R.W.P.

POKE SALIT: A SUCCESS STORY

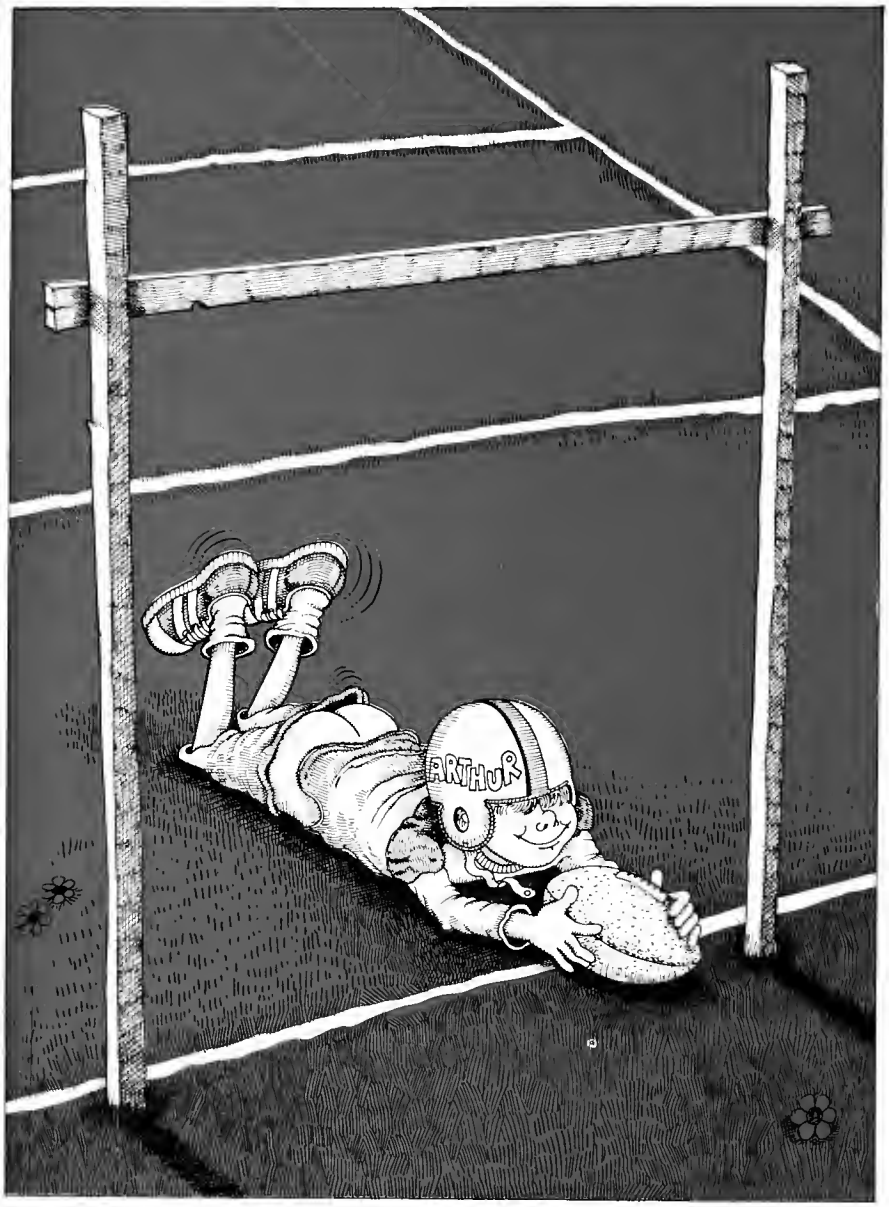
"I don't care if you live in a shotgun shack and eat poke salit— —if you love it there, you're all right." Thus a radio evangelist commenting on the state of the world. Unfortunately many have not had the advantage of eating poke salit in season and even more don't know what it is. For those so grievously uninformed, or who have heard poke is poison, a 3½ ounce (100 g) serving of boiled, drained poke shoots contains 20 calories, 2.3 g protein, 8,700 International units (IU) Vitamin A, 82 mg Vitamin C and some B vitamins. Botanically, pokeweed, also known as garget, pokeberry, inkberry or pigeonberry, is *Phytolacca americana* whose tender leaves may be cooked as greens (hence poke salit, or salad) and whose berries, according to Hardin and Arena,[1] are edible if baked in a pie. When leaves and berries are eaten raw, and if the highly poisonous roots are ingested, severe gastrointestinal symptoms, impaired breathing, seizures and even death may result.

The root contains a plant lectin with the capacity for incomplete panhemagglutination as well as incomplete panleukagglutination. More interesting medically is the presence of mitogen activity which induces transformation of 50 to 60 percent of human peripheral lymphocytes in culture to a type resembling early plasma cells.[2] Pokeweed mitogen (PWM) and phytohemagglutinin (PHA) from the red kidney bean, *Phaseolus vulgaris*, possess similar characteristics although the latter provokes complete hemagglutination and leukagglutination and 80 to 90 percent transformation of peripheral lymphocytes in culture. Hence poke has escaped from the category of weed, a plant of no value, and deserves to be promoted if poke salit and PWM are of worth.

References

1. Hardin JW, Arena JM. Human Poisoning from Nature and Cultivated Plants. 2nd edition. Duke University, Durham, 1974.
2. Borjeson J, Reisfeld R, Chessin LN et al. J Expr Med 124: 859, 1966.

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

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Bulletin Board

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Bartelt, Curtis Frederick, MD (FP), 3535 Randolph Rd., Charlotte 28211
Burroughs, Frederick Douglas, MD (PD), 510 S. Person St., Raleigh 27602
Conrad, Cynthia Dale (STUDENT), 238 McCauley St., Chapel Hill 27514
Cook, Joseph Wm., MD (TS), 810 Edgehill Rd., Charlotte 28207
Davis, Guy Claude, Jr., MD (AN), Box 3094, Duke Med. Ctr., Durham 27710
Eakins, Joey Wm., MD (IM), 3539 Kirby Smith Dr., Wilmington 28401
Gordon, John Bennett, III (STUDENT), 1617 Old Oxford Road, Chapel Hill 27514
Karis, Joannes Hubertus, MD (AN), Box 3094, Duke Med. Ctr., Durham 27710
King, Joseph Aaron, MD (AN), 4224 Wild Partridge St., Charlotte 28211
Kramer, Jeane Ann Grisso (STUDENT), 31 Oakwood Dr., Chapel Hill 27514
Lane, Jerald Paul, MD (P), 5913 Gatepost Rd., Charlotte 28211
Minor, Walter Nathan, MD (GP), 320 N. Ransom St., Fuquay-Varina
Musselwhite, Neill Hector, III, MD (Intern-Resident), 3846 Gillette Dr., Wilmington 28401
Patterson, Robert William (STUDENT), Route 3, Box 347, Chapel Hill 27514
Rhyne, James Moody, MD (IM), 110-M Stockton St., Statesville 28677
Robinson, Stephen Carey, MD, 3701 Mossborough Dr., Greensboro 27401
Scott, Samuel Edwin, MD (RENEWAL), Route 2, Burlington 27215
Seabrook, Paul Dewitt, Jr., MD (AN), 2035 Clematis Dr., Charlotte 28211
Tse, Alex Yu-Chow, MD (PD), 120 Memorial Drive, Jacksonville 28540
Ward, James Singleton, MD (FP), 411 Walnut St., Statesville 28677

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

March 5-6

General Diagnostic Radiology Updated
Fee: $100
Credit: 9 hours; AAFP credit applied for
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 6-7

Establishing Yourself in Medical Practice—a Practice Management Workshop for Senior Residents
Place: Charlotte Memorial Hospital
For Information: David S. Citron, M.D., or Carl B. Lyle, M.D., P. O. Box 2554, Charlotte 28207

March 19-20

Twelfth Annual E. C. Hamblen Symposium in Reproductive Biology and Perinatal Medicine
Program: Designed for practitioners and residents in Obstetrics and Gynecology. Two basic themes: "The Effect of Metabolic Diseases Upon Pregnancy" and "Teratogenicity"
Fee: $60; no charge for residents or students
Credit: 9 hours; AAFP credit applied for
For information: Charles B. Hammond, M.D., P. O. Box 3143, Duke University Medical Center, Durham 27710

March 21-24

Conference on Maternal and Child Health, Family Planning and Crippled Children Services
Fee: "Travel costs are *not* available but a per diem supplement of $16 for registrants is provided through a grant from the Bureau of Community Health Services, Office of Maternal and Child Health"
For Information: Continuing Education, UNC School of Public Health, Chapel Hill 27514

March 22-26

Radiology of the Urinary Tract—a Tutorial Postgraduate Course
Program: Emphasis on personalized small group tutorial type teaching. Subject matter will cover all facets of urinary tract disease, including comprehensive coverage of diagnostic techniques
Fee: $300
Credit: 30 hours
For Information: Robert McLelland, M.D., Radiology, Box 3808, Duke University Medical Center, Durham 27710

March 25

Greensboro Academy of Medicine Symposium
Jefferson Standard Country Club, Greensboro
Program: General areas of nutrition and metabolism
For Information: Ronald Garber, M.D., 1904 N. Church Street, Greensboro 27401

March 25-26

Medical Alumni Day and Scientific Meetings
Place: Berryhill Hall
Sponsor: Office of Continuing Education and Alumni Affairs
Credit: To be announced
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 27

Southern Regional Ultrasound Meeting
Place: Berryhill Hall, UNC, Chapel Hill
Sponsors: UNC Office of Continuing Education and the American Institute of Ultrasound in Medicine
Fee: $10
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 29-30

bstetrics and Gynecology Postgraduate Course
ee: $35
redit: 9 hours; AAFP credit applied for
or Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 31

flammatory Bowel Disease — The Challenge of Diagnosis and Treatment
ponsors: Moore Memorial Hospital; Office of Continuing Education, UNC School of Medicine
lace: Elks' Club (Country Club of Southern Pines), Southern Pines
ee: $11.50
redit: 2 hours; AMA Category 1; AAFP approved
or Information: C. Harold Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

April 1

Vilson Memorial Hospital Symposium—Carcinoma of the Breast
or Information: M. A. Pittman, Jr., M.D., Wilson Memorial Hospital, Wilson 27893

April 2-3

ractical Nuclear Medicine: Emphasis Oncology
ee: $75
redit: 9 hours; AAFP credit applied for
or Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 2-4

pring Symposium for Radiologists: Radiology and Images of the Chest
lace: Carolina Inn, Chapel Hill
ponsors: UNC School of Medicine and the N. C. Chapter of the American College of Radiology
ee: NCCACR members $20; non-members $30; registration limited to 150
redit: 15 hours
or Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 9-10
(Note change of date)

econd Annual Arthritis Symposium
ee: $50
redit: 11 hours; AAFP credit applied for
or Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 9-10

ractical Pediatrics
ee: $35
redit: 9 hours; AAFP credit applied for
or Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 22

lew Bern Annual Medical Symposium—1976, "Pulmonary Medicine"
lace: Ramada Inn, New Bern
ponsor: Craven-Pamlico-Jones County Medical Society
redit: 5 hours AAFP credit applied for
or Information: Zack J. Waters, M.D., Box 1089, New Bern 28560

April 23-24

econd Postgratuate Course in Perinatology
ee: $25; registration limited to 200
redit: 8 hours; AAFP credit applied for
or Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

May 6-9

22nd Annual Session of the North Carolina Medical Society
lace: Pinehurst Hotel and Country Club, Pinehurst
or Information: William N. Hilliard, Executive Director, North Carolina Medical Society, Box 27167, Raleigh 27611

May 7-9

ulmonary Infections in Pediatric Patients
lace: Quail Roost Conference Center, Rougemont
egistration: Limited to 50 participants
redit: 11 hours; AAFP credit applied for
For Information: Alexander Spock, M.D., P. O. Box 2994, Duke University Medical Center, Durham 27710

May 12-13

Breath of Spring '76: Respiratory Care Symposium
Fee: $25
Credit: 12 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 27-28

The 27th Scientific Sessions and Annual Meeting of the North Carolina Heart Association
Place: Benton Convention Center and the Winston-Salem Hyatt House, Winston-Salem
Sponsors: The North Carolina Chapter of the American College of Cardiology will be one of the co-sponsors of the sessions, and will hold its sessions, which are open to all physicians, on May 28. Special concurrent sessions will be held for nurses, emergency medical technicians, and cardiology technologists
For Information: Thomas R. Griggs, M.D., North Carolina Heart Association, P. O. Box 2408, Chapel Hill 27514

ITEMS OF SPECIAL INTEREST

Continuing Education for Nurses

The following courses are being offered through the School of Nursing, UNC-Chapel Hill, during the Spring 1976 session:

March 3	Intravenous Therapy Complications, Monitoring, and Surveillance
March 4-5	A Practical Approach to Drug Interactions
March 9-10	Family Centered Maternity Care (F.C.M.C.)
March 22-26	Planning Education for Quality Care (This program will be repeated on April 12-16)
March 23-24	Management by Objectives
April 5-9	Practical Approaches to Diabetic Care
April 20-21	Primary Nursing
April 26-30	Nursing Process
April 29	Toward More Effective Diabetic Teaching
May 25-26	Results-Oriented Performance-Evaluation

James M. Johnston Awards are available to help with tuition. Credit will be offered for each course. All of the courses listed above will be held in Carrington Hall, School of Nursing, UNC-CH.
For additional information write: Continuing Education Program, School of Nursing, University of North Carolina, Chapel Hill 27514

PROGRAMS IN CONTIGUOUS STATES

March 11-13

Gynecologic Endocrinology
Sponsor: The Department of Obstetrics and Gynecology, University of Tennessee Center For The Health Sciences, Memphis, Tennessee
Place: Hilton Inn—Memphis Airport
For Information: James R. Givens, M.D., 800 Madison Avenue, Memphis, Tennessee 38163

March 25-26

29th Annual Stoneburner Lecture Series—Neurology for Primary Care Physicians
Sponsors: Department of Neurology and Department of Continuing Medical Education
Fee: $105
Credit: 11¾ hours; AMA Category 1; AAFP credit applied for
For Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, P.O. Box 91, Richmond, Virginia 23298

May 3-5

The 1976 Southeast Emergency Medicine Congress
Place: Fairmont Colony Square Hotel, Atlanta, Georgia
Sponsors: The Southeast Chapters of the American College of Emergency Physicians, School of Medicine Medical College of Georgia (sic.), and in conjunction with the Emergency Department Nurses Association
Fees: $100 (ACEP), $125 (Non-ACEP Physician), $40 (EDNA), $50 (Non-EDNA Nurse), $40 (Registered EMT), $50 (Non-Registered EMT), $25 (Residents, Interns, Medical & Nursing Students with Letter from department chief), $100 (EMS Administrators with letter on EMS System stationery), $125 (Others).
For Information: Registrar, 1976 Southeast Emergency Medicine Congress, 1919 Beachway Road, Suite 5C, Jacksonville, Florida 32207

May 10-13

The Frontiers in Cardiology
Place: Royal Coach Motor Hotel, Atlanta, Georgia
Sponsors: Council on Clinical Cardiology, American Heart Association; Department of Medicine, Emory University School of Medicine in cooperation with the Georgia Heart Association
Fee: ACC members $125; non-members $175
Credit: AMA Category 1
For Information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

May 21-22

Clinical Rheumatology for the Practicing Physician
Place: Bonhomme Richard Inn, 500 Merrimac Trail, Route 143, Williamsburg, Virginia
Sponsors: Virginia Chapter of The Arthritis Foundation; Virginia Regional Medical Program; Medical College of Virginia—Virginia Commonwealth University; University of Virginia School of Medicine; Eastern Virginia Medical School
Fee: $25
Credit: 8¼ hours; AMA Category 1; AAFP credit applied for
For Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, P.O. Box 91, Richmond, Virginia 23298

Medical College of Virginia

The number in parenthesis, following the title, indicates the number of hours for that particular course.

March 18	Neonatology for the Practicing Physician (4)
March 25-March 26	29th Annual Stoneburner Lecture Series—Neurology for Primary Care Physicians (12)
April 1	Pediatric Cardiology for the Practicing Physician (4)
April 22	Medico-Legal Workshop (5) (Place: Virginia Baptist Hospital, Lynchburg, Virginia)
May 17-18	EEG Symposium (14)
May 21	Annual Spring Forum for Child Psychiatry (4)
June 2	Pediatric Nephrology for Practicing Physicians (4)

For further information on the above CME opportunities write to the Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, Richmond, Virginia 23298

The items listed in this column are for the six months immediately following the month of publication. Requests for listing should be received by WHAT? WHEN? WHERE?, P.O. Box 15249, Durham, N.C. 27704, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

Dr. Rene Dubos, author and professor emeritus of Rockefeller University, expressed optimism that the world can reverse the doomsday forecast of starvation during a speech, "Science and Ideals in a Hungry World" at a joint meeting of the Auxiliary and AMA in Atlantic City.

Two immediate problems are the acidic rain and the significantly cooler climate. Norway and Sweden have reported malfunctions in fish caused by oxides in the fogs from Great Britain, France and Germany along with decreased ability of crops to engage in photosynthesis. The cooler temperature of the past three years simulates the "little ice age" of 17th Century Central Europe and means that large areas of Canada and China cannot continue to produce the same kinds of crops.

However, Dr. Dubos is optimistic because historically mankind does not stand placid before events and forewarned can control his destiny with scientific investigation and subsequent production.

"Today we are still using the same species of plants animals and techniques of 2,000 years ago. Al growth—including human—is modified. Much of the deficit in food production comes from bad social structure with land ownership preventing effective agriculture.

"India a few years ago was self sufficient; then the government shifted its priority to heavy industry and hunger resulted. One of today's miracles is that mainland China is not only self sufficient but is exporting rice and has California rice growers worried."

Man's adaptability is shown in his changing food habits. After World War I Dr. Dubos' home village in France was dismayed to receive from the U.S. a gift of corn which they had always considered food only for pigs. Today this section of France is a big corn producer.

Already the efforts of human intervention have produced results in the environmental movement with once polluted rivers and lakes such as the Thames in England and Lake Washington in Washington state again teeming with fish.

In conclusion Dr. Dubos warns, "You in your turn must take a stand to manipulate public opinion. This I will do if I have any strength left in me the few years I have left. It can be done if you elect to do it."

News Notes from the— DUKE UNIVERSITY MEDICAL CENTER

Alpha Omega Alpha, honor medical society, has tapped new members.

The newly elected members from the class of 197 include Steven P. Honickman, Richard Klausner, David Ling, Michael K. Magill, Gary R. Moeller, Peter K. Smith, Linda C. Terry and Neil W. Trask III.

Those chosen from the graduating class were Carl E. Arentzen, Barbara Blaylock, David D. Collins, Eric H. Conn, Barbara J. Crain, Arnold M. Epstein, Paul G. Galentine, James R. Gavin, III, John Marquardt, David Schlossman, Diana J. Schultz, Bernard P. Scoggins, Robert B. Stanley Jr. and Robert E. Ziegler.

Dr. J. David Robertson was elected from the faculty and Drs. John Tindall and Charles Styron were honored as alumni selections.

Robertson is chairman of the Department of Anatomy and is widely published in the field of membrane biology.

Tindall is professor of medicine in the Division of Dermatology and also widely published in his discipline.

Styron is in private practice in Raleigh and has been

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Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema.* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4

The insomnias most often occurring in young and older adults

For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories.[1-4]

The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia

7 Hours

Awake too early

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

- □ induces sleep rapidly
- □ reduces nighttime awakenings
- □ lengthens total sleep time

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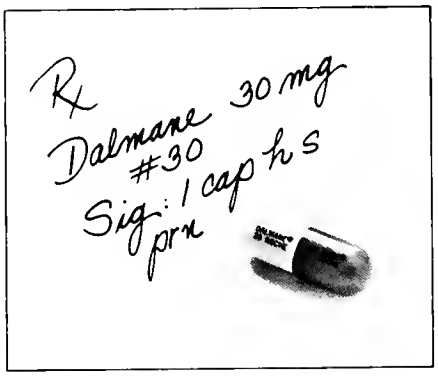
Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) Ⓒ IV



Objectively proved in the sleep research laboratory, Dalmane

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum benefit effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971

2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971

3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

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ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
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ctive in both civic and medical societies throughout is career as well as maintaining a special interest and xpertise on the subject of diabetes mellitus.

* * *

While a search is under way for a new director of uke Hospitals, an assistant vice president is serving s director pro tem.

John D. Shytle, assistant vice president to Dr. William G. Anlyan, vice president for health affairs, will ll the post until a successor to Dr. Stuart M. Sessoms chosen.

Sessoms, director since 1968, resigned to become enior vice president of Blue Cross and Blue Shield of lorth Carolina the first of the year.

Shytle is a former controller of the Veterans Administration in Washington, serving in that position om 1963-72. The Shelby native was director of the A Hospital in Richmond immediately prior to comg to Duke in the fall of 1974.

Duke hospitals include Duke University Hospital in urham, Highland Hospital in Asheville and Sea evel Hospital in Carteret County.

* * *

Fred L. Winsor has been named administrator of lighland Hospital, according to Dr. Jack W. Boner, l, medical director. Winsor succeeds James Carter, ow assistant director at Duke Hospital.

A native of Oneonta, N.Y., Winsor received his .A. degree at Duke, served two years with the U.S. larine Corps, and then returned to complete a two ear program in hospital administration at Duke.

He began his health career as assistant administrator of Southeastern General Hospital in Lumberton or two years, then served as administrative director f Presbyterian Hospital in Knoxville, Tenn., for over ight years. He was executive director of McNabb enter also in Knoxville and had been administrator f Sibley Memorial Hospital in Washington, D.C. ince May, 1973.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Dr. Marvin B. Sussman, former Selah Chamberlain rofessor of sociology and director of the Institute on he Family and Bureaucratic Society at Case Western eserve University, has been appointed professor of ociology at the Bowman Gray School of Medicine.

His appointment is in the medical school's Departent of Medical Social Sciences and Marital Health.

An internationally recognized sociologist, Dr. ussman's fields of special interest include family heory and research; sociology of medicine; sociology of rehabilitation and human service systems; and gerontology.

He is a past president of the Groves Conference on Marriage and the Family, and now serves that organization as a member of the executive board. He also is a past president of the Ohio Council on Family Relations and the Society for the Study of Social Problems.

Presently a member of the council of the Section on Social Psychology of the American Sociological Association, he has twice served the ASA as chairman of the Family Section and round table seminars for the annual meeting.

Most recently, Sussman was co-director for the 1975 International Workshop on Changing Sex Roles in Family and Society, and a section chairman for the fourth International Conference on the Unity of the Sciences.

Dr. Sussman is a graduate of New York University, and received the M.S. degree from George Williams College. He also holds the M.A. and Ph.D. degrees in sociology from Yale University, and has completed postgraduate study at the University of Chicago.

* * *

Other recent appointments to the Bowman Gray faculty include Dr. David W. Gelfand, associate professor of radiology (gastrointestinal); Louisa P. Branscomb, instructor in biomedical communications; Dr. James P. Caldwell, instructor in medicine; and Peggy Wills, instructor in community medicine (Allied Health Sciences).

Appointed to the school's part-time faculty were Dr. Amon L. Funderburk, clinical instructor in medicine (endocrinology); Dr. George E. Hamilton Jr., clinical assistant professor of psychiatry; Dr. Leroy Barden Lamm, clinical associate professor of psychiatry; and Dr. Thomas Gardiner Thurston, clinical instructor in radiology (nuclear medicine).

* * *

Dr. R. F. Smith Jr., pastor of the First Baptist Church in Hickory, has been elected chairman of the Medical Center Joint Administrative Board of the medical school and North Carolina Baptist Hospital.

He succeeds Francis E. Garvin of Wilkesboro.

The joint administrative board was formed in early 1974 to provide a better means of coordinating the work of Baptist Hospital and the Bowman Gray School of Medicine. The board consists of trustees of Wake Forest University and the hospital and a member of the medical center professional staff. It is responsible for the overall supervision of the medical center.

Smith was appointed to the Wake Forest Board of Trustees in 1974. He is a member of that board's Executive Committee and is chairman of its Student Life Committee.

He also is a member of the Board of Trustees of Southeastern Baptist Theological Seminary and is chairman of that board's Long-Range Planning Steering Committee.

Dr. Harold O. Goodman, professor of medical genetics, has been named associate dean for biomedical graduate studies at Bowman Gray. The graduate studies program offers course work leading to the M.S. and Ph.D. degrees in anatomy, biochemistry, comparative and experimental pathology, microbiology and immunology, pharmacology and physiology.

* * *

Dr. James C. Leist has been appointed assistant dean for continuing education at Bowman Gray. Leist, an instructor in community medicine, is deputy director of the Northwest Area Health Education Center Program in North Carolina.

The memory of Dr. Robert A. Moore, a pioneer orthopedic surgeon in Forsyth County, was honored during a full day of activities at Bowman Gray in December. Dr. Moore died in 1970.

Dr. Moore, who retired in 1964 after 45 years of orthopedic practice in Winston-Salem and 23 years of service to the Medical Center, was one of the 12 charter members of the medical school's private Diagnostic Clinic and was, for seven years, director of Section on Orthopedics.

Scientific sessions and the dedication of a room at the medical center in memory of Dr. Moore highlighted the day.

Dr. Frank C. Greiss Jr., professor and chairman of the Department of Obstetrics and Gynecology a Bowman Gray, has been elected president-elect of th Southern Gynecological and Obstetrical Association

He will be installed as president in Nov. 1976, at th Society's Annual meeting in New Orleans.

D. Ted George and John Mustol, third-year stu dents at Bowman Gray, have been awarded Medica Assistance programs-Reader's Digest Internationa Fellowships. The program provides three-month as signments to rural mission hospitals in remote parts c the world.

* * *

Dr. Eben Alexander Jr., professor of neurosurgery has been elected second vice president of the Amer can College of Surgeons. He has been re-appointed t the Interspecialty Council of the American Medica Association as a representative from the America Association of Neurological Surgeons.

Dr. William A. Brady, instructor in neurology, ha been appointed Stroke Work-Up chairman of th North Carolina Heart Association.

Dr. Courtland H. Davis Jr., professor c neurosurgery, has been elected chairman of the Medi cal Care Evaluation (Audit) Committee of the Pied mont Medical Foundation, Inc.

Dr. Frederick W. Glass, assistant professor c surgery, has been appointed to the Undergraduat

ducation Committee of the American College of mergency Physicians for a three-year period.

Dr. Donald M. Hayes, professor and chairman of ne Department of Community Medicine, has been elected as a charter member of the Health Systems gency for Region G, the 13-county sector which ncludes Forsyth County.

Dr. David L. Kelly Jr., associate professor of eurosurgery, has been elected to membership in the cademy of Neurological Surgery.

* * *

Dr. Richard C. Proctor, professor and chairman of ne Department of Psychiatry, has been elected to membership in the Academy of Psychosomatic Medicine.

Dr. C. Glenn Sawyer, professor of medicine, has been elected vice president of the Forsyth County Medical Society.

CONTROLLED THERAPEUTIC TRIAL OF CORTICOSTEROIDS IN FULMINANT HEPATIC FAILURE

When hepatic decompensation supervenes in viral epatitis and drug-induced hepatitis and is sufficiently severe to produce hepatic coma, the patient's prognosis becomes one of the poorest in present day medicine. Estimates of case fatality rate in this situation range from 60 to 97 percent. This level of fatality is particularly frustrating because complete recovery is possible if the patient survives the immediate injury.

It is not surprising that for such patients the clinician quickly adopts any measure reputed to be of benefit. Since the 1950s, hydrocortisone (corticosteroids) has been used in fulminant hepatic failure with varying results. If you were to poll different physicians throughout the country, you would probably come up with 50 percent who use corticosteroids always in hepatic failure and another 50 percent or thereabouts who do not use it because of the increased risk to the patient. Because there have been no controlled therapeutic trials in the use of corticosteroids in this situation, the Committee on Hepatic Failure of the American Association for the Study of Liver Diseases has begun a controlled therapeutic trial on the use of corticosteroids in fulminant hepatic failure from viral or drug-induced liver disease. Approximately 20 centers are participating, allowing for a larger number of subjects to be studied and thereby obtaining significant results more quickly. One of those centers will be The University of North Carolina School of Medicine under the direction of Dr. Henry R. Lesesne. Patients who are referred to our institution will be randomly given corticosteroid therapy or placebo therapy when hepatic coma has supervened in the process of viral or drug-induced liver disease within 6 weeks of onset and after complete informed consent has been obtained from the nearest relative.

Physicians are requested to refer these patients to Dr. Henry R. Lesesne, Department of Medicine, North Carolina Memorial Hospital, Chapel Hill, North Carolina 27514; or a phone call may be made on a WATS line—800-672-8271.

Month in Washington

The public interest would be better served if the nation examined the goals of a national health insurance program within the context of the existing health care system and directed its energies toward the perfection of that system, the American Medical Association said in testimony before a subcommittee of the House Interstate and Foreign Commerce Committee.

"It is unnecessary to gamble on a whole new medical health system in order to meet the health care needs of all Americans," AMA president Max H. Parrott told the Public Health and Environment Subcommittee.

Pointing to the large problems involved in creating a national health insurance program, Dr. Parrott, a Portland, Ore., practitioner, said that public attitudes toward it are changing steadily.

"These problems have been brought into better focus as a result of evidence of the effects of governmentally administered and controlled programs both here and abroad.

"Our national priorities have also shifted because of the effects of the changing economy, and the devastating effects of inflation on all segments of our society.

"Significant changes have taken place in our health system through increased manpower programs, increased facilities construction, increased levels of private health insurance coverage, and a variety of other programs. There is fuller realization and acknowledgment that this country's health system—under attack by many in the course of the NHI debate—is indeed superior to any other in the world," Dr. Parrott said.

Dr. Parrott told the subcommittee members of the

medical profession's national health insurance plan (H.R. 6222) which builds on the structure of the present system of employer-employee group health insurance plans, mandating each employer to provide comprehensive and catastrophic benefit coverage with the employer picking up at least 65 percent of the cost.

Employees, according to the AMA spokesmen, would not be compelled to participate. The self-employed as well as the non-employed could purchase qualified private health insurance, through pools if needed, at a cost not more than 125 percent of the cost of group plans. And, after a certain level of co-insurance is reached, depending upon income, the insurance would cover all remaining costs as a complete protection against catastrophic costs.

Dr. Parrott pointed out that in pressing for the adoption of any particular NHI proposal, sincerity must not be confused with objectivity—"We cannot afford to have a program of such importance fail."

"We must avoid the mistake inherent in those proposals which would lock medicine into a rigid, monolithic, no-choice bureaucratic system. Such a creation would be impossible to reverse. It would be an undertaking full of promise but empty of fulfi ment. Establishment of cost control through fix budgets including arbitrary fee schedules would resu in curtailment of care and discourage participation providers.

"A look at the current trouble of the British heal care system impels a close re-examination of the a leged need for such drastic action," Dr. Parrott sai

* * *

The Senate Finance Committee also approved wi few changes Medicare Amendments adopted earli by the House. The major one assures that no preva ing Medicare fee for this fiscal year is less than for t previous fiscal year. An unintended effect of the ne law tying physicians' Medicare reimbursement in wit a cost-of-living-type index was to roll back some fee HEW didn't want to do anything about it, but t House at the urging of the AMA and other group agreed to prevent the rollback.

The Senate Committee added language to t House provision to indicate that in calculating t controversial fee index HEW should include to t

extent feasible "factors related to any increases in costs of malpractice insurance and that index calculations should be prepared on a regional rather than a national basis."

The other Medicare changes include:

**A one-year extension of authority to grant waivers of nursing staff requirements in rural areas where nurses are in short supply. The House had approved a three-year extention.

**Repeal of a present provision which would make the Federal Employees Health Program rather than Medicare the primary payer of benefits for older or retired U.S. workers. The amendment specifies that Medicare be the primary payer for people eligible for both programs.

* * *

Physicians in some larger states containing more than one Professional Standards Review Organization area may have a chance to choose a single, statewide plan under legislation approved by the Senate Finance Committee. Texas, Louisiana and possibly some other states would qualify, the Health, Education and Welfare Department said.

The amendment by Sen. Lloyd Bensten (D-Texas) applies to states that have been divided into PSRO areas, and where no conditional PSROs have yet been designated. The HEW Department would poll the physicians in the areas to determine their preference for a local or a state-wide PSRO. If a majority of physicians in each area approve the state-wide plan, the verdict would have to be accepted by HEW.

The Texas Medical Association and other state societies, as well as the AMA, have fought for the rights of larger states to become single PSRO areas, but the HEW Department turned down the appeals on grounds PSROs were intended to be primarily local. As a result, large population states were divided into several PSRO areas.

The Medical Liability Commission has urged Congress not to employ National Health Insurance as a vehicle for forcing a federal solution to the professional liability problem.

Gale Richardson, M.D., a member of the Liability Commission, told the House Ways and Means Subcommittee on Health that the causes of the liability crisis "vary in kind and in relative emphasis from state to state. This is one reason that the remedies should be sought within the individual states."

"We are particularly opposed to linking of this problem in any way with national health insurance," said Dr. Richardson.

The Commission is composed of 20 national medical specialty and institutional provider groups, including the AMA, the American Hospital Association and major specialty associations.

Dr. Richardson noted that there have been suggestions that under NHI the government pay the liability premium for physicians who accept assignment. He cited speculation that physicians may be willing to accept government control of medicine in return for having the burden of liability premiums lifted.

"We do not believe that limiting the rights of patients or the rights of any class of citizens is a proper approach to the solution of this problem—nor do we believe that granting by Congress of immunity to physicians or any other group at any time is a proper approach," Dr. Richardson declared.

Dr. Richardson said "both the immediate and longer range remedies can be more responsive to the needs of all concerned if approached at the most practical local level—state legislatures when legislative remedies are required."

Dr. Richardson said the liability problem should be corrected by innovative changes which should be evolutionary and not revolutionary.

"We strongly oppose those who believe that the answer to the weaknesses in our system is a controlled economy and a government which is more important than those it governs," he asserted.

Book Review

CORRECTION:

Review of Medical Microbiology, 11th edition, was reviewed in the March, 1975, issue of the *Journal*. We inadvertently listed this as a CRC Press publication, when credit should have been given to Lange Medical Publications, Los Altos, California.

The *Journal* regrets the error.

In Memoriam

Edmund S. Boice, M.D.

Dr. Boice was born in 1883 in the mountains of western North Carolina, grew up in Abingdon, Virginia, received his B.A. degree from Washington and Lee in 1905 and his M.D. from the University of Pennsylvania in 1909. He was president of his class in medicine and is a "Distinguished Senior Alumnus of the University of Pennsylvania School of Medicine."

He interned at Union Memorial Hospital in Baltimore from 1909 to 1910. For the next four years he was on the surgical staff of the Johnston-Willis Hospital in Richmond and instructing in anatomy, pathology and surgery at the Medical College of Virginia.

He became the first surgeon at Park View Hospital in 1914 and was joined by Dr. B. C. Willis in 1915. The partnership formed by these two grew to a clinic of specialists now numbering 12.

Dr. Boice was a diplomate of the American Board of Surgeons, a Fellow of the American College of Surgeons, president of the Seaboard Medical Society, a charter member of the Edgecombe-Nash Medical Society and director of the Edgecombe-Nash Cancer Center from 1948 until 1970.

Most of all, he was a great human being, respected and loved by all of us who had the privilege of knowing him.

THE EDGECOMBE-NASH MEDICAL SOCIETY

Classified Ads

ASSOCIATE INTERNIST WANTED—Resort area in Western North Carolina. Guaranteed salary first year: $30,000 plus percentage; thereafter, increased income leading to partnership. Professional Corporation with fringe benefits. Excellent office facilities located near new modern hospital. Write: NCMJ-3, P. O. Box 27167, Raleigh, N.C. 27611.

DUKE PHYSICIAN'S ASSOCIATE STUDENT graduating May 1976 seeks position in Eastern N.C. Background and training in Internal Medicine and Family Practice. Call Collect (919) 286-3031 evenings, or write Miss T. Gardner, 506 Elf St., #16, Durham, N.C. 27705.

STAFF PSYCHIATRISTS, located in Piedmont N.C., young mental health staff serving 180,000 residents in three county area. No restrictions on private practice after hours. Good fringe benefits. Contact Larry Parrish, Area Director, Tri County Mental Health Complex, 165 Mahaley Avenue, Salisbury, N.C. 28144. Telephone collect (704) 633-3616.

OFFICE SPACE FOR RENT: 1300 sq. ft. Erdman building in front of Pardee Hospital. Excellent parking facilities. Former tenant after two years had to take two associates and needed more footage. Contact: 704-692-2115 or 704-692-2321.

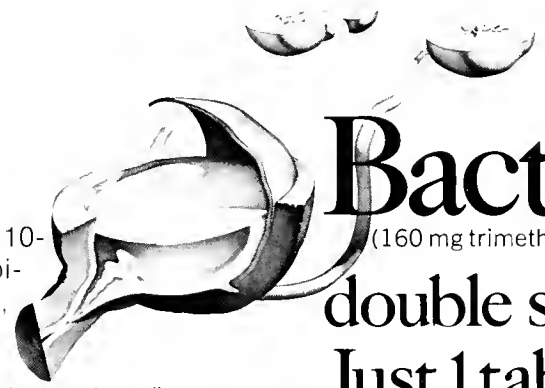
PHYSICIAN'S ASSOCIATE—Duke Graduate—Strong background in pediatries and surgery. Interested in relocating to Central or Eastern North Carolina. Reply to: NCMJ-10, P. O. Box 27167, Raleigh, N. C. 27611.

EMERGENCY MEDICINE: Northeastern North Carolina; four, 12-hour evening rotations per week. Paid malpractice, vacation, professional dues. $45,000 annual remuneration. Contact Drs. Cooper or Spurgeon toll free 1-800-325-3982.

PHYSICIANS NEEDED: M.D.'s with completed internships or residencies for hospital clinics flight surgeon duties — worldwide placement available! Relocation fees paid, 30 days paid vacation each year. 40 hour work week. Contact Dave Powell, Navy Medical Representative, Navy Recruiting District, P.O. Box 18568, Raleigh, N.C. 27609. Call Collect: 782-2005.

Index to Advertisers

10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions were mild (*e.g.*, nausea, rash), more serious reactions can occur with these drugs. See manufacturers' product information for complete listing.

Note: Bactrim single strength tablets were used in these clinical trials. However, studies have established the bioequivalency of Bactrim DS with the single strength tablets.

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

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Bactrim™

(80 mg trimethoprim and 400 mg sulfamethoxazole)

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For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

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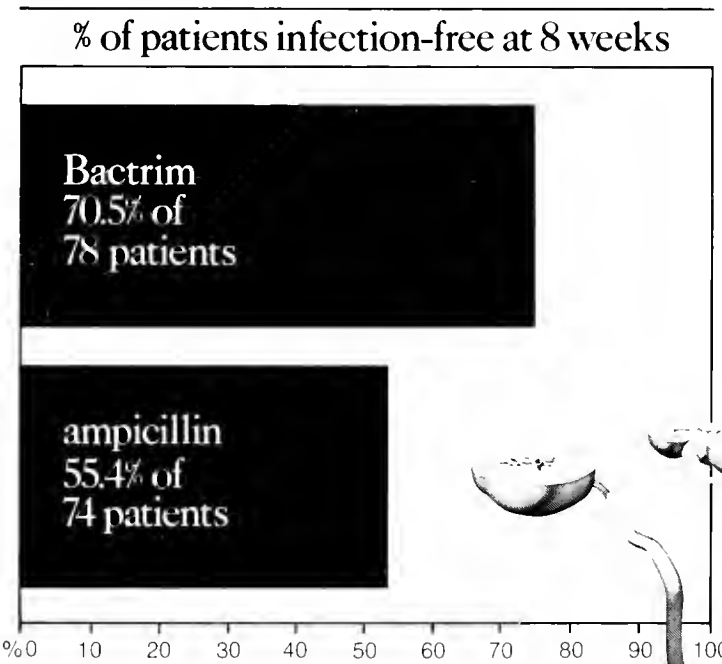
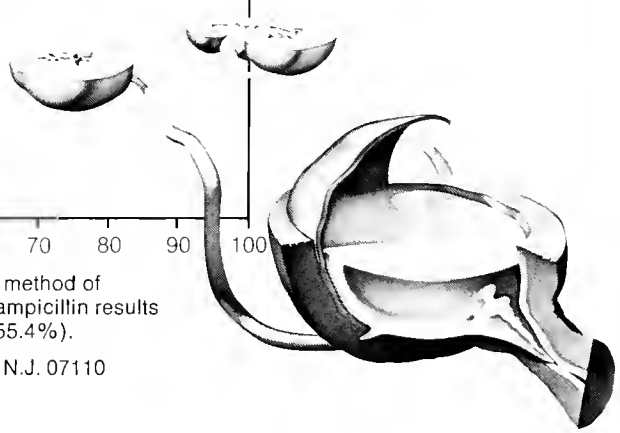
Bactrim™ was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07110



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Please see summary of product information on preceding page.

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The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY March 1976, Vol. 37, No. 3

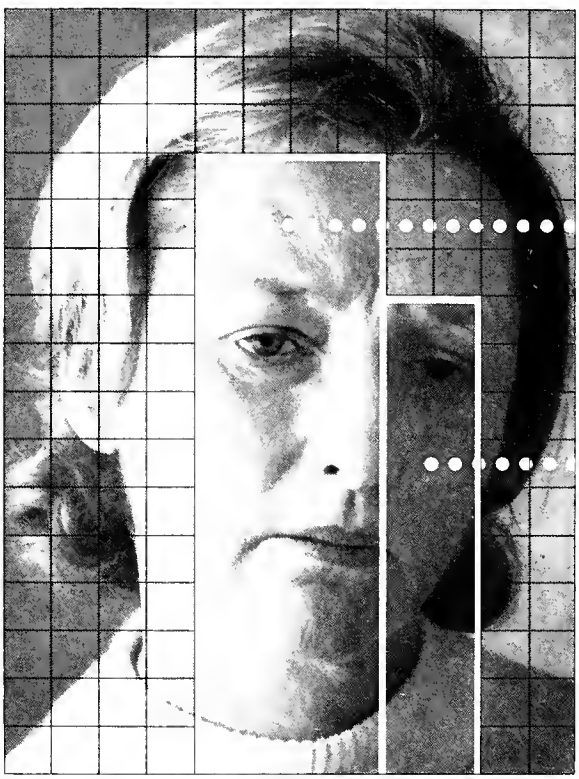
NORTH CAROLINA
Medical Journal

IN THIS ISSUE: High Mortality in North Carolina, Kathryn B. Surles, M.Ed., and Charles J. Rothwell, M.B.A., M.S.; Pseudomembranous Colitis Following Clindamycin Therapy, Robert D. Stratton, M.D., James L. Lapis, M.D., and Eugene M. Bozymski, M.D.; Benign Strictures of the Anus and the Rectum, Harold F. Hamit, M.D., F.A.C.S.

1976 ANNUAL SESSIONS
May 6-9—Pinehurst

1976 Committee Conclave
Sept. 22-26—Southern Pines

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

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with associated
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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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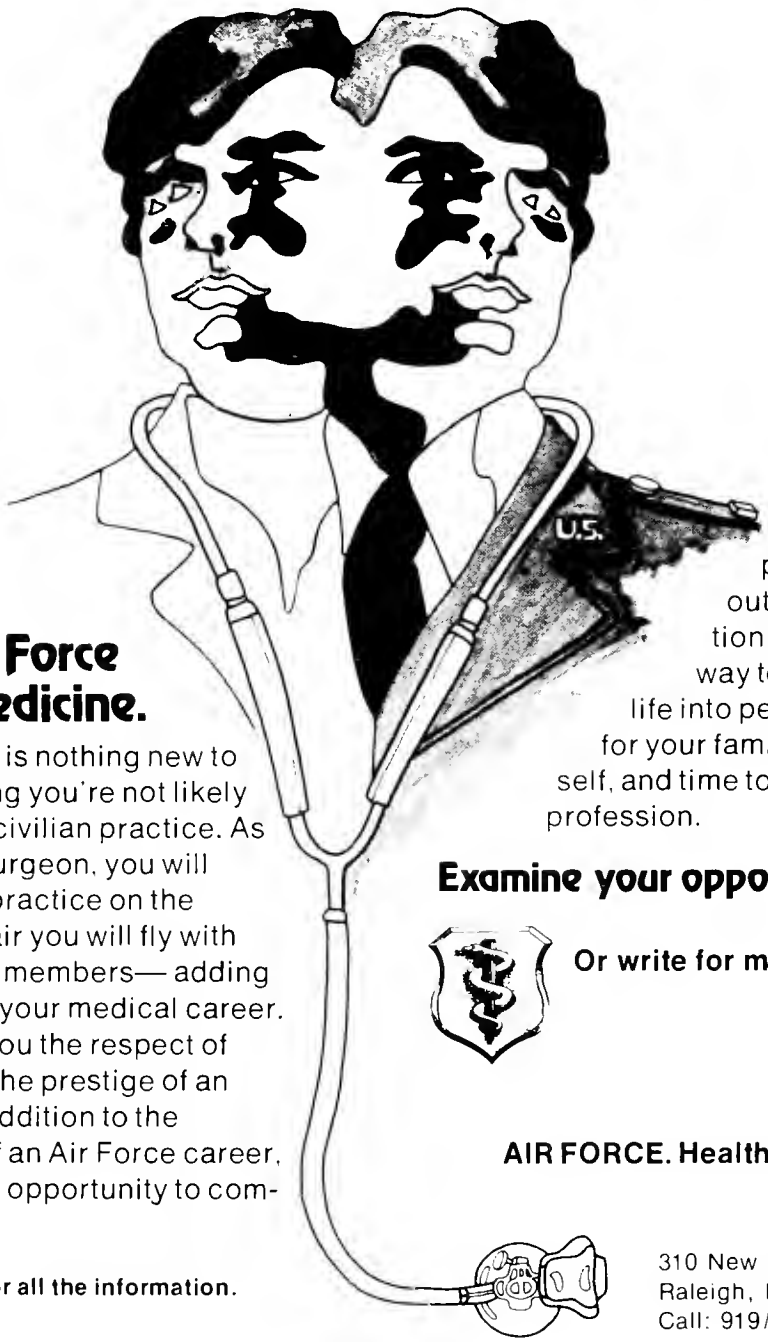

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Published Monthly as the Official Organ of
The North Carolina
Medical Society

March 1976, Vol. 37, No. 3

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Contents listed in *Current Contents/Clinical Practice*

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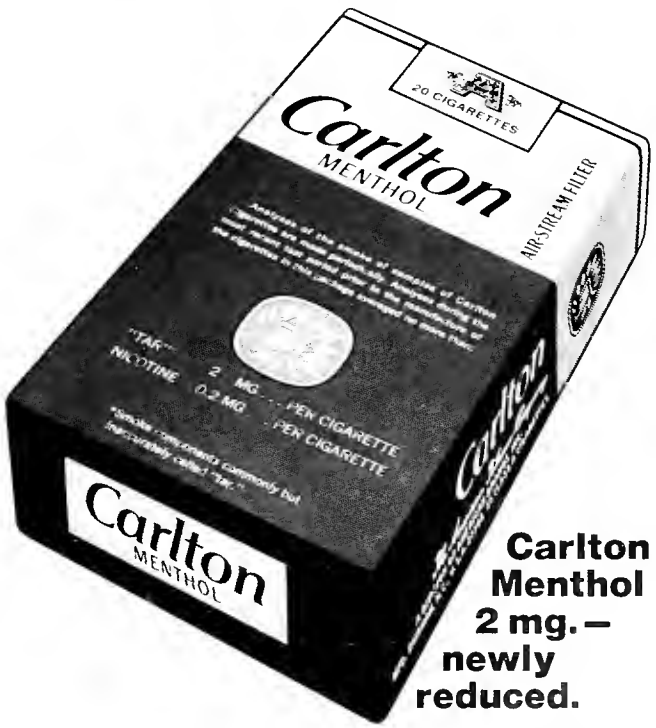

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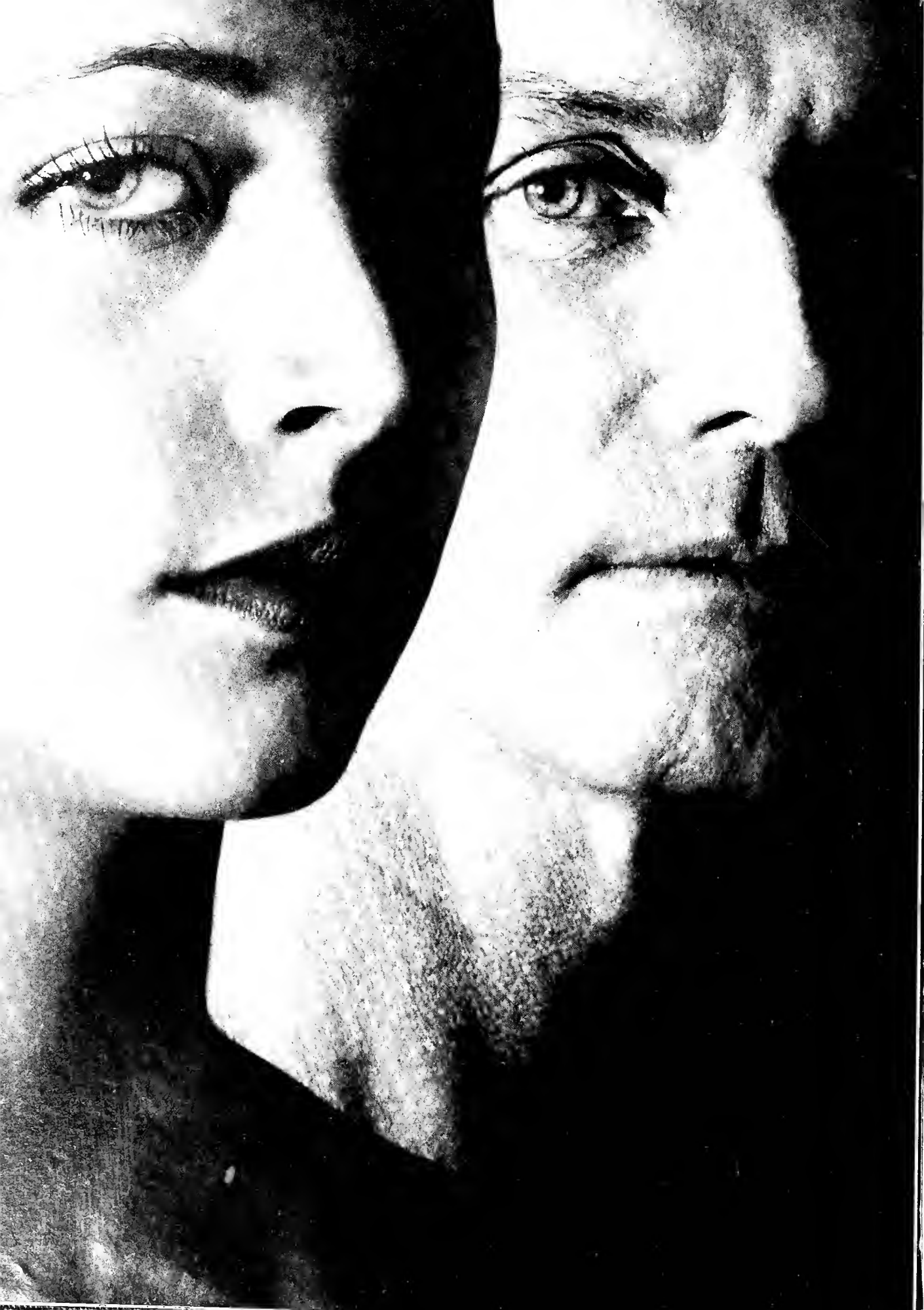

Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct nontherapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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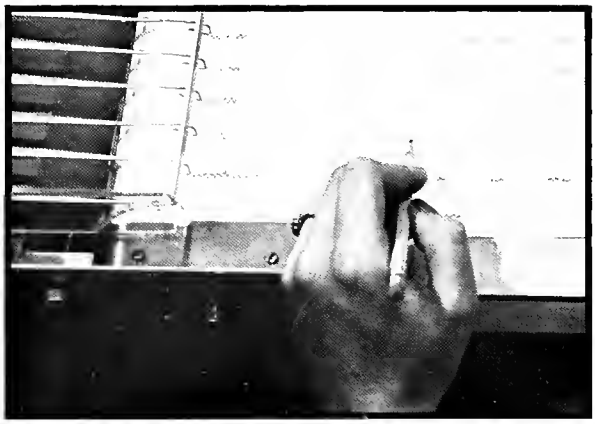

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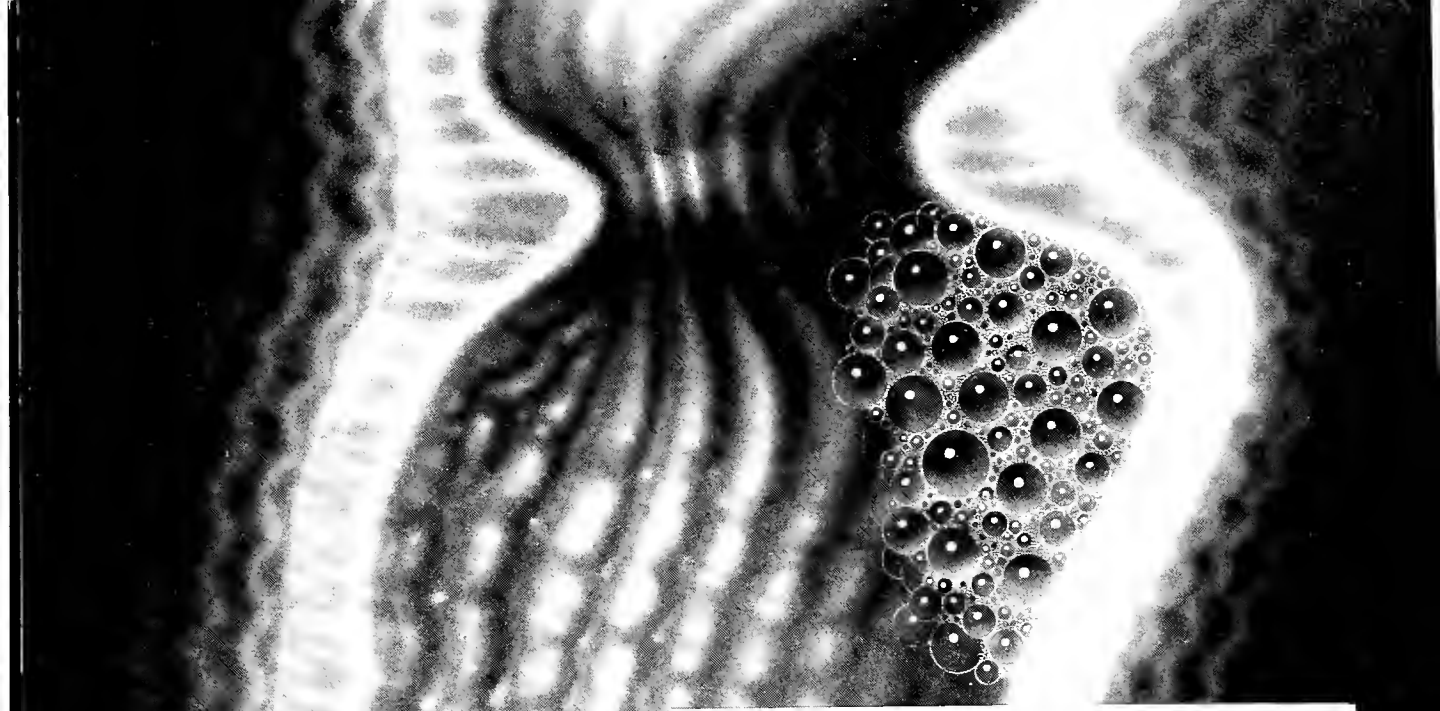

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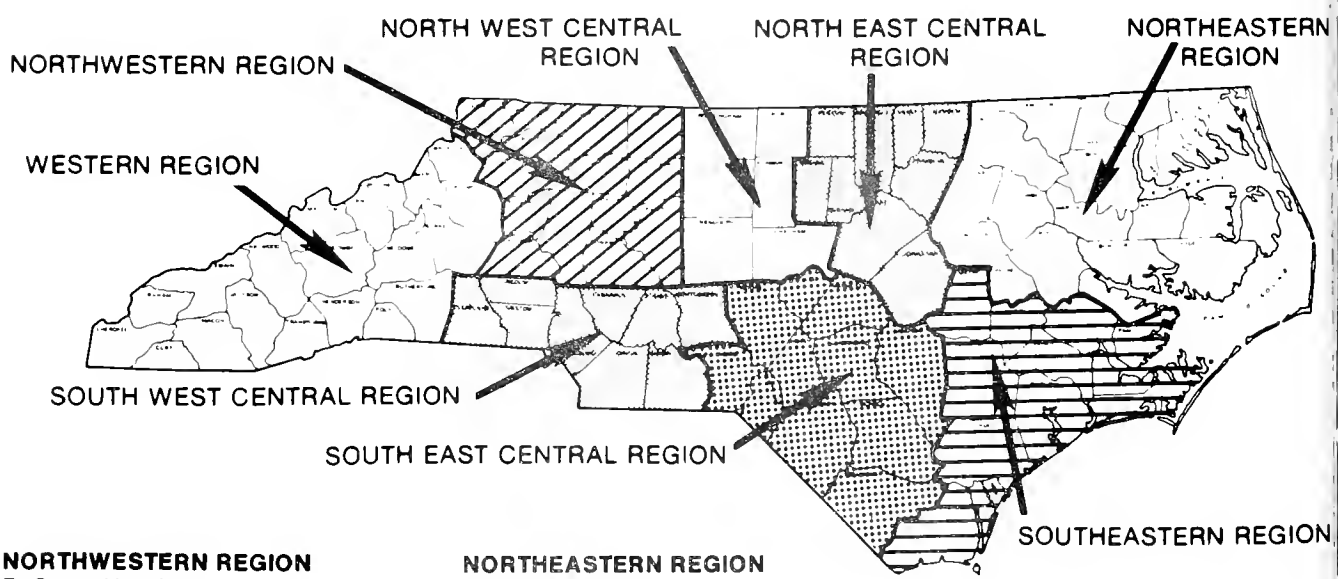

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High Mortality in North Carolina

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A STUDY of leading causes of mortality in North Carolina[1] revealed some disturbing trends for the period 1960 through 1973. The purpose of this paper is (1) to add data from 1974 to that study and (2) to take a close look at geographical areas of the state in which current mortality levels are high.

STATEWIDE MORTALITY TRENDS SINCE 1960

After an increase of 4.8 percent between 1960 and 1971, the North Carolina death rate increased an additional 4.6 percent between 1971 and 1972 to a level of 9.1 deaths per 1,000 population. This rate, the highest recorded in the state since 1938,[2] remained unchanged in 1973. Even more sharply than it rose in 1972, however, the rate dropped 5.5 percent in 1974 to a level of 8.6, the lowest since 1967. While this improvement is encouraging, the situation with respect to some population groups and to certain causes of death continues to evoke concern.

Age-Specific Mortality

Altogether, the state's death rate increased 3.6 percent between 1960 and 1974, most of the increase reflecting a higher "risk of death" due to North Carolina's changing age structure — more people at older high-risk ages and fewer at young low-risk ages. However, for young people ages 15-24, the rate increased 4.3 percent, from 122.5 per 100,000 population in 1960 to 127.8 in 1974.

Race- and Sex-Specific Mortality

Race differentials in North Carolina's mortality remained high in 1974, but the gap has narrowed. While the white death rate increased six percent, from 7.7 per 1,000 population in 1960 to 8.2 in 1974, the nonwhite rate decreased three percent, from 10.2 to 9.9. On the other hand, sex differentials remained high and reductions in excessive male mortality have not occurred. Between 1960 and 1974, the male death rate rose from 9.8 to 10.1 while the female death rate increased from 6.9 to 7.2.

The 1974 death rates for race-sex groups were 9.9 for white males, 7.0 for white females, 12.3 for nonwhite males and 8.5 for nonwhite females. These rates reflect reductions of between 5 and 8 percent during 1974 with each of the race-sex groups showing reductions in most age-specific rates. Exceptions were white females ages 20-24 and nonwhite females between the ages of 15 and 24.

Cause-Specific Mortality

The most significant changes in North Carolina's mortality since 1960 involve the causes of death. While rates for infant mortality and several other leading causes of death have been reduced, these improvements have been counterbalanced by deterioration with respect to other causes. The death rates for both lung cancer and emphysema have nearly tripled and the rate for cirrhosis of the liver has more than doubled. Rates for non-medical causes have also risen appreciably — homicide by 57 percent and suicide by 40 percent. Before 1974, the rate for accidents had also increased appreciably, but improvements during the past year resulted in a net rate increase of only 11 percent since 1960.

For North Carolinians ages 15-24, the rate increase of 4 percent largely reflects increases in non-medical deaths. The suicide rate for this group has risen 124 percent while the rate for homicide is up 85 percent from 1960. The death rate for accidents has also risen, but the motor vehicle death rate for these young people dropped 18 percent between 1973 and 1974.

Coupled with the improvements

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FIGURE 1

already noted for accidents were improvements in the rates for heart disease and stroke during 1974. Decreases in these three areas accounted for about 80 percent of the total annual decline.

Rates for several other leading causes of death also decreased in 1974, but the diabetes rate rose by 10 percent and rates for hypertension as well as nephritis and nephrosis remained unchanged. The 1974 rate for cancer also reflected negligible improvement over 1973.

COUNTY MORTALITY LEVELS DURING 1972-74

The previously cited study of North Carolina's mortality[1] involved the mapping of county death rates for total mortality, infant mortality and 25 specific causes of death for the period 1971-73. For each map, four levels of death rates were used to group counties that were "like each other" with respect to the particular cause of death.*

Using methods described above, the 1972-74 county rates for total mortality are depicted in Figure 1. Computed as average resident deaths per 1,000 average population, these rates show a county's status with respect to the actual incidence of mortality during the three-year period. The rates of Figure 2, on the other hand, are age-race-sex-adjusted rates. Computed by the direct method,[3] these rates are those which would be expected if the average annual age, race and sex composition of each county's population were the same as that projected for the state. In other words, these rates are free of the effects of age, race and sex and thus demonstrate a county's status with respect to other determinants of mortality.

As shown in Figure 1, the actual mortality rates ranged from 4.6 per 1,000 population to 14.6 with higher rates occurring in the south central and northeastern portions of the state. To some extent, the high rates would appear to reflect unfavorable age, race and sex composition of the county populations; for example, among counties with level-four actual rates (Figure 1), Gates, Hyde, Perquimans, Polk and Warren had level-two or level-one adjusted rates (Figure 2). Also, several counties had level-three actual rates corresponding to level-one adjusted rates. On the other hand, some counties with low (level-one) actual rates had notably higher (level-three) adjusted rates. This was true for Catawba, Craven, Cumberland and Onslow, indicating that low mortality in these counties reflected favorable age, race, and sex factors and other conditions were not so favorable during 1972-74.

Altogether, adjustment for age, race and sex resulted in the identification of 17 counties where mortality was significantly high during 1972-74: a band of six contiguous south central counties extending from Montgomery to Columbus and including Bladen; a band of 10 contiguous counties extending from Lee in the center of the state to Tyrrell on the coast; and Carteret County, also on the coast. These counties with level-four adjusted rates, as well as those with upper level-three rates, should investigate the determinants of their death rates. Although not explained by age, race and sex factors, high mortality may be due to other demographic correlates, such as poverty or rurality, or may be due to some other set of local conditions which invite remedy.

Cause-Specific Mortality in 17 Counties

As an aid to investigating the par-

*The four levels of death rates were determined by the death rate distributions such that the following properties applied.
a) The middle two levels = $\bar{x} \pm (M)(S.D.)$ where $\bar{x}$ = the mean or average county death rate, M = a multiple less than or equal to 1.00,
b) M is chosen such that rates in each interval are homogeneous,
c) $\bar{x}$ is the lower limit of level three, considering level one the lowest rate interval and level four the highest

GENERAL MORTALITY
NORTH CAROLINA 1972–1974

FIGURE 2

icular causes of death contributing o high mortality. Table 1 shows the 1972-74 cause-specific death rates adjusted) for the 17 counties identified in Figure 2 as having overall high and unexplained mortality. Other counties may assess their cause-specific mortality by consulting published data.[1-4]

Heart disease was a major contributor to high mortality with all 17 counties experiencing above average rates for acute myocardial infarction and/or other forms of ischemic heart disease. All but Beaufort and Tyrrell had higher than average rates for all forms of heart disease combined. Rates for other major cardiovascular diseases were also high in many of the 17 counties; the hypertension death rate and the stroke death rate were above average in most counties with stroke mortality especially prevalent in the south central counties. The rate for arteriosclerosis was high in several counties but was lower than average in the seven easternmost counties.

All 17 counties had above average mortality from some form of cancer. In 11, rates for lung cancer were above average, with the higher rates occurring in Harnett and several eastern counties. Excessive mortality from ovarian cancer was observed in the northeast. For all cancer sites combined, 14 of the 17 counties had higher than average rates with highest rates occurring in Beaufort, Bertie and Tyrrell.

All 17 counties also experienced excessive mortality from other causes of death with accidents, homicide, emphysema and cirrhosis of the liver the most prevalent problems. Rates for motor vehicle accidents and homicide were notably high in the south central counties and rates for all four external causes of death were above average in six counties—Robeson, Columbus, Lee, Johnston, Wilson and Beaufort.

In order to assess the relative impact of various causes of death in the 17 counties, we computed "synthetic rates" which represent the 1972-74 adjusted mortality rates that each county might have expected had it not experienced excessive mortality from particular causes. In other words, while holding the adjusted death rates for other causes constant, we have assumed that a county could achieve a particular cause-specific adjusted rate not exceeding the average for all 100 counties.** In the case of Montgomery, for example, we replaced the excessive heart disease rate of 412.5 with the average county rate of 325.8 (see Table 1). The county's adjusted rate with excessive heart mortality removed is then 9.3 compared to its observed rate of 10.1.

Results of the foregoing exercise are presented in Table 2 where leading causes of death are ranked according to their relative contributions to excessive mortality. A low rank (small number) represents a low synthetic rate and hence a relatively high contribution. Ties are assigned the average of the tied ranks. A blank indicates that the county's cause-specific mortality was not excessive.

As a whole, heart disease, stroke and cancer (in that order) figured prominently in the excessive mortality experienced by most counties. Heart disease was the leading contributor in 12 counties and stroke in the remaining five. Cancer was the second or third leading contributor in eight counties.

In Figure 3, each county's observed adjusted rate is compared to its synthetic adjusted rates resulting from (a) removal of excessive heart disease mortality, (b) removal of excessive heart and stroke mortality and (c) removal of excessive heart, stroke and cancer mortality.

**For all causes examined, the average or mean rate for all 100 counties was equal to or slightly greater than certain other measures of central tendency, i.e., (1) the median rate for all 100 counties and (2) the mean and median rates for counties where mortality was not considered significantly high or low. Thus, the estimates of excessive mortality may be considered slightly conservative.

TABLE 1

CAUSE-SPECIFIC MORTALITY IN NORTH CAROLINA COUNTIES

1972-1974

Cause of Death	Average County Rate* (100 Counties)	RATES* FOR SEVENTEEN COUNTIES																
		Montgomery	Richmond	Scotland	Robeson	Bladen	Columbus	Lee	Harnett	Johnston	Wilson	Pitt	Beaufort	Martin	Bertie	Washington	Tyrrell	Carteret
All Causes	9.0	10.1	11.0	11.0	10.4	10.0	10.2	10.0	10.2	10.5	10.4	10.0	10.1	10.2	10.6	10.0	10.4	10.0
Heart Disease	325.8	412.5	408.5	379.6	336.8	348.7	395.4	380.4	405.7	433.9	342.6	401.1	314.8	394.2	421.1	419.2	280.6	408.9
Acute Myocardial Infarction	172.3	268.1	229.3	180.4	159.2	203.9	178.2	220.1	195.5	151.1	195.6	203.5	186.1	152.9	238.9	159.7	106.5	210.8
Other Ischemic Heart Disease	121.5	116.9	143.7	156.9	161.1	105.9	128.7	140.9	171.3	251.1	121.3	158.0	91.4	176.9	140.0	166.3	166.7	162.3
Hypertension	4.5	1.5	5.5	11.8	9.1	4.4	2.8	13.0	10.2	3.2	9.7	5.5	5.7	4.3	8.7	10.8	9.3	6.0
Stroke	109.2	113.2	169.5	150.1	139.9	152.2	135.2	106.8	92.6	109.2	136.1	127.4	147.2	106.0	133.2	101.0	165.3	92.9
Arteriosclerosis	12.7	13.1	8.6	37.2	33.4	15.7	7.8	15.3	14.6	21.4	21.7	10.6	9.0	7.0	5.9	11.4	0.0	3.2
Cancer	140.0	142.6	150.9	155.8	141.9	126.4	130.1	152.3	148.7	141.3	151.8	153.8	166.2	136.2	171.7	146.0	191.7	161.0
Stomach	5.7	8.0	7.0	10.9	4.7	1.4	3.7	6.3	8.1	9.0	3.9	4.9	6.8	4.0	12.6	4.3	3.4	7.0
Colon/Rectum	15.1	16.8	10.7	7.8	18.4	20.5	11.7	19.2	20.7	12.7	13.8	14.7	14.1	13.9	20.5	9.5	23.7	15.2
Pancreas	8.3	8.7	6.6	7.8	5.7	6.9	4.7	7.9	5.1	6.6	11.0	8.2	8.7	2.3	7.8	2.9	3.7	10.6
Lung	28.9	29.3	29.9	27.8	29.5	26.5	26.0	31.4	37.0	26.8	28.9	38.5	43.8	33.9	40.7	32.6	56.9	34.9
Female Breast	23.4	30.5	33.0	53.4	20.3	15.8	21.2	19.5	22.5	17.4	29.1	21.5	28.2	24.2	21.4	21.8	11.7	17.1
Cervix Uteri	6.4	3.5	7.0	9.4	8.6	2.5	7.5	11.3	8.9	6.0	11.5	4.0	10.9	9.3	0.0	6.0	0.0	8.7
Ovary	7.0	6.5	3.6	3.3	8.3	9.6	8.1	6.0	3.7	4.7	5.9	6.9	9.4	13.9	18.2	13.7	25.5	6.5
Prostate	17.9	22.7	20.4	24.4	21.6	16.2	23.5	27.2	18.9	18.8	18.7	16.1	17.0	8.3	24.3	17.3	20.5	18.2
Leukemia	5.9	4.6	10.3	2.0	8.9	7.3	7.9	7.6	6.7	6.0	2.0	4.9	4.9	5.9	5.6	11.9	6.2	11.2
Diabetes Mellitus	20.1	31.1	19.9	31.7	24.5	20.4	20.6	18.2	26.9	19.7	21.4	15.6	14.6	17.1	15.8	18.9	30.4	18.1
Influenza/Pneumonia	28.2	44.0	21.4	26.8	27.0	31.8	27.4	19.2	24.8	24.4	38.3	26.2	33.4	56.1	28.9	28.2	6.8	29.7
Bronchitis, Emphysema/Asthma	11.7	10.3	7.0	18.8	11.9	14.4	13.9	13.3	6.0	13.6	19.1	17.4	16.8	12.9	22.4	11.0	8.7	10.1
Cirrhosis of Liver	14.1	4.7	20.0	11.6	16.7	10.8	11.4	17.8	11.0	17.2	19.9	15.4	20.0	7.0	10.7	21.9	22.9	16.5
Nephritis/Nephrosis	4.4	1.4	11.6	8.1	4.4	2.1	8.1	4.3	5.2	3.5	8.5	5.9	1.0	1.8	3.5	6.6	8.2	7.9
Motor Vehicle Accidents	38.3	44.7	47.9	52.0	61.9	67.8	58.1	40.7	62.9	46.5	45.7	38.2	52.5	37.2	40.1	26.3	6.3	36.8
All Other Accidents	34.8	37.5	34.5	24.8	41.8	41.4	38.5	40.0	48.4	37.0	37.0	30.2	49.8	39.4	34.1	39.1	77.9	39.4
Suicide	13.1	9.7	12.3	11.0	16.3	7.7	15.7	15.6	17.8	14.1	15.0	12.5	22.7	13.1	10.1	9.1	0.0	9.7
Homicide	12.7	17.2	20.4	19.2	25.7	22.9	18.9	16.3	12.7	15.9	15.7	11.5	16.7	10.1	6.3	4.4	0.0	13.5

*Age-Race-Sex-Adjusted by the Direct Method.[3] The rate for All Causes is expressed as deaths per 1,000 population; the cause-specific rates are deaths p 100,000 population.

The horizontal line at 9.0 indicates the average adjusted rate observed for all 100 counties.

By comparing its four death rate bars against the average rate, each county may assess the extent to which removal of excessive heart, stroke and/or cancer mortality might have affected the excess in its overall adjusted rate. In the case of Washington County, for example, removal of excessive heart mortality alone serves to eliminate the county's entire excess above the average county rate of 9.0. Removal of excessive heart mortality also reduces by at least one-half the overall excess observed for nine other counties. Removal of excessive stroke mortality substantially reduces the overall excess in a number of counties, notably Richmond, Bladen, Beaufort and Tyrrell, and removal of excessive cancer mortality further reduces the overall excess in most counties, especially Beaufort, Bertie and Tyrrell. As a whole, however, excessive heart, stroke and/or cancer mortality could account for a county's entire excess only in the case of Pitt, Washington and Carteret. Thus, counties should be sensitive to other diseases and conditions contributing to high mortality. This is particularly true for four counties — Scotland, Robeson, Wilson, and Martin — where excessive heart, stroke and cancer mortality could account for only one-third to one-half of the county's overall excess during 1972-74.

COMMENTS

Statistical procedures applied to the 1972-74 death rates for North Carolina's 100 counties have resulted in the identification of 17 counties where overall mortality levels were considered high after adjustment for the age, race and sex composition of county populations (Figure 2). This means that unfavorable conditions other than age, race and sex distributions need to be identified. Additionally, Figure 1 shows that all but one of the 17 counties also experienced above average actual mortality during 1972-74, indicating that existing health care resources may need to be evaluated.

With respect to local conditions which may be contributing to high adjusted mortality, it is noteworthy that all 17 counties except Wilson and Pitt were predominantly rural in 1970 and all except Carteret and Lee included a disproportionately high number of people living below the poverty level, when compared to the state as a whole.[5] In addition to these demographic correlates of disease and mortality, certain environmental factors may also

TABLE 2

RANKS OF SYNTHETIC ADJUSTED DEATH RATES[1] FOR SEVENTEEN COUNTIES

NORTH CAROLINA, 1972-1974

Cause of Death	County and Rank[2]																
	Montgomery	Richmond	Scotland	Robeson	Bladen	Columbus	Lee	Harnett	Johnston	Wilson	Pitt	Beaufort	Martin	Bertie	Washington	Tyrrell	Carteret
Heart Disease	1	1	1	5	3	1	1	1	1	2	1		1	1	1		1
Hypertension		8	7	7			3	6		9	7	10		5	3	6	6.5
Stroke	6	2	2	1	1	2				1	2	1		3		1	
Arteriosclerosis	9		3	3	7		7	8	2	5							
Cancer	8	3	4	11			2	4	8	3	3	2		2	4	2	2
Diabetes Mellitus	3		6	8	9	9		5		14						4	
Influenza/Pneumonia	2				6					4		7	2	7			6.5
Emphysema[3]			8	12	8	8	10		7	6.5	4	8	4	4			
Cirrhosis of the Liver		7		10			5		5	8	6	6			2	5	5
Nephritis/Nephrosis		6	10			5.5		9		10	5				6	7	4
Motor Vehicle Accidents	4	4	5	2	2	3	9	2	3	6.5		4		6			
All Other Accidents	7			6	5	5.5	4	3	6	12		3	3		5	3	3
Suicide				9		7	8	7	9	13		5					
Homicide	5	5	9	4	4	4	6		4	11		9					8

[1] Adjusted rate after removal of excessive cause-specific mortality.

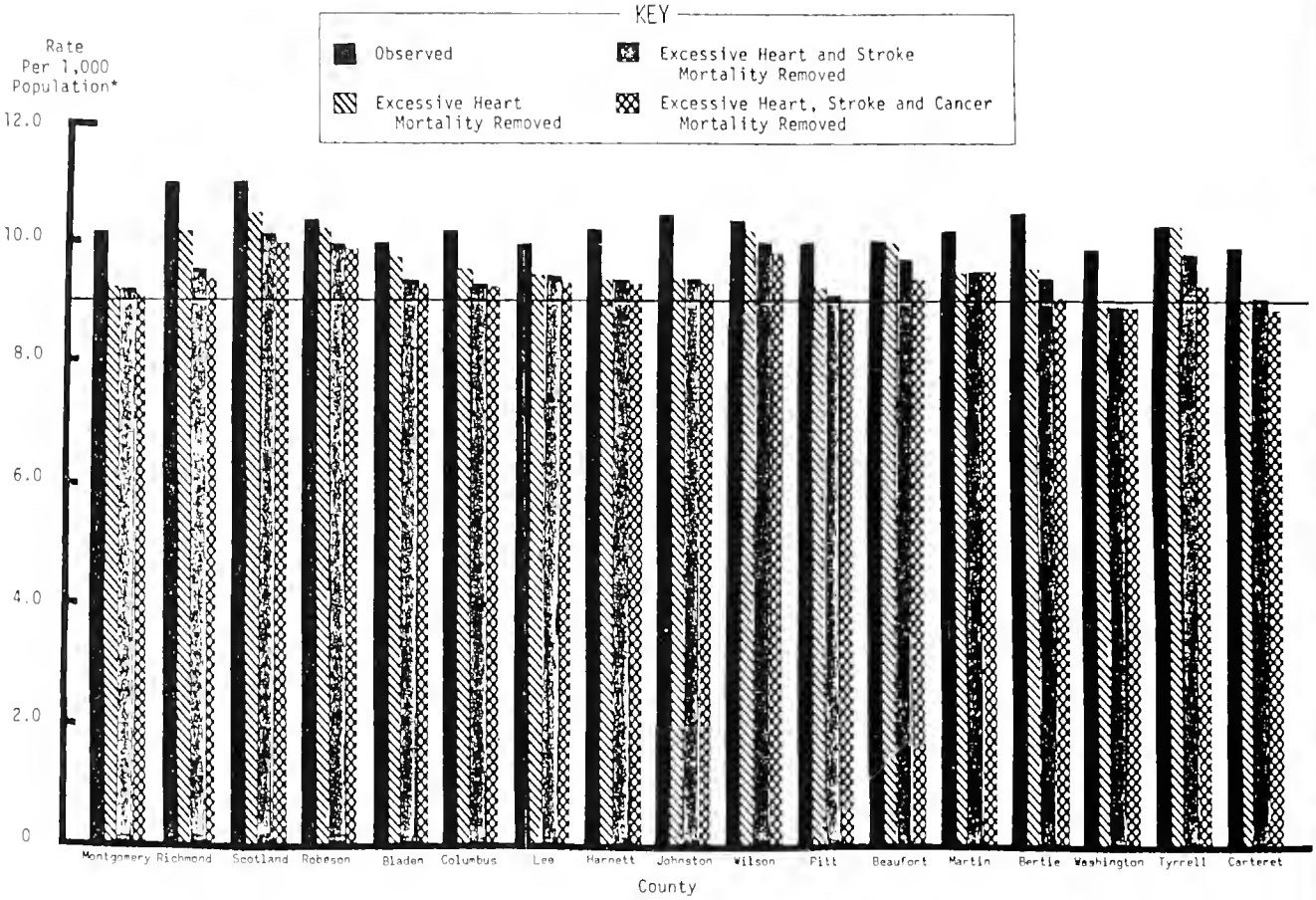
[2] Synthetic adjusted rates ranked from low to high with a low rank (small number) indicating that the cause of death was a relatively heavy contributor to excessive mortality.

[3] The category includes bronchitis and asthma but is predominantly emphysema.

FIGURE 3

OBSERVED AND SYNTHETIC ADJUSTED DEATH RATES FOR SEVENTEEN COUNTIES

NORTH CAROLINA, 1972-1974



*Age-race-sex adjusted by the direct method.[3]

underlie excessive mortality in these and other counties. The literature abounds, for example, with studies relating health—heart disease in particular—to the mineral content and hardness of local water supplies,[6] and certain forms of cancer have been related to atmospheric agents.[7] These environmental elements need to be investigated in North Carolina.

It is, of course, difficult to assess the adequacy of a county's health care resources, because counties vary widely with respect to specific disease proneness and thus with respect to health care needs. One can, however, examine the availability of resources in terms of broad quantitative measures such as the ratios of county populations to the number of non-federal primary care physicians practicing in the county, the number of active registered nurses residing in the county and the number of short-term general hospital beds licensed in the county.

Assuming that high adjusted mortality is indicative of high disease proneness, it is interesting to note that only six of the 17 counties appear average or better with respect to the three resources named above. Compared to ratios for all 100 counties, the other 11 counties are found to be worse than average with respect to one or more resources as follows: Columbus, physicians and hospital beds; Bertie and Martin, nurses and hospital beds; Carteret, Richmond, Harnett, and Tyrrell, physicians; Bladen, Johnston, Pitt, and Washington, hospital beds.[1]

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Pseudomembranous Colitis Following Clindamycin Therapy

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INTRODUCTION

THE introduction of clindamycin (Cleocin®) brought with it the hope that this more readily absorbed derivative of lincomycin would have fewer side effects than the parent drug. In early clinical trials, clindamycin was effective against most penicillin-resistant staphylococci and skin rash was the most common side effect. Diarrhea was reported in only one of 50 cases.[1] Recently, there have been many reports of gastrointestinal complications ranging from mild diarrhea to pseudomembranous colitis with bloody diarrhea, fever, hypoproteinemia and leukocytosis.[2-11] The following four cases seen at North Carolina Memorial Hospital during a 14-month period illustrate our experience with this complication of clindamycin therapy.

CASE REPORTS

Case 1

A 21-year-old female college student was treated for endometritis with a 10-day course of oral clindamycin. The initial symptoms of lower abdominal pain cleared, but on the eighth day of treatment she developed diarrhea and fever to 104° F. The diarrhea persisted despite antidiarrheal medications, and four days after completing the 10-day course of clindamycin she was admitted to the student infirmary complaining of fever, nausea, vomiting and cramping lower abdominal pain along with the diarrhea. She denied tenesmus, melena and hematochezia. Her temperature was 102° F. Bowel sounds were hypoactive and the lower abdomen was tender with minimal rebound. The stool was benzidine positive. The white cell count was 10,700/mm^3 with 65 percent polymorphonuclear leukocytes (PMN), and 3 percent bands. The hematocrit was 38 percent. The serum sodium was 141 mEq/l, potassium 2.8 mEq/l, and the urea nitrogen was 6 mg/dl. No ova, parasites or pathogenic bacteria were found in the stool. An upper gastrointestinal series was within normal limits. On the fifth hospital day proctoscopy to 8 cm revealed spotty cream-colored plaques, some of which could be removed revealing a friable base. She responded to supportive therapy, including intravenous fluids and metamucil, and was discharged on the 13th hospital day. A barium enema was normal and she was well on follow-up two weeks later.

Case 2

A 26-year-old woman had the onset of an erythematous tender swelling in the left axilla, thought to be hidradenitis. She was treated with a 10-day course of clindamycin (150 mg q.i.d. orally). On the eighth day she developed nausea, vomiting, cramping abdominal pain and diarrhea consisting of 4-5 watery, bloodless stools per 24 hours. The symptoms continued intermittently for three weeks and were unrelieved by tincture of opium, lactobacillus acidophilus and kaopectate. When seen at the hospital the patient was dehydrated and had a temperature of 102° F which spiked to 104° F on the first day. Hypoactive bowel sounds and minimal diffuse abdominal tenderness were noted and the stool contained occult blood. The white cell count was 30,000/mm^3 (77 percent PMN, 12 percent bands) and the hematocrit was 50 percent. The serum sodium was 136 mEq/l, potassium 3.5 mEq/l, albumin 2.1 g/dl. Alkaline phosphatase, SGOT and SGPT were normal. Sigmoidoscopy to 16 cm revealed a patchy, raised, cream-colored

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Supported in part by G.I. Training Grant #1-0-155-4228-GM046

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pseudomembrane throughout the rectum and distal sigmoid colon. A gram stain of the membrane revealed many bacterial forms including a few gram positive cocci. A culture of the material obtained at sigmoidoscopy grew out normal flora. She was rehydrated and given albumin and lactobacillus acidophilus. The symptoms abated and she was discharged on the eighth hospital day. One week later she was well and sigmoidoscopic exam was normal.

Case 3

A previously healthy 32-year-old woman developed Vincent's angina after extraction of a molar and was treated with one week of oral clindamycin (600 mg per day) and tetracycline (1 g per day). The clindamycin was continued for another two weeks and on the last day of therapy she noted diffuse lower abdominal pain with watery, bloodless diarrhea and fever. She received clindamycin for another week and then was admitted to her local hospital because of persisting complaints. Sigmoidoscopy revealed erythematous friable mucosa and the upper GI series and barium enema were normal. One week later, the colonic mucosa was covered by creamy, yellow plaques. Treatment was begun with methylprednisolone (80 mg IV per day). She continued to do poorly and developed ascites and bilateral pleural effusions resulting in her transfer to North Carolina Memorial Hospital. On arrival she was febrile to 101.6° F with evidence of volume depletion, bilateral pleural effusions, ascites and lower abdominal tenderness with rebound. Bowel sounds were present. Sigmoidoscopy revealed diffusely scattered cream-colored plaques and edematous red mucosa (Fig. 1). Plain film of the abdomen demonstrated thumbprinting of the transverse colon. The stool was positive for occult blood. The white cell count was 23,000/mm^3 with 78 percent PMN and 15 percent bands. Gram stain and culture of the stool demonstrated normal flora. The serum albumin was 2.8 g/dl, the SGOT 143 U, the SGPT 86 U and the alkaline phosphatase 23 NP units (normal 2-6).

After treatment with intravenous fluids, prednisone (10 mg q.i.d.), albumin (75 g per day), and lactobacillus acidophilus, she became afebrile with a normal white cell count but continued to have 15 stools per day and abdominal pain. She recovered slowly and was discharged on the 24th hospital day. Her total in-hospital time was seven weeks. She was well, with a normal sigmoidoscopy and liver function tests, one week after discharge.

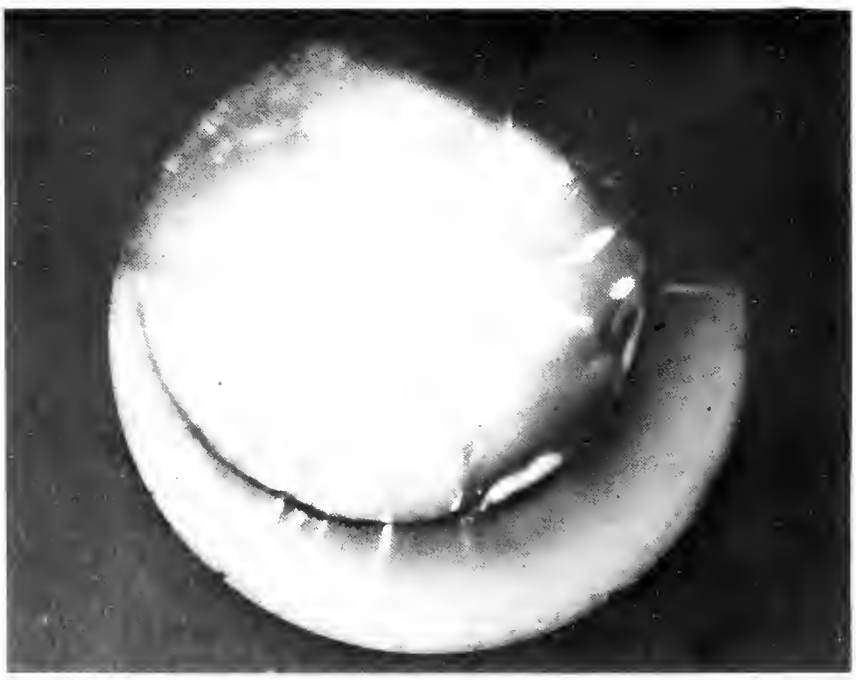

Fig. 1. Photograph of mucosa seen through sigmoidoscope, Case # 3. Note the raised cream-color plaques on the edematous mucosa.

Case 4

A 35-year-old woman with glomerulonephritis and chronic renal failure underwent bilateral nephrectomy in October, 1972. She was maintained on home dialysis until a renal transplant was performed March, 1973. She remained oliguric for the ensuing two months and in May, 1973, the transplant was removed after a needle biopsy demonstrated acute rejection. A wound infection developed from which streptococci, staphylococci and E. coli were cultured and the patient was treated with clindamycin and kanamycin. Steroids were tapered and hemodialysis was continued. On the fifth day of treatment she was afebrile and the wound infection was improving. On the ninth day of therapy, her temperature went to 100.8° F and she developed nausea, and later, severe abdominal pain along with episodes of hypotension. On the 13th day of antibiotic therapy she had a period of apnea and hypotension during hemodialysis, with a temperature spike to 102° F. Nausea, vomiting and severe abdominal pain continued, and on successive days the white cell count rose to 13.8, 28.9, 47, and 74.4 x 10^3/mm^3. Massive ascites developed which did not respond to albumin administration. Abdominal exploration revealed no evidence of abscess. She died during an episode of apnea and hypotension on the 17th day of treatment. Autopsy revealed previously unsuspected pseudomembranous colitis involving the entire colon (Fig. 2). Other findings were fibrinous pericarditis and wound infection.

DISCUSSION

Pseudomembranous colitis can occur in a variety of clinical situations and is often associated with the use of broad spectrum antibiotics. The diagnosis should be suspected when a patient taking a broad spectrum antibiotic develops

ver, diarrhea, abdominal pain or stention. It is confirmed by sigoidoscopy with the finding of eam-colored tenacious plaques ith the intervening mucosa being ythematous and edematous.

The patients presented above ere seriously ill with high fever, ukocytosis and immature forms in e peripheral blood. In the 20 cases ported in detail in the literature, hite cell counts varied from 11,500 34,000 with all but two greater an 16,000/mm^3. Fever in all but o of the 20 was greater than 101° [2,3,5-11]

Protracted disability in otherwise ealthy young people was a striking ature, both in our patients and in ose described by others. It ranged om one week to several months, ith a median and mean of five eeks. That this can be a serious ness is demonstrated by the fact at of these 24 patients, two died d two others required extended spital stays. Ages ranged from 9 74, with a mean of 46. One-third the patients were under 35. A table feature is that the majority patients (19 of 24) were women.

The most consistent chemical abormality in our cases was the low erum albumin primarily from proin loss via the gastrointestinal act. As demonstrated by Case 3, scites and pleural effusions may esult from the hypoalbuminemia nd the requirement for albumin relacement may be extensive. In two four patients, elevated SGOT and lkaline phosphatase levels were oted, returning to normal with reovery. Mild transient elevation of GPT and SGOT, or alkaline phoshatase was noted in 8 of 19 patients iven clindamycin in one study.[12] o evidence of colitis was reported. lmore and colleagues reported a arked rise in SGOT and an abormal liver biopsy following inravenous clindamycin therapy which quickly resolved after cessation of therapy.[13] The nature of this defect in hepatic function and its relation to colitis remains obscure.

In view of these experiences, we believe the use of clindamycin should be reserved for those specific clinical situations in which it is clearly the antibiotic of choice. The potential significance of diarrhea, fever or abdominal pain in a patient receiving clindamycin therapy is evident. Continued fever, diarrhea, marked leukocytosis or hypoalbuminemia should be watched for and viewed with suspicion. Detection of this complication by a high index of suspicion and by early sigmoidoscopy may decrease the severity and length of debility. Treatment is non-specific and includes discontinuance of the antibiotic, supportive care, albumin replacement and lactobacillus acidophilus. Burbige and Milligan have recently reported prompt remission of symptoms in this entity with cholestyramine in one patient.[14]

Fig. 2. Gross appearance of colon from Case # 4. Note the diffuse and extensive involvement.

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. . . I am convinced the great majority of those complaints which are considered purely mental, such as irritability and irascibility of temper, gloomy melancholy, timidity and irresolution, despondency, &c. might be greatly remedied, if not entirely removed, by a proper system of temperance, and with very little medicine. On this account, medical men often have it in their power to confer an immense boon of happiness on many valuable members of society, whose lives are rendered wretched by morbid sensitiveness of the mind, having its unsuspected source in morbid sensibility of the stomach, bowels, or nervous system.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 8.

Benign Strictures of the Anus and the Rectum

Harold F. Hamit, M.D., F.A.C.S.

BENIGN strictures of the anus and the rectum apparently are considered so insignificant that they are scarcely mentioned in several current textbooks on surgery and gastroenterology. These lesions occur in a variety of degrees, result from a variety of causes and respond to a variety of treatments. Among the causes are anal and rectal surgery, fissures and fistulas *in ano*, chronic colitis and proctitis, diverticulitis and diverticulosis, lymphogranuloma venereum and ionizing radiation. Among any group of patients with these lesions will be several for whom the lesion must be termed idiopathic since its cause cannot be traced to any recognized injury or disease. Because this subject has been neglected in current literature, we reviewed our recent experience with this problem.

METHODS AND MATERIALS

We asked our Department of Medical Records to collect the clinical records of patients discharged from the hospital from 1971 through 1974 with any diagnosis associated with a stricture of the anus or the rectum, whether benign or malignant and whether the stricture was the primary cause for hospitalization or an incidental or secondary diagnosis. This request produced 186 charts for review. We eliminated cases in which the patient had fistulae, polyps, villous adenomas and other conditions not associated with actual strictures and cases of malignant disease of the anus or the rectum. We were left with 27 clinical records of patients with *bona fide* strictures not associated with malignant disease. The one exception was a patient with a history of local excisions over a period of 20 years for polyps of the rectum, some of which contained carcinoma *in situ*. This patient apparently had developed a stricture as a result of these repeated local excisions. The complete records of these 27 patients, including all admissions to this hospital for any cause, were studied in detail. In an attempt to assess the results of the treatments these patients had undergone for stricture, we requested follow-up information from their physicians.

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RESULTS

Age, Race and Sex

Five of the 27 patients were men (three white, one black and one American Indian). Of the 22 women, 16 were white and three black. The race of the other three could not be determined from clinical records. The ages of these patients on their first admission to the hospital ranged from 26 to 84 years with both a mean and a median age of 56. At the final admissions, their ages ranged from 30 to 85 years with a mean of 56 and a median of 57. (The ages of two black women were uncertain; the youngest ages of several ages recorded for them were used.) The ages of the men ranged from 2[illegible] to 60 on first admission with a mean of 37 and a median of 34; on final admission the men ranged from 3[illegible] to 63 with a mean of 38 and a median of 37. The ages of the women ranged from 41 to 84 with a mean age of 60 and a median age of 56 on first admission; on final admission the women ranged from 44 to 85 with a mean of 64 and a median of 67.

Marital and Social Status

The three white men and the Indian were married. The marital status of the black man was not indicated in his record. All the women except one were or had been married. All of the patients except three were private.

Hospitalizations

The 27 patients were hospitalized 73 times, the number of hospitaliza-

tns ranging from one to eight with a average of 2.7 per patient. Twenty-five hospitalizations were primarily because of anal or rectal strictures; the others were for other reasons and the stricture was a secondary, incidental or unmentioned conditioned. During nine hospitalizations, examination of the rectum was "deferred" and apparently never accomplished; for 13 other admissions there was no indication whether the rectum had been examined. Seventeen patients were hospitalized primarily for stricture: 1 of them were hospitalized once, four twice and two three times for this reason. During these 25 hospitalizations, the patients spent 223 days in the hospital (an average of 8.9 days per patient or 8.9 days per hospitalization). Those hospitalized once primarily for strictures spent an average of 6.6 days in the hospital. Those hospitalized twice for stricture spent an average of 5.2 days in the hospital the first time and 9.3 days the second time. Those hospitalized three times spent averages of 17.5, 12.5, and 15 days, respectively, in the hospital.

Diagnosis

The symptoms included constipation and obstipation, rectal pain, abdominal pain and cramping relieved in some cases by laxatives, small or ribbon-like stools, "stenosis" or "stricture," hemorrhoids, fissures and fistulae and rectal bleeding. Diagnosis usually was made by digital examination. In five patients the diagnosis by digital examination was not evaluated by any other means and was never treated. In 12 patients the problem was further evaluated by proctoscopic examination, barium enema or a consultant; none of these was treated for stricture during the initial admission, but eight subsequently were treated. In two, rectal examination was reported as negative during a subsequent admission, and in two rectal examination was either not reported or "deferred" during subsequent hospitalizations. In four, rectal examination either was not reported or was "deferred" during hospitalizations preceding the hospitalization during which the diagnosis of stricture was made. A Frei test was negative in the only patient upon whom it was performed. It apparently was not done upon another patient who gave a history of suppurative inguinal lymphadenopathy. Tuberculosis was never mentioned as a possible cause of the stricture and was not diagnosed in any of these patients.

For the 17 patients eventually treated for anal or rectal strictures, rectal examinations were reported as "negative" in two during earlier hospitalizations. Rectal examination was either not reported or "deferred" during the 18 preceding admissions of these patients for other ailments. Certain treated patients subsequently were hospitalized 11 times for one reason or another; during three of these hospitalizations rectal examination was either not reported or was "deferred," but they were reported as negative during eight hospitalizations.

Cause of Stricture

The probable causes associated with anal or rectal stenosis are shown in Table I.

Treatment

The manner by which these patients were treated is shown in Table II. Dilation and incision included combinations of dilation and biopsy in one patient, with hemorrhoidectomy and fissurectomy in two, with fissurectomy and sphincterotomy in two (one of the last subsequently required a sphincteroplasty because of persistent fecal incontinence). One of the patients who underwent dilation and hemorrhoidectomy also required a sphincteroplasty. One patient was treated by elective colostomy which preceded a resection from a posterior approach of the stenotic rectum which in turn was followed by a closure of the colostomy. Another patient hospitalized twice in two years at this hospital first for suspected subdural hematoma and later for a urinary tract infection with septicemia, was treated by colostomy at another hospital for a rectal stricture "at seven centimeters" and returned here for closure of his colostomy. During this procedure the stricture was "dilated from above and below" but not resected. Six days after his discharge he returned with a wound infection which was incised and drained of a "tremendous amount of ascitic fluid," which on culture grew out a Proteus microorganism. The patient then made a "remarkable recovery." A colostomy, intended to be permanent, was performed on a patient who had been treated by ionizing radiation for cancer of the cervix and had developed proctitis and rectal stricture. A patient treated repeatedly over a period of 20 years by local excision of rectal polyps, several of which contained carcinoma *in situ*, eventually developed a stricture which was treated by anterior resection of the rectosigmoid and a similar resection was performed on a stricture associated with diverticular disease. Incisions of the stricture or the anal sphincter ranged from four-quadrant incisions to simple fissurotomy and anal sphincterotomy. One elderly woman in whom a tight anal stenosis had been noted but not treated eventually was admitted with a diagnosis of "large bowel obstruction," which

TABLE I
Causes Associated with Anal or Rectal Strictures

Unknown	8
Post-hemorrhoidectomy (2 months to 15 years)	7
Fistula or fissure in ano	3
Post ionizing radiation to pelvic organs	2
Associated with hemorrhoids (preoperatively)	2
Associated with diverticular disease	2
Post-rectal surgery (other than hemorrhoidectomy)	2
Ulcerative colitis	1
TOTAL	27

TABLE II
Treatment of Patients with Anal or Rectal Strictures

None — Stricture apparently ignored after diagnosis	7
None — Stricture evaluated but not treated	3
Dilation and incision	6
Dilated only (under anesthesia)	3
Excision or incision of fissure or fistula and hemorrhoidectomy	3
Colostomy	2
Resection of stenosis	2
Dilation by patient (after instruction)	1
TOTAL	27

TABLE III
Follow-Up Results on Patients Discharged with a Diagnosis of Rectal Stricture

Result	Number
Cured, No further treatment necessary	11
Apparent Asymptomatic; Not Evaluated	3
Improved, Still has a problem	5
Performing self-dilations satisfactorily	1
Not seen since discharge	1
TOTAL	21

was relieved by incision of an anal stenosis "so tight that an opening could hardly be found" and delivery of a fecal impaction. Three patients were treated by dilation under anesthesia and one patient was taught to perform dilations at home with graduated plastic dilators. One patient whose pelvic organs had been irradiated and upon whom digital dilation had been performed was advised to continue self-dilations at home.

Follow-Up

Thirteen physicians returned 21 follow-ups. Except for one patient who was not seen after discharge, the follow-up periods ranged from three weeks to more than three and one-half years (see Table III).

One patient who required a sphincteroplasty to correct an over-correction of her stenosis was having a slight problem with fecal incontinence at last follow-up. Two patients, who apparently were instructed to perform self-dilations without this being noted in the hospital record, have been able to discontinue these treatments. Two patients who required further dilations by the physician in his office now are apparently doing well. One patient died of unrelated causes, but none has died from any cause associated with rectal or anal stricture.

CONCLUSION

Benign anal and rectal strictures are rare and accounted for only 73 (27 patients, or .06 percent) of the 114,229 hospitalizations at Charlotte Memorial Hospital and Medical Center during the period of this study. Only 25 (or .02 percent) of these hospitalizations were due to anal and rectal stricture.

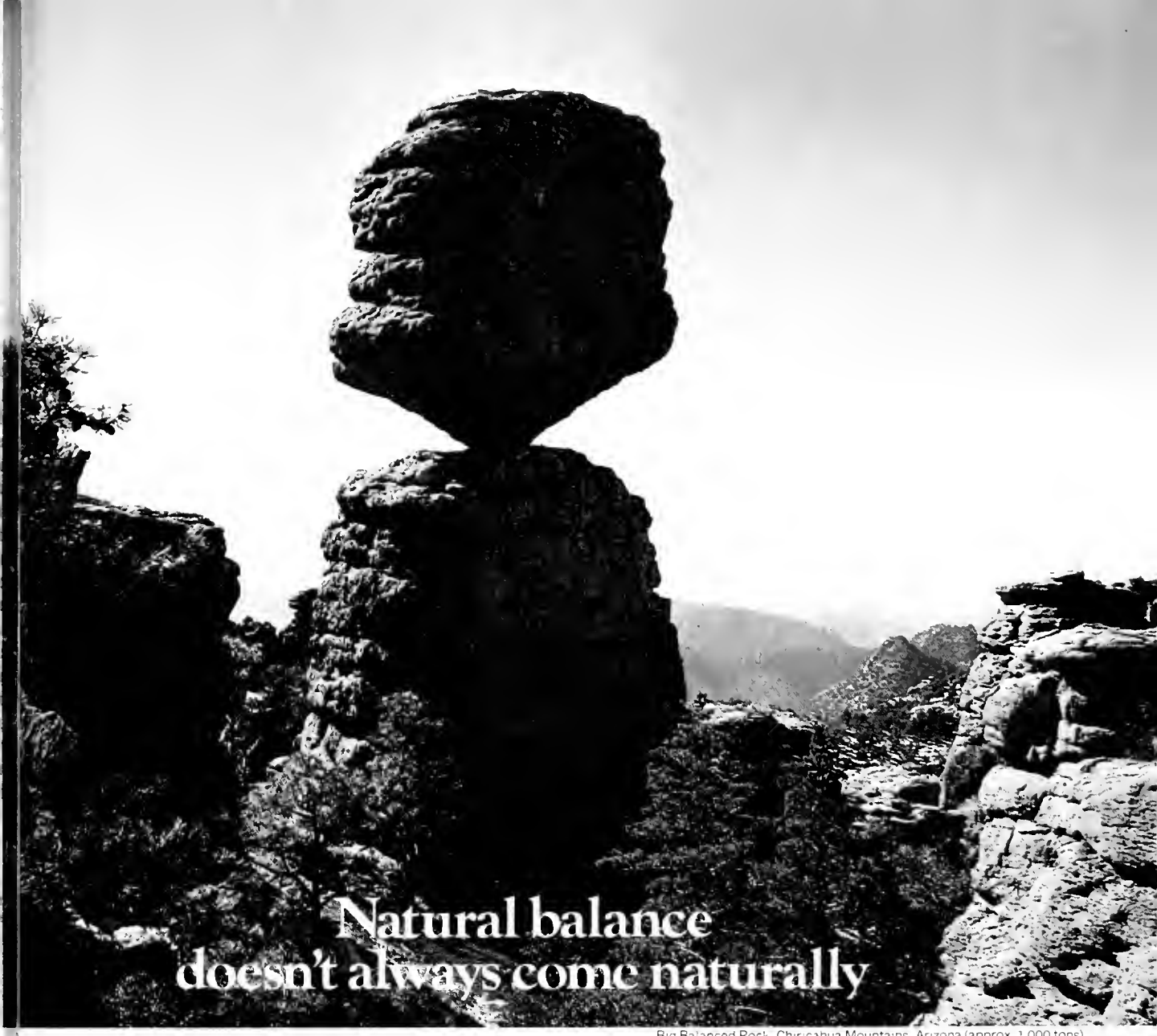
From this review it appears that a high percentage of benign anal or rectal strictures are iatrogenic. Eleven of 27 (41 percent) were associated with some kind of medical treatment. Hemorrhoidectomy was the greatest single cause of stricture (7 out of 27, or 26 percent). Although there was no recorded history of rectal surgery for eight (30 percent) of the patients for whom the cause of stricture was unknown, one might reasonably suspect that some of these may have had a hemorrhoidectomy or other rectal surgery in the past and that this fac simply was not mentioned in thei histories. The next most importan cause appears to be inflammator disease.

Whatever the cause, the treat ment or non-treatment of thes strictures appears to have bee satisfactory. Although five patient of the 21 followed still were havin problems, only one of these coul be said not to be under satisfactor control at last follow-up. From thi study it appears that benign recta and anal strictures are rather un common, that most are readil amenable to appropriate treatment and therefore are, indeed, benign Probably the most important fac disclosed by this study is that doc tors may not be as diligent as the should be in taking advantage of op portunities to perform routine recta examinations on their patients an may be missing the opportunity t detect more serious lesions, i.e. malignancies, as well as benig strictures. It is especially disturbin to find that rectal examinations ar "deferred," "not done" or not re corded for patients known to hav had and to have been treated fo rectal problems.

ACKNOWLEDGEMENT

Dr. Isaac Isaiah, formerly a resident i general surgery, performed the initial screen ing of the clinical records.

Thus, a man in perfect health, and with an excellent appetite, is allured by variety of dishes, agreeable company, provocative liquors, and pressing invitations, to take food more in accordance with the relish of appetite than the power of digestion. No inconvenience occurs for an hour or two; but then the food appears to, and actually does, swell in the stomach, occasioning a sense of distention there, not quite so pleasant as the sensations attendant on the various changes of dishes, and bumpers of wine, or other drink. He unbuttons his waistcoat, to give more room to the labouring organ underneath: but that affords only temporary relief. There is a struggle in the stomach between the *vital* and the *chemical* laws, and eructations of air or acid proclaim the ascendancy of the latter.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 22.



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Found useful in the management of vertigo* associated with diseases affecting the vestibular system.

Can relieve nausea and vomiting often associated with vertigo.*

Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.

Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.

Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children Clinical studies establishing safety and effectiveness in children have not been done, therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy See "Contraindications."

ADVERSE REACTIONS Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

DYAZIDE®

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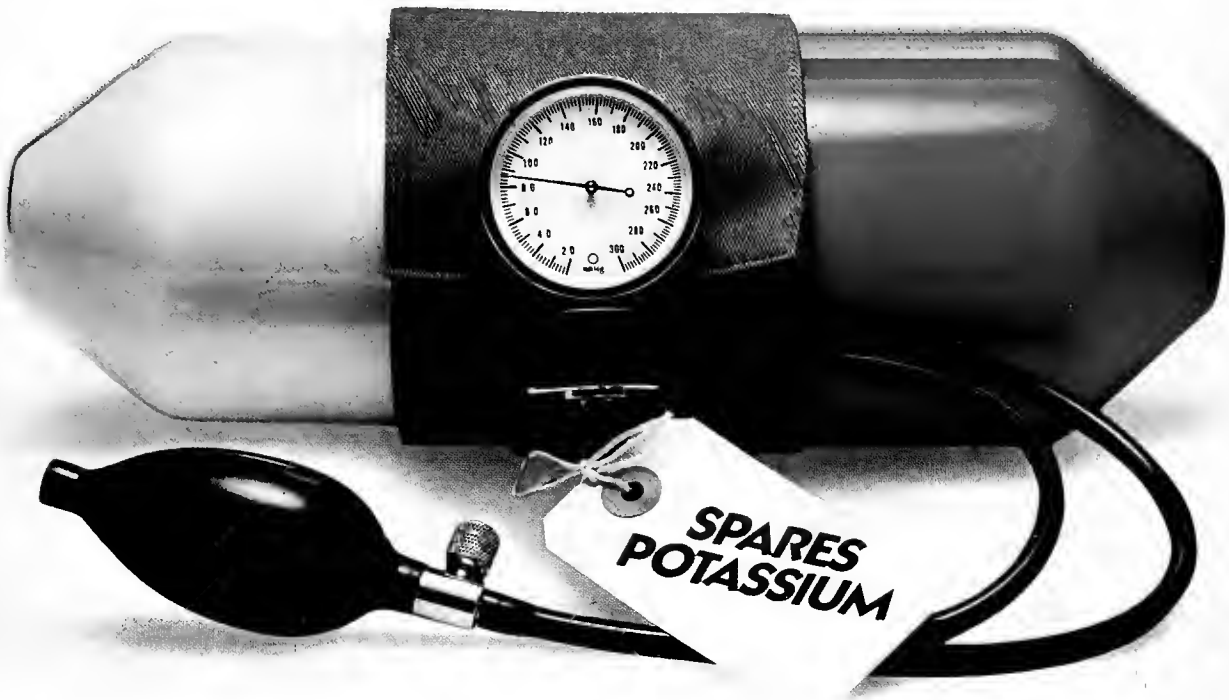
Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

Editorials

HIGH MORTALITY IN NORTH CAROLINA

As the United States was settled, geographic and economic considerations helped define county lines which have remained virtually unchanged despite shifts in population, changes in resources and variations in productivity. The transition of our country from a primarily rural and agricultural to a predominantly urban and industrial society has concentrated population and has often left smaller counties financially unable to provide minimal health and other services without state or federal assistance, a dilemma leading some to advocate extensive county consolidation and regionalization of medical and other service facilities. Since minimum populations appear necessary to support certain specialists, data about variations in age, disease incidence and prevalence and ethnic susceptibility might be helpful in planning and in allocation of funds if maximal benefit is to be achieved from the resources available. Such expectations might be important in deciding where to establish centers for categorical care as dialysis, coronary care, neonatal intensive care and radiation therapy facilities.

Such planning to bear fruit requires epidemiologic study of a number of variables. As Surles and Rothwell suggest in this issue of the Journal, there is significant unexplained variation in mortality from certain specific diseases among our hundred counties, the explanation of which might require investigation of a number of factors including mineral content and hardness of water supplies and variations in atmospheric agents. To these might be added efforts to identify industrial determinants, genetic influences and dietary factors which might be susceptible to social action. Recent studies of cancer mortality by counties, 1950-69, by the epidemiology branch of the National Cancer Institute may be instructive.[1,2] Risk of bladder cancer in white males, for example, appears linked to industrial exposure whereas excessive mortality for stomach cancer in white males is greatest in the upper midwest where people of northern European descent are clustered. Cancer mortality, all primary sites combined in white males and females, is significantly lower in most of North Carolina, a more agricultural state with less concentrated heavy industry than the rest of the United States and probably more homogenous in the ethnic derivation of its people. Even so, mortality from nasopharyngeal and other cancers of the mouth and throat among white males, malignant melanomas and other skin cancers among whites of both sexes, eye cancer and bone tumors is significantly greater in many counties in North Carolina than the rest of the nation. Both environmental and genetic factors have been linked to the appearance of melanomas so that more extensive investigation might lead to the identification of unfavorable factors which might be remediable. As Hoover et al indicated and Surles and Rothwell confirm, counties are "small enough to be homogenous for demographic and environmental characteristics that might influence . . . risk and yet large enough for stable estimates of . . . mortality."

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THE NINETEENTH HOLE

No figures are available to tell us how many doctors play golf on Wednesday afternoons, but patients seem to have accepted this as a secular ritual seldom challenged, except by the weather. Not as rigidly stylized as bullfighting, golf nevertheless has its fixed aspects, including the nineteenth hole with its endless discussions of hooking and slicing and other abstruse matters. Yet the medical mind, so geared to problem-solving at the bedside, has provided no lasting solution for the obstacles of a pleasant golfing afternoon, perhaps because without complaints and difficulties play would be less fun and conversation more mundane.

Still, such is the drive for perfection that the source of greatest anguish on the links has been identified: the ball. It, at least, can be changed — perhaps made to self-correct in its flight, similar to more advanced tools in the Pentagon's armamentarium. Since only three requirements must be met for a modern golf ball to be legitimate — a weight of no more than 1.62 ounces, a diameter of at least 1.68 inches and a maximal velocity on standard impact of 250 feet per second — variations seem almost infinite. Working within these restrictions, two California scientists have produced a ball which, it is said, reduces hooking and slicing by 75 to 80 percent, with modest compensatory decrease in length of the drive, all by applying simple principles of physics and spending about $2.75 for raw material.[1]

No longer should the surface of the ball be totally dimpled, but only at its equator; such cosmetic surgery reduces the ball's tendency to stray but sacrifices distance. The ball's mass is increased at its poles because rigidly connected weights tend to spin

in only one axis, rather like a drum majorette's baton, hence hooking and slicing are inhibited. Unfortunately, putting won't improve.

We wish the American Tentative Society (yes, there is an American Tentative Society dedicated to the proposition that all knowledge is tentative and thus scientific principles must be constantly evaluated as to their validity[2]) could be enticed into identifying and validating the principles of the Department of Health, Education and Welfare, as well as the significance of redesigned golf balls. Hooking and slicing, whether on the golf course or in Washington, demand careful examination.

References

1. Science 187, 941, 1975.
2. Wall Street Journal, Sept. 5, 1974

Committees and Organizations

THE NORTH CAROLINA MEDICAL CARE COMMISSION

At the December 11-12, 1975, meeting of The North Carolina Medical Care Commission, resolutions of appreciation for retiring members were unanimously approved. The retiring members were Drs. Harold B. Kernodle and William Raney Stanford.

Resolved: Whereas, Dr. Harold B. Kernodle of Burlington, Alamance County, has served as a member of The North Carolina Medical Care Commission since 1967 and during that time has served as a member of the Student Loan Committee; and

Whereas, Dr. Kernodle has served the people of North Carolina in these endeavors with a devotion and interest beyond the call of duty with highest integrity, graciousness and efficiency; and

Whereas, during Dr. Kernodle's tenure, the Commission assisted local communities throughout the State in providing new, enlarged and modernized hospital facilities, nursing homes, health centers, facilities for the mentally retarded, and community mental health centers; and, in addition, administered funds to assist in the education of physicians, dentists, pharmacists, nurses and other health personnel for medically deprived areas of North Carolina; and

Whereas, North Carolina's accomplishments in these fields have been recognized throughout the nation:

Now, Therefore, Be It Resolved that The North Carolina Medical Care Commission does hereby record its appreciation of the unselfish, highly intelligent and friendly services of Dr. Harold B. Kernodle over a period of eight years:

Resolved: Whereas, Dr. William Raney Stanford of Durham, Durham County, has served as a member of The North Carolina Medical Care Commission since 1949, a period of 26 years; and

Whereas, Dr. Stanford has served the people of North Carolina with a devotion and interest beyond the call of duty with highest integrity, graciousness and efficiency; and

Whereas, during Dr. Stanford's tenure, the Commission assisted local communities throughout the State in providing new, enlarged and modernized hospital facilities, nursing homes, health centers, facilities for the mentally retarded, and community health centers; and, in addition, administered funds to assist in the education of physicians, dentists, pharmacists, nurses and other health personnel for medically deprived areas of North Carolina; and

Whereas, North Carolina's accomplishments in these fields have been recognized throughout the nation:

Now, Therefore, Be It Resolved that The North Carolina Medical Care Commission does hereby record its appreciation of the unselfish, highly intelligent and friendly services of Dr. William Raney Stanford over a period of 26 years.

Bulletin Board

NEW MEMBERS
of the State Society

Anderson, Larry Glenn, M.D. (ORS), 808-B N. DeKalb St., Shelby 28150
Daniel, Walter Eugene, Jr. (STUDENT), 304 Woodhaven Road, Chapel Hill 27514
Edden, Stanley Harry, M.D. (GP), Box 307, Main Street, Beulaville 28518
Hardeman, Richard A., M.D. (FP), Box 45, Grover 28073
Hundley, James Davenport, M.D. (ORS), 315 N. 17th Street, Wilmington 28401
Lauer, Thomas Eugene (STUDENT), 1918 Halifax Court, High Point 27262
McCreary, Jeremy Alan (STUDENT), Route #3, Box 110, Hillsborough 27278
Miller, Robert Michael, M.D. (FP), 809 N. Lafayette Street, Shelby 28150
Osberg, Arthur Guyer (STUDENT), B-10 Camelot Apartments, Chapel Hill 27514
Pope, Thomas Lee, Jr. (STUDENT), 47 Davie Circle, Chapel Hill 27514
Raper, David Ray (STUDENT), #47 Tarheel Trailer Park, Chapel Hill 27514
Rozier, John Charles, Jr., M.D. (OBG), 4300 Fayetteville Road, Lumberton 28358
Smith, Ronnie D. (STUDENT), 704-A Hibbard Drive, Chapel Hill 27514

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

April 1

Cancer of the Breast—Wilson Memorial Hospital Symposium
Credit: 7 hours; AAFP credit applied for
For Information: M. A. Pittman, Jr., M.D., Wilson Memorial Hospital, Wilson 27893

April 2-3

Practical Nuclear Medicine: Emphasis Oncology
Fee: $75
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 2-4

Spring Symposium for Radiologists: Radiology and Imaging of the Chest
Place: Carolina Inn, Chapel Hill
Sponsors: UNC School of Medicine and the N.C. Chapter of the American College of Radiology
Fee: NCCACR members $20; non-members and out of state $30, registration limited to 150
Credit: 15 hours
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 5-9

Practical Approaches to Diabetic Care: Unit I — Diabetes and Its Management; Unit II — Teaching the Diabetic Patient
Fee: $125; James M. Johnston awards available to partially cover cost of tuition
Credit: 35 contact hours, CERP
For Information: Patricia Lawrence, R.N., UNC-CH School of Nursing, Chapel Hill 27514

April 9

Gastroduodenal Ulcerations — Joseph W. Hooper Memorial Lectures
Sponsors: North Carolina Chapter of the American College of Surgeons and the Joseph W. Hooper Memorial Trust
Place: Blockade Runner, Wrightsville Beach
For Information: J. S. Mitchener, Jr., M.D., P. O. Box 1599, Laurinburg 28352

April 9-10

Second Annual Arthritis Symposium
Fee: $50
Credit: 11 hours; AAFP credit applied for
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 9-10

Practical Pediatrics
Fee: $35
Credit: 9 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 22

New Bern Annual Medical Symposium — 1976, "Pulmonary Medicine"
Place: Ramada Inn, New Bern
Sponsor: Craven - Pamlico - Jones County Medical Society
Credit: 5 hours; AAFP credit applied for
For Information: Zack J. Waters, M.D., Box 1089, New Bern 28560

April 22-24

Behavioral Approaches to Medical Practice
Place: Governor's Inn, Research Triangle Park, Durham
Program: Focus on "the use of behavioral techniques in treating obesity, fecal incontinence, insomnia, headaches, pain, alcoholism, urinary disorders, smoking, hypertension, asthma, Type-A personality, and compliance with medical regimen"
Sponsor: Department of Psychiatry
Fee: $200; registration limited
Credit: 13 hours; AAFP credit applied for
For Information: W. D. Gentry, Ph.D. or R. B. Williams, Jr., M.D., Box 3264, Duke University Medical Center, Durham 27710

April 23-24

Second Postgraduate Course in Perinatology
Fee: $25; registration limited to 200
Credit: 8 hours; AAFP credit applied for
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 29

Modern Management of Rheumatoid Arthritis
Place & Time: Elks' Club, Southern Pines (Country Club of Southern Pines); 6:30 p.m.
Fee: $11.50
Credit: 2 hours; AMA Category 1; AAFP approved
For Information: C. Harold Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

May 6-9

122nd Annual Session of the North Carolina Medical Society
Place: Pinehurst Hotel and Country Club, Pinehurst
For Information: William N. Hilliard, Executive Director, North Carolina Medical Society, Box 27167, Raleigh 27611

May 7-9

Pulmonary Infections in Pediatric Patients
Place: Quail Roost Conference Center, Rougemont
Registration: Limited to 50 participants
Credit: 11 hours; AAFP credit applied for
For Information: Alexander Spock, M.D., P.O. Box 2994, Duke University Medical Center, Durham 27710

May 12-13

Breath of Spring '76: Respiratory Care Symposium
Fee: $25
Credit: 12 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 20-22

National Conference — Daycare for Older Adults: The New Modality
Sponsor: Older American Resources and Services Program, Center for the Study of Aging and Human Development
Credit: AAFP credit applied for
For Information: Dorothy Heyman, Executive Secretary, Box 3003, Duke University Medical Center, Durham 27710

May 26

Recent Trends in Therapy of Myocardial Infarction Including Efforts to Limit the Size of Myocardial Infarction
Place and time: Elks' Club, Southern Pines, (Country Club of Southern Pines); 6:30 p.m.
Fee: $11.50
Credit: 2 hours; AMA Category 1; AAFP approved
For Information: C. Harold Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

May 27-28

The 27th Scientific Sessions and Annual Meeting of the North Carolina Heart Association
Place: Benton Convention Center and the Winston-Salem Hyatt House, Winston-Salem
Sponsors: The North Carolina Chapter of the American College of Cardiology will be one of the co-sponsors of the sessions, and will hold its sessions, which are open to all physicians, on May 28. Special concurrent sessions will be held for nurses, emergency medical technicians, and cardiology technologists
For Information: Thomas R. Griggs, M.D., North Carolina Heart Association, P.O. Box 2408, Chapel Hill 27514

ITEMS OF SPECIAL INTEREST

Continuing Education for Nurses

The following are among the courses being offered through the School of Nursing, UNC-Chapel Hill, during the Spring 1976 session:

April 5-9	Practical Approaches to Diabetic Care
April 20-21	Primary Nursing
April 26-30	Nursing Process
April 29	Toward More Effective Diabetic Teaching
May 25-26	Results-Oriented Performance-Evaluation

James M. Johnston Awards are available to help with tuition. Credit will be offered for each course. All of the courses listed above will

eliminates Pinworms and Roundworms with a single dose

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be held in Carrington Hall, School of Nursing, UNC-CH.
For additional information write: Continuing Education Program, School of Nursing, University of North Carolina, Chapel Hill 27514

PROGRAMS IN CONTIGUOUS STATES

May 3-5

The 1976 Southeast Emergency Medicine Congress
Place: Fairmont Colony Square Hotel, Atlanta, Georgia
Sponsors: The Southeast Chapters of the American College of Emergency Physicians; Medical College of Georgia School of Medicine in conjunction with the Emergency Department Nurses Association
Fees: $100 (ACEP), $125 (Non-ACEP Physician), $40 (EDNA), $50 (Non-EDNA Nurse), $40 (Registered EMT), $50 (Non-Registered EMT), $25 (Residents, Interns, Medical & Nursing Students with Letter from department chief), $100 (EMS Administrators with letter on EMS System stationery), $125 (Others).
For Information: Registrar, 1976 Southeast Emergency Medicine Congress, 1919 Beachway Road, Suite 5C, Jacksonville, Florida 32207

May 10-13

The Frontiers in Cardiology
Place: Royal Coach Motor Hotel, Atlanta, Georgia
Sponsors: Council on Clinical Cardiology, American Heart Association; Department of Medicine, Emory University School of Medicine in cooperation with the Georgia Heart Association
Fee: ACC members $125; non-members $175
Credit: AMA Category 1
For Information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

May 21-22

Clinical Rheumatology for the Practicing Physician
Place: Bonhomme Richard Inn, 500 Merrimac Trail, Route 143, Williamsburg, Virginia
Sponsors: Virginia Chapter of The Arthritis Foundation; Virginia Regional Medical Program; Medical College of Virginia — Virginia Commonwealth University; University of Virginia School of Medicine; Eastern Virginia Medical School
Fee: $25
Credit: 8¼ hours; AMA Category 1; AAFP credit applied for
For Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, P.O. Box 91, Richmond, Virginia 23298

Medical College of Virginia

The number in parenthesis, following the title, indicates the number of hours for that particular course.

April 1	Pediatric Cardiology for the Practicing Physician (4)
April 22	Medico-Legal Workshop (5) (Place: Virginia Baptist Hospital, Lynchburg, Virginia)
May 17-18	EEG Symposium (14)
May 21	Annual Spring Forum for Child Psychiatry (4)
June 2	Pediatric Nephrology for Practicing Physicians (4)

For further information on the above CME opportunities write to the Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, Richmond, Virginia 23298

The items listed in this column are for the six months immediately following the month of publication. Requests for listing should be received by WHAT? WHEN? WHERE?, P.O. Box 15249, Durham, N.C. 27704, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Dr. E. Ted Chandler, an internal medicine specialis in Hickory, has been selected as the medical directo for the Reynolds Health Center in Winston-Salem.

The Bowman Gray School of Medicine has a agreement with the Forsyth County Commissioners t be responsible for professional services at th Reynolds Health Center.

Chandler is a 1951 graduate of Wake Forest Colleg and holds the M.D. degree from the University o North Carolina School of Medicine. He took intern ship and residency training at North Carolina Baptis Hospital.

He is a member of the Board of Trustees of Nortl Carolina Baptist Children's Home and the Board o Advisors of Mars Hill College.

* * *

Dr. Zelma A. Kalnins, director of the Bowman Gra Cytotechnology Program, has retired after 20 years o the medical school faculty.

She has served as director of the Clinical Cytolog Laboratories at the medical center and director of th Cytotechnology Program since 1969.

Dr. Kalnins, an associate professor of patholog and an associate professor of community medicin (allied health), was honored during a January dinne by her colleagues, friends and former students.

A native of Riga, Latvia, Dr. Kalnins received th M.D. degree from the University of Latvia. She came to the United States in 1951 and was appointed to the Bowman Gray faculty in 1955 following three years o fellowship training in cytology.

* * *

Dr. Charles A. Duckett, associate professor of fam ily medicine, has been elected president-elect of the North Carolina Academy of Family Physicians.

* * *

Dr. Donald M. Hayes, professor and chairman o the Department of Community Medicine, has beer appointed chairman of a new Advisory Committee on Childhood Cancer being formed by the North Carolina Division of the American Cancer Society.

* * *

Dr. Cornelius F. Strittmatter, professor and chair man of the Department of Biochemistry, has beer appointed to the Council of Academic Societies of the Association of American Medical Colleges as a representative of the Association of Medical School Departments of Biochemistry.

Dr. Thomas E. Clark, associate professor of sociology, has been elected president-elect for 1976 of the North Carolina Association of Marriage and Family Counselors.

* * *

Dr. James F. Martin, professor of medical sonics, has been re-elected secretary for the American Roentgen Ray Society.

* * *

Dr. Jesse H. Meredith, professor of surgery, has been elected vice chairman of the Committee for Commission on Health Services for the State of North Carolina.

* * *

Helen P. Vos, assistant professor of community medicine, has been re-elected chairman of the American Association of Nurse Anesthetists Council on Practice.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA
DIVISION OF HEALTH AFFAIRS

Appointments

Wiley M. Sams Jr., professor of the department of dermatology, will join the faculty after heading the division of dermatology at the University of Colorado Medical Center. He holds the B.S. degree from the University of Michigan and the M.D. degree from Emory University.

Peter Curtis, assistant professor, department of family medicine, has been in general practice in Winchester, Hants, England since 1963. He was a visiting professor at UNC in 1973. He holds the M.B. and M.R.C.P. from the University of London.

Connie J. Evashwick, assistant professor, department of hospital administration, spent the past year as a program specialist in medical care for the Massachusetts Department of Public Health in Boston. She holds the A.B. and M.A. from Stanford University and the M.Sc. and D.Sc. from Harvard School of Public Health.

Gary B. Mesibov, assistant professor of psychology, department of psychiatry, also will be clinical scientist in the Biological Sciences Research Center of the Child Development Institute. A graduate of Stanford University, he received the M.A. from the University of Michigan and the Ph.D. from Brandeis University. Since 1974 he has been a postdoctoral fellow in the UNC division for disorders of development and learning.

Promotion

Archie T. Johnson Jr. and Martha K. Sharpless, department of pediatrics, have been promoted to the rank of associate professor.

Leaves of Absence

Richard V. Wolfenden, professor, department of biochemistry and nutrition, will do experimental work at Oxford University and the University of Lund while on leave from Jan. 1-June 30, 1976.

Marshall H. Edgell, associate professor, department of bacteriology, began a one-year leave Feb. 1 to pursue studies in the laboratory of Dr. Philip Leder, Laboratory of Molecular Genetics, National Institute of Health and Human Development, in Bethesda, Md.

George M. Himadi, associate professor, department of radiology, began a six-month leave Jan. 1. The first three months he studied fungus diseases of the Southwest at the University of Arizona and was involved in medical student teaching and the evaluation of teaching methods. In April he will be at the University of Washington in Seattle to observe radiological teaching approaches for medical students.

Mohammad R. Habibian, assistant professor, department of radiology, School of Medicine, is on leave

until Aug. 1, 1976, to establish a nuclear medicine facility at a university in Iran, his native country.

* * *

Joseph J. Bonanno, assistant professor, department of radiology, School of Medicine, resigned Dec. 31 to enter private practice in Phoenix, Ariz.

* * *

The North Carolina National Bank recently presented a $2,500 check for the N.C. Jaycee Burn Center, to be built at N.C. Memorial Hospital in Chapel Hill.

Charles Roupas, city executive of NCNB in Chapel Hill, presented the check, which is part of the bank's $10,000 pledge.

When completed, the Burn Center will be the only major center of its kind in the Carolinas. It will offer a full range of treatment and services for seriously burned patients, which now number about 500 each year in North Carolina alone. Plans call for a 24-bed center with nursing facilities, supporting laboratories, physical therapy areas, social service space and teaching and conference rooms.

* * *

Dr. John K. Spitznagel of the University of North Carolina School of Medicine at Chapel Hill has been elected chairman of the division of immunology of the American Society of Microbiology. Spitznagel, professor of bacteriology and immunology at UNC-CH, will begin his one-year term on July 1.

* * *

Dr. Donal Dunphy of the University of North Carolina School of Medicine at Chapel Hill has been named to the Board of Directors of the American Board of Family Practice (ABFP). Dunphy, acting chairman of family practice and professor of pediatrics, will represent the American Board of Pediatrics during his five-year term on the ABFP board.

* * *

LeRoy D. Werley Jr. has been named acting dean of the University of North Carolina at Chapel Hill School of Pharmacy.

Werley has served as assistant dean since 1967.

Dean Werley is a graduate of the University of Maryland School of Pharmacy and holds a master's degree in hospital administration from the University of Minnesota.

* * *

A series of workshops on public and mental health law was presented throughout the state in January and February by the University of North Carolina at Chapel Hill.

Sponsored by the UNC School of Public Health and Institute of Government, the course introduced public and mental health personnel to the legal system and current legal issues in the health field. Areas covered included consent to treatment, access to publi and client records and public officials' liability.

* * *

Dr. Naomi Morris, professor and chairman of th maternal and child health department at the UN School of Public Health, participated in a series workshops at the Greater Baltimore Medical Cente She was invited to be on the resources panel for th workshops which studied the ambulatory care of chi dren.

News Notes from the— DUKE UNIVERSITY MEDICAL CENTER

Over the past 18 months, 10,000 women have bee checked at the Breast Cancer Project, a joint ventur of Duke, the National Cancer Institute and the Ameri can Cancer Society.

Of that number, 33 women were discovered to hav cancer.

In only five of the 33 had the disease spread beyon the breast, according to Dr. Josephine Newell, projec coordinator. That means that 28 women — 85 per cen — had their cancer detected at a stage when "it' highly curable," Dr. Newell said.

* * *

A research team at Duke has identified the firs known lipid (fat) molecule that serves as a trigger t attract disease-fighting white blood cells to the site o body injury.

It is a small molecule called HETE (L2-hydrox eicosotetraenoic acid). The identification of it makeup and behavior could have far-reaching benefit in the understanding and control of human disease.

The discovery came as a result of research into th process known as chemotaxis, which is the reaction o living cells being either attracted to or repelled by chemical stimulus.

The reaction — or message — sets in motion th body's initial response to injury, and is critical in th defense against infection. White blood cells are sum moned to the point of injury where they attack an destroy intruding bacteria.

The team, headed by Dr. William S. Lynn, profes sor of medicine and associate professor of biochemis try, reported the discovery in "Nature," an Englis scientific journal with international circulation.

* * *

If heart disease among aggressive, highly competi tive, easy-to-anger persons is to be reduced, they mus learn how to relax.

That is the conclusion reached by a Duke psychia trist who is the chief investigator in a continuing re

arch program into the effects of a person's behavior
a his heart.

The "Type A" — or aggressive — personality is the cus of the investigation because it is he — or she — ho is most likely to suffer a heart attack.

"What we've got to do now is show that Type A rsonality can be changed. And then we've got to ahead and change it," said the investigator, Dr. edford B. Williams Jr., associate professor of sychiatry.

Williams believes that if a person's behavioral traits n be changed, that will be proof that behavior is a ajor contributor to the problem.

The principal method to be employed in the effort is ofeedback training, a technique by which a patient is ught to monitor the electronic impulses of his brain id heart. Through sensors attached to his body he is le to pinpoint muscle tension.

"Basically," Williams said, "we want to teach eople to relax. Through biofeedback we can show em where the tension is, and if they can learn to duce it—perhaps by thinking about pleasant ings—then they can learn to do the same thing in real e," when they are confronted with problems of ress.

* * *

With the opening of a new inpatient unit of Duke Hospital, located in the Durham Rehabilitation Center building at 3100 Erwin Road, Duke's total bed capacity stands at 895.

The new unit has no connection with the rehabilitation center, which is a private nursing home, but space is leased there.

The Duke portion includes an annex of the Surgical Private Diagnostic Clinic, housing the offices of orthopaedic surgeons Drs. Frank Bassett and Frank Clippinger; a surgical inpatient unit; the Inpatient Rehabilitation Unit; and the Sports Medicine Program.

The new complex is being called Duke Hospital West.

* * *

The Fannie E. Rippel Foundation has awarded a second $50,000 grant to Duke in support of the "Computerized Textbook of Medicine" project.

Researchers here are computerizing detailed diagnostic and treatment information of cases involving coronary heart disease. As a result, they can identify from the computer patients whose case profiles most nearly match the particular case at hand.

An initial $50,000 grant from the Rippel Foundation in 1974 helped to establish a special coronary follow-up clinic, the major source of information being compiled in the "textbook."

Dr. Robert E. Fellows of Duke will become head of the Department of Physiology and Biophysics in the Universtiy of Iowa College of Medicine, effective July 1.

A native of Syracuse, N.Y., the 42-year-old Fellows earned A.B., M.D. and Ph.D. degrees at Hamilton College, McGill and Duke Universities, respectively; held an internship and residency in internal medicine at The New York Hospital, and a second residency at Royal Victoria Hospital in Montreal.

He has taught and directed research as a full-time faculty member here since 1966. He is an associate professor of physiology and pharmacology.

* * *

The American Cancer Society has granted $135,000 to help a Comprehensive Cancer Center scientist search for human cancer viruses.

The scientist, Dr. Dani P. Bolognesi, heads the Cancer Center's Surgical Tumor Virus Laboratory and is an associate professor of surgery at the medical center. The award will support his salary for five years.

ALPHA EPSILON DELTA

Robert L. Garrard, M.D., of Greensboro and Christopher D. Fordham, III, M.D., dean of the University of North Carolina School of Medicine, will be on the program when Alpha Epsilon Delta holds its national convention March 31-April 3, at the University of Alabama, Tuscaloosa. The honor society was founded on the Alabama campus 50 years ago.

Dr. Garrard, a founding member and the second national president, will speak at a Founders Luncheon. Dr. Fordham will participate on a panel with David Mathews, Secretary of Health, Education and Welfare, and others discussing "Health Care in the Next Decade."

The honor society for students interested in careers in the health professions has 112 college and unive sity chapters. About 350 students, faculty advisor and alumni are expected at the convention.

NORTH CAROLINA ACADEMY OF FAMILY PHYSICIANS

The North Carolina Academy of Family Physician has named Edwin P. Davis of Raleigh as executiv director.

Davis, 43, is a native of Roanoke, Va., and brings t the academy some 15 years' experience in profes sional association management. His last post in Nort Carolina was as executive director of Professiona Engineers of North Carolina. Before moving t Raleigh in 1965, Davis managed three local chamber of commerce in Virginia and served as director o public affairs and legislative research for the Virgini State Chamber of Commerce for three years.

Davis is a 1955 graduate of Virginia Polytechni Institute with a degree in business administration an is married to the former Mildred Smith, a registere nurse who is operating room supervisor at Wake Med ical Center in Raleigh. They have two children.

PIEDMONT OB-GYN SOCIETY

The first quarterly meeting of 1976 of the Piedmon Ob-Gyn Society was held at the Catawba Countr Club on January 13. Twenty members and their wive attended. The scientific program was presented by Dr Ernest Franklin, a specialist in gynecologic cancer a Crawford Long Hospital in Atlanta. A yoga demon stration was presented for the wives. Dr. Pau Kearnes of Statesville, president, welcomed th guests: Dr. Alan Huffman, Jr., of Hickory, and Dr Norman Cohen of Winston-Salem. A new member Dr. Tom Thurston of Salisbury, was presented to th group.

Instead of sound sleep, the Gourmand experiences much restlessness, and what is called *fidgets*, through the night—or, if he sleeps, alarms his neighbours with the stifled groans of the night-mare. In the morning, we perceive some of those sympathetic effects on other parts of the system, which, at a later period of the career of intemperance, play a more important part in the drama. The head aches—the intellect is not clear or energetic—the eyes are muddy—the nerves are unstrung—the tongue is furred—there is more inclination for drink than food—the urinary secreation is turbid, or high-coloured—and the bowels very frequently disordered, in consequence of the irritating materials which have passed into the intestinal canal imperfectly digested. This can hardly be called a fit of indigestion, though, even here, we find many of the leading phenomena which afterwards harass the individual without such provocation. It is a fit of repletion, or *intemperance*. . . .—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 23.

Month in Washington

President Ford's all-out attack against rising government spending sustained a major blow with the Congressional override of his veto of a $45 billion Health, welfare and labor bill.

The vetoed bill called for $1 billion more than the Administration's budget request and required hiring of 8,000 more Health, Education, Welfare Department employees. Almost $800 million of the increase involves health programs which would receive a total of $3.9 billion for the fiscal year that ends September 30.

Both houses of Congress exceeded the two-thirds vote necessary to override a veto. The tally was 310 to 113 in the House; 10 to 24 in the Senate.

The Administration defeat came despite a last-minute administration offer to compromise by more or less splitting the difference for a $500 million increase.

Ford had said in his veto message the bill was "a classic example of unchecked spending." But Democrats charged the money measure would cut spending below last year's level and not meet inflation-caused increases.

The bill provides more funds for such programs as Community Mental Health Services, Maternal and Child Health, medical research, Alcoholism and Drug Abuse Facilities, Emergency Medical Services, and education of health professionals.

The Congressional vote was preceded by all-out efforts on both sides to line up votes and by vigorous lobbying from affected outside groups.

The HEW money bill is considered the hardest to vote against in Congress because of the multitude of popular programs funded. Asked how the House was able to muster such a vote to override including dissident Republicans, House Majority Leader, Thomas O'Neill, Jr., (D-Mass.) replied simply, "the coming election."

House Majority Whip, Representative Robert Michel, (R-Ill.) told the house in the debate that it would be "setting the spending tone for the session."

* * *

Officials of the American Medical Association have met with President Ford and his top health officers to discuss a wide range of health topics including the Administration's new health proposals and federal regulation problems worrying the physicians of the country.

The 45-minute meeting in the Cabinet Room at the White House was described by participants as friendly. "The President listened with interest to what we had to say and his attitude seemed to be sympathetic," said AMA President, Max H. Parrott, M.D.

Dr. Parrott said President Ford noted the pressures he is facing to take positions that might disturb some physicians. The Chief Executive made a point of urging the AMA and members of his Administration and White House staff to confer often to resolve differences.

Among the subjects discussed were the President's State of the Union and Budget Health Proposals, government regulations affecting physicians, the Federal Trade Commission move to allow physicians to advertise, costs of medical care, and medical manpower.

Present for the AMA, in addition to Dr. Parrott, were Raymond T. Holden, M.D., Chairman of the AMA Board of Trustees; Richard E. Palmer, M.D., AMA President-Elect; James H. Sammons, M.D., Executive Vice President of the AMA; and Joe Miller, Deputy Assistant Executive Vice President.

President Ford was told that his recommended annual four percent limit on physician reimbursement increases under Medicare poses real problems with the medical profession which must adjust to higher costs of doing business yearly as well as the ever-climbing costs of professional liability insurance.

Ford indicated he understood the viewpoint of the profession on the matter and proposed that Administration officials and AMA representatives meet further on the issue.

The AMA delegation told Ford about the AMA's National Commission on the Cost of Medical Care and invited the President to appoint a representative of his Administration to serve as a member.

There was considerable talk about the supply of physicians, with President Ford evincing special interest in the Foreign Medical Graduate situation and the problems of Americans studying medicine abroad. The AMA officials described the increasing numbers of young physicians entering primary care, now 58 percent.

The AMA's support of the National Health Service Corps as a principal means of helping physician-short areas was outlined. The voluntary incentives in this program were compared with the "indentured service" aspects of health manpower legislation before Congress that would compel young physicians to serve or to repay the government for federal aid received by medical schools.

In reply to a question from Ford, the AMA delegates noted the organization's support of federal medical scholarships.

The controversial Utilization Review Regulations were talked about. HEW Secretary Mathews was complimented by the delegation for his reasonable approach and willingness to work with the profession to reach agreement on these rules.

President Ford was told that the AMA could find no scientific basis for the disputed Maximum Allowable Cost proposals for Medicare-Medicaid outpatient drugs. The MAC plan could lead to interference in the practice of medicine by restricting the physicians' prescribing scope and could hurt the quality of health care, the AMA officers said.

The FTC suit to overturn the AMA ban on physician advertising will be contested in court, the AMA asserted. The AMA was founded in part to do away with abuses of charlatans and advertising of physicians' services, the Chief Executive heard.

The President sought support for his health programs and expressed confidence the Administration and the representatives of the medical profession could work together to iron out differences and reach accommodations.

* * *

Mandatory second professional opinions have been urged for elective or non-emergency surgery under Medicare and Medicaid by a House Commerce Subcommittee.

The Subcommittee on Investigations and Over sight, which held hearings last fall on unnecessary surgery, charged in a report that there were an esti mated 2.4 million unnecessary surgeries performed i 1974 at a cost to the public of almost $4 billion. Th procedures led to an estimated 700 deaths, the repor said.

Contending that second consultations could cu down "significantly" on unneeded surgery, the Sub committee, headed by Representative John Mos (D-Calif.) said "such a program would save the gov ernment millions of dollars."

Arguments that second opinions would cost mone and not necessarily provide a solution and expert as sertions that it is difficult to determine what consti tutes unnecessary surgery were brushed aside by th Subcommittee in its strongly-worded report.

The report said the lawmakers were impressed wit evidence "that prepayment plans for consumers an salaried surgeons help reduce surgery in equivoca situations."

"Evidence was compiled in the Subcommittee' investigation that the fee-for-service mechanism o surgical payment encourages surgery in questionabl situations," the report said. "An in-depth study of thi should be undertaken" by the HEW Department.

The Subcommittee recommended that HEW immediately undertake a study to determine the dif

erences in health indices, costs and the surgical procedure rates between salaried surgeons and fee-for-service surgeons.

Legislation to amend the Health Maintenance Organization (HMO) program "would effectively gut the HMO concept and subvert the original intent of the program," the AMA has told the Senate.

Edgar T. Beddingfield, M.D., Vice-Chairman of the AMA's Council on Legislation, said the House passed HMO amendments "remove important comprehensive services and eliminate characteristics which distinguish the HMO from other prepaid group practices."

The AMA witness testified on the final day of hearings on changes in the HMO program. The House bill eliminates many of the benefits stipulated in the original HMO bill and makes other changes designed to make it easier to set up and operate such pre-paid health systems.

Dr. Beddingfield said the House bill in effect converts a demonstration health delivery program into a mechanism for the federal funding of ordinary prepaid groups.

"If in fact the HMO is to be no different from prepaid groups which have existed without federal funding, then we submit there is no justification for federal funding under the guise of experimentation or otherwise."

Congress has buttressed the medical and hospital professions' case against the Utilization Review Regulations originally promulgated by HEW.

The lawmakers approved with no dissent a provision making it clear that Congress never intended to require 100 percent review of all Medicare-Medicaid hospital admissions, a key part of the controversial UR Regulations issued by HEW.

The AMA has challenged successfully the UR Regulations in court. The HEW Department is slated soon to issue revised regulations after court-ordered negotiations with the AMA.

One of the major arguments against the Regulations was that HEW had reached beyond Congress' intent

in carrying out the review program. Congress' vote on the amendment to the Medicare-Medicaid laws appeared to back up the protests of the AMA and the American Hospital Association.

Sen. Paul Fannin (R-Ariz.) told the Senate that the original regulations calling for direct review of each Medicare-Medicaid admission "is beyond the scope of what we intended . . ."

Chairman Russell Long (D-La.) of the Senate Finance Committee said "the idea of requiring that everything in a claim be reviewed is not what we had in mind when we passed the law. It is a technical error that should be corrected, otherwise, there would be needless cost and a great deal of unnecessary paperwork."

* * *

The Administration has opposed a specific extension of the program of federal aid to states and localities to demonstrate ways of improving emergency medical services.

Testifying before the Senate Health Subcommittee, Theodore Cooper, M.D., Assistant Secretary for Health, said such assistance could be handled in the future under the Administration's proposed block grant plan to consolidate 16 existing categorical programs.

The so-called "Financial Assistance For Health Care Act" will give states and localities "the discretion to continue funding according to individual state priorities," Dr. Cooper testified.

Legislation before the Senate to extend the program at costs ranging from $270 million to $416 million are "far in excess" of what is required to demonstrate effective systems for emergency medical services, said Dr. Cooper.

He told the Subcommittee, headed by Senator Edward Kennedy (D-Mass.), that the HEW Department already has ample research authority to carry out improvements in emergency services.

* * *

Americans' health continues to improve. Lower infant death rates and longer life expectancy are shown in a State of the Union's Health Report for 1975 submitted to Congress and President Ford by the HEW Department.

Rates of infant deaths in the U.S. declined from 29.2 per 1,000 live births in 1950 to an estimated 16.5 in 1974. Over the same period, life expectancy at birth increased by nearly four years. The death rate for heart disease is decreasing.

"The report shows considerable achievement as well as need for improvement," Theodore Cooper, M.D., Assistant Secretary for Health, said. "As a people we are receiving more medical care now than 10 years ago. We have made considerable progress in

owering the income barrier to care. Most of us describe our health as good or excellent.

"Conversely, we may well have a higher prevalence of chronic diseases," Dr. Cooper said. "People are living to the older ages where they develop conditions such as arthritis and diabetes, and we can better manage these conditions medically. Many areas of the country appear to lack adequate supplies of health manpower, and costs remain a burden for many."

The report, *Health, United States, 1975*, includes data on health care costs and financing, health resources and utilization, and health status. The death rate for heart disease among persons aged 55-64 dropped almost 15 percent over the past six years. In the same age group, the death rate from cancer rose almost four percent. Among younger people, accidents and homicide are major causes of death.

"The data suggest that much improvement in health status could come from individual action," Dr. Cooper said. "Most death and disability from accidents are preventable, so are health conditions which are aggravated by excessive use of alcohol and tobacco and by lack of exercise and proper diet. They are preventable primarily by changes in individual behavior. Medical care alone can do relatively little."

Representative Thomas Morgan, M.D., Chairman of the House Foreign Affairs Committee, announced he will retire at the end of this session of Congress. Dr. Morgan, a Pennsylvania Democrat, is one of three physicians in Congress. Despite his Congressional duties, Dr. Morgan has maintained a continuous but small practice in his home town of Fredericktown. The 69-year-old physician has served in Congress for 32 years and as Chairman of the Foreign Affairs Committee for 18 years — longest service as Chairman of any current Committee Chairman in the House. Dr. Morgan focused his legislative interest almost exclusively on foreign affairs. He seldom became involved in legislative health matters. The other physician-Congressmen are Representative Tim Lee Carter (R-Ky.) and Larry McDonald (D-Ga.).

* * *

Out-of-town hearings on National Health Insurance have been slated tentatively by the House Ways and Means Health Subcommittee for:

San Francisco — March 18-19; Knoxville, Tenn. — March 25-26; Salem, Oregon — May 6-7 and New Orleans — May 20-21.

In Memoriam

Jerome Otis Williams, M.D.

Whereas, Dr. Jerome Otis Williams has distinguished himself as pathologist and director of clinical laboratories at Cabarrus Memorial Hospital, as a gentleman and scholar, as a master of the written as well as the spoken word, as a friend, teacher and investigator, as a husband and father, and

Whereas, Dr. Williams' love of "The Arts" and all things beautiful endeared him to everyone, even many who did not know him personally, and

Whereas, Dr. Williams' leadership in medical fields has touched untold thousands of lives and especially those who have benefited from his pioneer leadership in the development of cancer screening for women in this state, and

Whereas, all persons, young and old, who came in contact with Dr. Williams benefited from his gracious charm, his encouraging smile, and unselfish advice,

Now, Therefore, be it Resolved, that the Cabarrus County Medical Society wishes to acknowledge the leadership of this man not only in the field of his profession, but in "The Arts" as well.

CABARRUS COUNTY MEDICAL SOCIETY

OFFICIAL CALL
HOUSE OF DELEGATES

pursuant to the Bylaws, Chapter IV, Section 1:

HOUSE OF DELEGATES
Meetings scheduled

Notice to: **Delegates, Alternate Delegates, Officials of the North Carolina Medical Society, and Presidents and Secretaries of county medical societies.**

Sessions of the HOUSE OF DELEGATES will convene in the Cardinal Ballroom, Pinehurst Hotel, Pinehurst, North Carolina, at the following times:

Thursday, May 6, 1976—2:00 p.m.—Opening Session

Saturday, May 8, 1976—2:00 p.m.—Second Session

A member of the CREDENTIALS COMMITTEE will be present at the Desk in the Hotel Lobby, Thursday, May 6, 1976, from 8:30 a.m. to 12:30 p.m. to certify Delegates. Delegates are urged to bring their Credential Cards for presentation at the Registration Desk. Delegate Badges must be worn to be seated in the HOUSE OF DELEGATES.

REFERENCE COMMITTEE HEARINGS

Reference Committee hearings are scheduled to begin Friday, May 7, 1976, at 2:00 p.m.

James E. Davis, M.D., President
Chalmers R. Carr, M.D., Speaker
E. Harvey Estes, Jr., M.D., Secretary
William N. Hilliard, Executive Director

Program

122nd ANNUAL SESSION
May 6-9, 1976
NORTH CAROLINA MEDICAL SOCIETY
PINEHURST HOTEL
PINEHURST, NORTH CAROLINA

Thursday, May 6, 1976

9:00 a.m.-5:00 p.m. — AUDIO-VISUAL PROGRAM — (HMS Bounty)
0:00 a.m.-1:00 p.m.—Section on Urology Meeting — (Disco Room)
2 Noon-1:45 p.m.—Section on Ophthalmology Luncheon — (Crystal Room)
2:00 p.m.—Section on Ophthalmology Meeting — (Disco Room)
2:00 p.m.—HOUSE OF DELEGATES—OPENING SESSION — (Cardinal Ballroom)
4:30 p.m.—MEMBERSHIP OPEN MEETING — (Cardinal Ballroom)
6:00 p.m.—SOCIAL HOUR — NCSIM — (Augusta Cottage)
6:00 p.m.—Reception — Mecklenburg County Medical Society (Crystal Room)

Friday, May 7, 1976

7:30 a.m.—MEDICINE & RELIGION BREAKFAST — (Crystal Room)
9:00 a.m.—FIRST GENERAL SESSION — (Cardinal Ballroom)
9:00 a.m.—AUDIO-VISUAL PROGRAM — (HMS Bounty)
9:00 a.m.-12 Noon—Section on Otolaryngology Meeting — (Dutch Room, Holly Inn)
9:00 a.m.-12 Noon—Auxiliary Program Planning Workshop — (Ballroom, Holly Inn)
12:30 p.m.—Luncheon — Section on Surgery — (Crystal Room)
12:30 p.m.—Luncheon — Auxiliary President-Elect — (Dining Room, Holly Inn)
2:00 p.m.—REFERENCE COMMITTEE Meetings:
I—Cardinal Ballroom
II—Disco Room
2:00 p.m.—Section on Public Health & Education Meeting — (Dutch Room, Holly Inn)
2:00 p.m.—Cardio-Pulmonary Resuscitation — Auxiliary & N.C. Heart Association — (Society members welcomed) — (Dining Room — HOLLY INN)
5:30 p.m.—Bowman Gray Medical Alumni Social Hour — (Disco Room)
6:00 p.m.—Exhibitors' Party — (Land Sales Office)
6:30 p.m.—UNC Medical Alumni Social Hour — (HMS Bounty)
6:30 p.m.—Duke Medical Alumni — Social Hour & Dinner — (Pinehurst Country Club)
6:30 p.m.—Medical College of Virginia Medical Alumni — Social Hour & Dinner — (Crystal Room)
7:00 p.m.—MEDPAC Dinner — (Cardinal Ballroom)
9:00 p.m.—Auxiliary Board of Directors Meeting — (Presidential Cottage Suite)

Saturday, May 8, 1976

8:30 a.m.-9:30 a.m.—Section on Neurology & Psychiatry Executive Committee Meeting — (Disco Room)
9:00 a.m.—SECOND GENERAL SESSION — (Cardinal Ballroom)
9:00 a.m.-11:00 a.m.—Informal Meeting — Nuclear Medicine — (HMS Bounty Room)
9:00 a.m.-12 Noon—Section on Anesthesiology Meeting — (Parlor #129)
9:00 a.m.-1:00 p.m.—Breakfast & Scientific Meeting — Section on Neurological Surgery — (Crystal Room)
9:30 a.m.-12:30 p.m.—Section on Neurology & Psychiatry Scientific Session — (Disco Room)
12:00 Noon—PICNIC Lunch — Section on Dermatology & Pediatrics — (Poolside)
12:00 Noon—North Carolina Pediatric Society — Luncheon Meeting — (Pinehurst Country Club)
12:00 Noon-2:30 p.m.—Section on Orthopaedics (Dining Room, Holly Inn)
12:30 p.m.—Luncheon—Section on Neurology & Psychiatry (East End-Main Dining Room)
1:30 p.m.—Section on Radiology Meeting — (HMS Bounty)
1:30 p.m.-3:00 p.m.—Section on Neurology & Psychiatry Business Meeting — (Disco Room)
2:00 p.m.—Commission for Health Services — (Crystal Room)

2:00 p.m.—Sections on Dermatology & Pediatrics Scientific Session (Ballroom, Holly Inn)
2:00 p.m.—HOUSE OF DELEGATES — Second Session — (Cardinal Ballroom)
6:30 p.m.—PRESIDENT'S RECEPTION — (Land Sales Office)
7:30 p.m.—PRESIDENT'S DINNER — (Main Dining Room)
9:00 p.m.—PRESIDENT'S BALL — (Cardinal Ballroom)

Sunday, May 9, 1976

8:00 a.m.—Breakfast Meeting — Auxiliary Board of Directors — (Crystal Room)
8:30 a.m.-1:00 p.m.—Section on Family Physicians Scientific Meeting & North Carolina Academy of Family Physicians Board of Directors Meeting — (Disco Room)
9:00 a.m.—THIRD GENERAL SESSION — (Cardinal Ballroom)

GENERAL SESSIONS

FIRST GENERAL SESSION

Friday, May 7, 1976 .....Cardinal Ballroom
9:00 a.m.-12:00 Noon

Convene Session

Presiding: James E. Davis, M.D., President
Durham
Invocation:

Surgical Session

Department of Surgery, Bowman Gray School of Medicine-North Carolina Baptist Hospital Medical Center, Winston-Salem
MODERATOR: Richard T. Myers, M.D., Professor and Chairman, Department of Surgery
9:00 a.m.—OPENING REMARKS
Richard Janeway, M.D., Dean
Bowman Gray School of Medicine
9:10 a.m.—SURGERY FOR OBSTRUCTIVE JAUNDICE IN INFANTS
Louis deS. Shaffner, M.D.
9:20 a.m.—EXPERIENCES WITH TOTAL KNEE REPLACEMENT
George D. Rovere, M.D.
9:30 a.m.—MODERN MANAGEMENT OF ABDOMINAL AORTIC ANEURYSMS
Frank R. Johnston, M.D.
9:40 a.m.—REVIEW OF STAGING LAPAROTOMIES PERFORMED FOR LYMPHOMAS AT THE NORTH CAROLINA BAPTIST HOSPITAL
John Michael Sterchi, M.D.
9:50 a.m.—MANAGEMENT OF PRE-MALIGNANT LESIONS OF THE CERVIX
Howard D. Homesley, M.D.
10:00 a.m.—LESS RADICAL APPROACHES TO SOLITARY THYROID NODULES
Timothy C. Pennell, M.D.
10:10 a.m.—DISCUSSION
10:20 a.m.—BREAK
10:40 a.m.—GASTRIC BYPASS FOR OBESITY
Jesse H. Meredith, M.D.
10:50 a.m.—MANAGEMENT OF MINOR FACIAL TRAUMA
Julius A. Howell, M.D.
11:00 a.m.—ULTRASONOGRAPHY OF THE PROSTATE AND BLADDER
Martin I. Resnick, M.D.
11:10 a.m.—THE STATUS OF PACEMAKERS—1976
Robert Cordell, M.D.
11:20 a.m.—COMBINED USE OF "SUPER-PEEP" — (Positive End Expiratory Pressure) and "IVM" — (Intermittent Mandatory Ventilation) IN THE TREATMENT OF POST-SURGICAL RESPIRATORY FAILURE
Robert L. Gibson, M.D.
11:30 a.m.—RECENT ADVANCES IN CATARACT SURGERY
John Allen Stanley, M.D.
11:40 a.m.—Discussion
12:00 Noon—ANNOUNCEMENTS
ADJOURN

SECOND GENERAL SESSION

Saturday, May 8, 1976 .....Cardinal Ballroom
9:00 a.m.-12:30 p.m.

Convene Session

Presiding: John L. McCain, M.D., Wilson
First Vice-President

Medical Session

Department of Medicine, Duke University Medical Center, Durham
MODERATOR:
9:00 a.m.—OPENING REMARKS
9:10 a.m.—
9:20 a.m.—
9:30 a.m.— (to be announced)
9:40 a.m.—
9:50 a.m.—
10:00 a.m.—
10:10 a.m.—DISCUSSION
10:30 a.m.—BREAK
10:40 a.m.—
10:50 a.m.—
11:00 a.m.—
11:10 a.m.— (to be announced)
11:20 a.m.—
11:30 a.m.—
11:40 a.m.—

2:00 Noon—ANNUAL ADDRESS OF THE PRESIDENT
James E. Davis, M.D., President
Durham
2:30 p.m.—ANNOUNCEMENTS
ADJOURN

THIRD GENERAL SESSION

unday, May 9, 1976 .....Cardinal Ballroom
9:00 a.m.-12:30 p.m.

Convene Session

Presiding: T. Reginald Harris, M.D., Shelby
Second Vice-President

ocio-Economic Session

9:00 a.m.—CONJOINT SESSION
North Carolina Medical Society and North Carolina Division of Health Services
Jacob Koomen, M.D., State Health Director, Raleigh
9:30 a.m.—(to be announced)
1:00 a.m.—Address: Richard E. Palmer, M.D., President-Elect, American Medical Association, Alexandria, Virginia
1:45 a.m.—Address: Jesse Caldwell, M.D., President, North Carolina Medical Society, Gastonia
2:30 p.m.—Awarding of Prizes
Josephine E. Newell, M.D., Chairman
Annual Convention Commission
ADJOURN SINE DIE

POSTGRADUATE AUDIO-VISUAL PROGRAM

J. Patrick Henderson, Jr., M.D., Chairman, Pinehurst

THURSDAY, May 6, 1976—HMS Bounty Room

Morning Session—9:00 a.m.-12 Noon

Moderator: Paul Abernethy, M.D., Burlington
9:00 a.m.—PULMONARY COMPLICATION IN SHOCK
9:20 a.m.—DIZZINESS
9:45 a.m.—THE THERAPEUTIC ASSESSMENT OF HYPERTENSION AND EDEMA
0:15 a.m.—NUTRITION IN THE INJURED PATIENT
0:30 a.m.—ABSORPTION
0:50 a.m.—RECURRENT TRACT INFECTIONS

Afternoon Session—2:00 p.m.-5:00 p.m.

Moderator: Thornton R. Cleek, M.D., Asheboro
2:00 p.m.—PHYSIOLOGY AND THE EMOTIONS IN THE MATURE WOMAN
2:35 p.m.—THE LONG RANGE PROBLEMS OF THE POSTMENOPAUSAL WOMAN
3:20 p.m.—A LIFE IN YOUR HANDS
3:35 p.m.—CORONARY ARTERY DISEASE, REAL OR IMAGINARY?
4:00 p.m.—HEART IN JEOPARDY
4:30 p.m.—SIMPLIFIED ABDOMINAL HYSTERECTOMY

FRIDAY, May 7, 1975—HMS BOUNTY ROOM

Morning Session—9:00 a.m.-12 Noon

Moderator: Jack C. Evans, M.D., Lexington
9:00 a.m.—Rx FOR FLIGHT
9:25 a.m.—GI ROUNDS
9:55 a.m.—LAPAROSCOPY, THE VIEW WITHIN
10:15 a.m.—CARDIOPULMONARY RESUSCITATION
10:35 a.m.—RECOGNITION AND MANAGEMENT OF SKIN LESIONS
11:00 a.m.—HOW TO AVOID YOUR DAY IN COURT

Afternoon Session—2:00 p.m.-5:00 p.m.

Moderator: J. Benjamin Warren, M.D., New Bern
2:00 p.m.—FORENSIC MEDICAL PROBLEMS IN INFANCY AND CHILDHOOD
3:00 p.m.—THE TECHNIQUES OF INTRAARTICULAR AND PERIARTICULAR INJECTION
3:20 p.m.—PROSTAGLANDINS: TOMORROW'S PHYSIOLOGY?
3:45 p.m.—DIABETES: SPECIAL PROBLEMS IN THE OLDER PATIENT
4:10 p.m.—NEXT WITNESS

SPECIALITY SECTIONS

SECTION ON UROLOGY

Thursday, May 6, 1976
10:00 a.m.-1:00 p.m. .....Disco Room
Chairman: Robert Dale Ensor, M.D., Charlotte

Scientific Session

Business Session:
Election of Officers, Delegate and Alternate Delegate for 1976-77

SECTION ON OPHTHALMOLOGY

Thursday, May 6, 1976
Luncheon and Business Meeting
12:00 Noon—1:45 p.m. .....Crystal Room
Chairman: E. R. Wilkerson, Jr., M.D., Charlotte
Program Chairman: Harold N. Jacklin, M.D., Greensboro

SCIENTIFIC MEETING

2:00 p.m.....Disco Room
2:00 p.m.—INTRODUCTION: E. R. Wilkerson, Jr., M.D., Chairman
Harold N. Jacklin, M.D., Program Chairman

I—GENERAL PAPERS

2:05 p.m.—PSEUDOEPIBULBAR MELANOMA
David W. White, M.D., Greenville

II—CATARACT SURGERY IN NORTH CAROLINA

A. CONVENTIONAL INTRACAPSULAR CATARACT EXTRACTION

2:15 p.m.—GOOD OLD FASHION CATARACT SURGERY—A Review of 500 Cases
Arthur C. Chandler, Jr., M.D., Durham

2:25 p.m.—EVOLUTION OF MICROSURGERY
Samuel D. McPherson, Jr., M.D., Durham

B. PHACOEMULSIFICATION EXTRACAPSULAR EXTRACTION

2:35 p.m.—INDICATIONS FOR PHACEOMULSIFICATION
Paul Simel, M.D., Greensboro

2:45 p.m.—SURGICAL TECHNIQUE
E. Reed Gaskin, M.D., Charlotte

2:55 p.m.—ROLE OF THE PHYSICIAN'S ASSISTANT
Wayne Stirewalt, C.R.O.T., Charlotte

3:00 p.m.—MANAGEMENT OF POSTERIOR CAPSULE
Steven M. White, M.D., Greenville

3:10 p.m.—PHACOEMULSIFICATION IN A COMMUNITY HOSPITAL
L. Byerly Holt, M.D., Winston-Salem

3:20 p.m.—CONGENITAL CATARACT PHACOEMULSIFICATION
Hampton Lefler, M.D., Hickory

3:30 p.m.—PHACOEMULSIFICATION RESULTS
William R. Harris, M.D., Hickory

3:40 p.m.—COFFEE BREAK (10 minutes)

III—CONTACT LENSES AND INTRAOCULAR LENSES

A. CONTACT LENSES

3:50 p.m.—SOFT CONTACT LENSES IN APHAKIA
Edward K. Isbey, Jr., M.D., Asheville

4:00 p.m.—SOFT CONTACT LENSES
Joe H. Woody, M.D., Charlotte

B. INTRAOCULAR LENSES

4:10 p.m.—INTROCULAR LENSES (Movie)
Charles W. Tillett, Jr., M.D., Charlotte

IV—VITREOUS SURGERY IN NORTH CAROLINA

4:20 p.m.—INSTRUMENTATION
Scot Brower, M.D., Durham

4:30 p.m.—INDICATIONS
M. Madison Slusher, M.D., Winston-Salem

4:40 p.m.—SURGICAL TECHNIQUE
Harold N. Jacklin, M.D., Greensboro

4:50 p.m.—COMPLICATIONS AND RESULTS
Maurice B. Landers, III, M.D
Durham

5:00 p.m.—ADJOURNMENT

SECTION ON OTOLARYNGOLOGY

Friday, May 7, 1976

9:00 a.m.—12 Noon .....Dutch Room, Holly In
Chairman: N. L. Sparrow, M.D., Raleigh

Scientific Session

METASTATIC CARCINOMA OF THE PAROTID
John R. Mountjoy, M.D., Winston-Salem

TUBERCULOUS MASTOIDITIS
John R. Emmett, M.D., Dept. ENT,
N.C. Memorial Hospital, Chapel Hill

SINONASAL SURGERY WITHOUT PACKING
Thad H. Pope, Jr., M.D., McPherson Hospital
Durham

DISPENSING OF HEARING AIDS IN OTOLARYNGOLOGY
B. Ray Olinger, M.D., Asheville

Business Session

Election of Chairman, Delegate and Alternate Delegate for 1976-77

SECTION ON SURGERY

Friday, May 7, 1976

12:30 p.m. .....Crystal Roon
Chairman: Robert C. Moffatt, M.D., Asheville
Luncheon and Business Meeting

SECTION ON PUBLIC HEALTH & EDUCATION

Friday, May 7, 1976

2:00 p.m. .....Dutch Room, Holly Inn
Chairman: J. N. MacCormack, M.D., Raleigh

2:00 p.m.—SMALLPOX — GOING, GOING GONE?
J. Michael Lane, M.D., Director
Bureau of Smallpox Eradication
Center for Disease Control, Atlanta
Georgia

3:00 p.m.—OCCUPATIONAL LUNG DISEASE IN NORTH CAROLINA INDUSTRIES
Carl Shy, M.D., Director
Institute for Environmental Studies
University of North Carolina, Chapel Hill

4:00 p.m.—Short Business Meeting

SECTION ON NEUROLOGICAL SURGERY

Saturday, May 8, 1976

8:00 a.m.-1:00 p.m. .....Crystal Room
Chairman: M. S. Mahaley, Jr., M.D., Durham

8:00 a.m.—BREAKFAST—go thru Buffet Line and on into Crystal Room

cientific Session

9:00 a.m.—INTACT ARCH LUMBAR SPONDYLOLISTHESIS
William Brown, M.D., Resident in Neurosurgery, Bowman Gray School of Medicine, Winston-Salem

9:15 a.m.—POSTERIOR CERVICAL FUSION IN CHILDREN
J. M. McWhorter, M.D., Resident in Neurosurgery, Bowman Gray School of Medicine, Winston-Salem

9:45 a.m.—CSF RHINORRHEA: CONTROVERSIES IN MANAGEMENT
Courtland H. Davis, M.D., Professor of Neurosurgery, Bowman Gray School of Medicine, Winston-Salem

0:00 a.m.—ROLE OF NEUROSURGEON IN ORGAN PROCUREMENT
Stanley Mandel, M.D., UNC and John Weinerth, M.D., Duke

0:20 a.m.—SPECIAL COMMITTEE REPORTS:
Liaison: Neurosurgical Manpower Discussion
Courtland H. Davis, M.D., Moderator
Legal & Professional Liability: Malpractice Discussion
Ira Hardy, M.D., Moderator

12:00 Noon—Other Committee Reports

12:15 p.m.—Minutes of last meeting: Walter Lockhard, M.D., Secretary

12:20 p.m.—Report of Officers

12:30 p.m.—UNFINISHED BUSINESS:
Election of Officers: President-Elect, Vice-President, Board of Directors
Neurosurgical Nurses Training: Eben Alexander, M.D.
Other Business

1:00 p.m.—ADJOURNMENT

SECTION ON NEUROLOGY & PSYCHIATRY

Saturday, May 8, 1976

8:30 a.m. .....Disco Room

Chairman: Hervey W. Mead, M.D., Charlotte

8:30 a.m.-9:30 a.m.—Executive Committee Meeting

Scientific Session

9:30 a.m.-12:30 p.m.—CLINICAL ASPECTS OF CHRONIC PAIN

PSYCHIATRIC ASPECTS OF CHRONIC PAIN
Jeffrey L. Houpt, M.D., Assistant Professor of Psychiatry, Duke University Medical Center, Durham

BEHAVIORAL TREATMENT OF CHRONIC PAIN — A Status Report
W. Doyle Gentry, Ph.D., Associate Professor & Head of Division of Medical Psychology, Duke University Medical Center, Durham

APPLICATION OF NERVE BLOCKS IN TREATING CHRONIC PAIN
Bruno J. Urban, M.D., Associate Professor of Anesthesiology and Assistant Professor of Neurosurgery; Co-Director, Pain Clinic, Duke University Medical Center, Durham

Discussion of Papers
Jerry H. Greenhoot, M.D., Private Practice of Neurosurgery, Charlotte Neurosurgical Associates, P.A., Charlotte
Formerly: Director, Pain Clinic, University of California, San Diego, California

12:30 p.m.-1:30 p.m.—LUNCH — East End, Main Dining Room (Reserved tables)

1:30 p.m.-3:00 p.m.—BUSINESS MEETING in conjunction with North Carolina Neuro-Psychiatric Association

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SECTION ON FAMILY PHYSICIANS & NORTH CAROLINA ACADEMY OF FAMILY PRACTICE BOARD OF DIRECTORS MEETING

Saturday, May 8, 1976

8:30 a.m.-1:00 p.m. .....Disco Room

Chairman: William W. Hedrick, M.D., Raleigh

Program Chairman: Robert S. Cline, M.D., Sanford

THE FUTURE AND GOALS OF FAMILY MEDICINE AT UNC-CHAPEL HILL
Edward J. Shahady, M.D., Chairman
Department of Family Medicine, UNC, Chapel Hill

BUSINESS SESSION:
Election of Chairman, Delegate and Alternate Delegate for 1976-77

SECTION ON ANESTHESIOLOGY

Saturday, May 8, 1976

9:00 a.m. .....Parlor #129

Chairman: Jack H. Welch, M.D., Greenville

Program Chairman: Merel H. Harmel, M.D., Durham

9:00-9:20 a.m.—DEVELOPMENT OF A LARGE OB-GYN SERVICE CENTER
Francis M. James, M.D., Bowman Gray

9:25-9:45 a.m.—ANESTHESIA FOR THE PREMATURE INFANT
Kenneth J. Levin, M.D., UNC

9:50-10:10 a.m.—STUDIES OF THE EFFECT OF ANESTHESIA ON THE PULMONARY CIRCULATION
Guy C. Davis, M.D., Duke

10:10-10:35 a.m.—DRUG EFFECTS ON RENAL BLOOD FLOW
Alexander A. Birch, M.D., Bowman Gray

10:40-11:00 a.m.—THE ELECTROENCEPHALOMYOGRAM — A PRACTICAL METHOD OF NEUROMUSCULAR

EVALUATION DURING ANESTHESIA
David A. Davis, M.D., Duke
11:05-11:25 a.m.—RECENT ADVANCES IN BLOOD-GAS MEASUREMENT
Kenneth Sugioka, M.D., UNC
11:30-12 Noon—Business Meeting
Jack H. Welch, M.D., Section Chairman

Informal Meeting—NUCLEAR MEDICINE

Saturday, May 8, 1976
9:00 a.m.-11:00 a.m. . . Dutch Room, HOLLY INN
Presiding: Edward V. Staab, M.D.
Department of Radiology,
N.C. Memorial Hospital, Chapel Hill

NORTH CAROLINA PEDIATRIC SOCIETY
&
NORTH CAROLINA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS

Saturday, May 8, 1976
12 Noon .....Pinehurst Country Club
Presiding: Archie T. Johnson, Jr., M.D., Raleigh
Chapter Chairman
Executive and Liaison Committees—Luncheon Meeting

Informal Discussion
of
Forming a Section on Nuclear Medicine
Saturday, May 8, 1976—9 a.m.-11 a.m.
HMS BOUNTY ROOM—Pinehurst Hotel
Presiding: Edward V. Staab, M.D.
Department of Radiology
N.C. Memorial Hospital
Chapel Hill

SECTION ON PATHOLOGY

Saturday, May 8, 1976
9:30 a.m.-4:00 p.m. . . .Dutch Room, HOLLY INN
Chairman: Charles M. Hassell, Jr., M.D., Greensboro
9:30 a.m.—Registration
10:00 a.m.—Scientific Session
(program to be announced)
12:30 p.m.—Lunch — (on your own)
2:00 p.m.-3:30 p.m.—Scientific Session
(program to be announced)
3:30 p.m.-4:00 p.m.—Business Session
Election of Chairman, Delegate and Alternate Delegate for 1976-77

SECTION ON ORTHOPAEDICS

Saturday, May 8, 1976
12:00 Noon .....Dining Room, HOLLY INN
12 Noon—Executive Committee Meeting Luncheon
1:30 p.m.—Business Meeting

Scientific Session—2:30 p.m.
PANEL: THE MANAGEMENT OF HIP FRACTURES
Moderator: Frank Clippinger, M.D., Durham
THE TREATMENT OF FEMORAL NECK FRACTURES BY INTERNAL FIXATION
Edwin T. Preston, M.D., Chapel Hill
THE TREATMENT OF FEMORAL NECK FRACTURES BY PRIMARY PROSTHETIC REPLACEMENT
Donald B. Reibel, M.D., Raleigh
FRACTURES IN THE INTERTROCHANTERIC REGION
Everett I. Bugg, Jr., M.D., Durham
FRACTURES IN THE SUBTROCHANTERIC REGION
Phillip J. Bach, M.D., Charlotte
Judging Committee: J. Stuart Gaul, M.D., Anthony G. Gristina, M.D., John L Wooten, M.D.

SECTION ON RADIOLOGY

Saturday, May 8, 1976
1:30 p.m. .....HMS BOUNTY ROOM
Chairman: R. W. McConnell, M.D., Greenville

SECTION ON DERMATOLOGY &
SECTION ON PEDIATRICS

Saturday, May 8, 1976
2:00 p.m. .....Ballroom, HOLLY INN
Chairmen: George W. Crane, Jr., M.D., Durham—Dermatology
Gerard Marder, M.D., Gastonia—Pediatrics
SYMPOSIUM ON RECENT ADVANCES IN IMMUNOLOGY
Robert E. Jordon, M.D., Assistant Professor,
Dermatology and Immunology
Mayo Medical School
Rochester, Minnesota
Rebecca H. Buckley, M.D.,
Associate Professor of Pediatrics and Chief
Division of Allergy & Immunology
Duke University Medical Center, Durham
4:30-5:00 p.m.—Business Session
Election of Chairman, Delegate and Alternate Delegate for 1976-77 — (each Section)

Classified Ads

OFFICE SPACE FOR SALE OR RENT: Ample parking. Tri-City area, Piedmont North Carolina. Multispace Medical Complex, two spaces available. Solo practice or small group. Area needs: internist, hematologist/oncologist, psychiatrist or general practice. Contact: HIGH POINT MEDICAL CENTER, INC., 919-882-1725 or 919-882-1524.

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Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
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The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY April 1976, Vol. 37, No. 4

NORTH CAROLINA
Medical Journal

IN THIS ISSUE: Training the Internist to Provide Primary Care—Are We? Carl B. Lyle, Jr., M.D., David S. Citron, M.D., and Marvin M. McCall, III, M.D.; Training in North Carolina for Family Practice, William B. Herring, M.D.; Ethical Implications of Professional Standards Review Organizations, James F. Toole, M.D.

1976 ANNUAL SESSIONS
May 6-9—Pinehurst

1976 Committee Conclave
Sept. 22-26—Southern Pines

Both often

Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

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Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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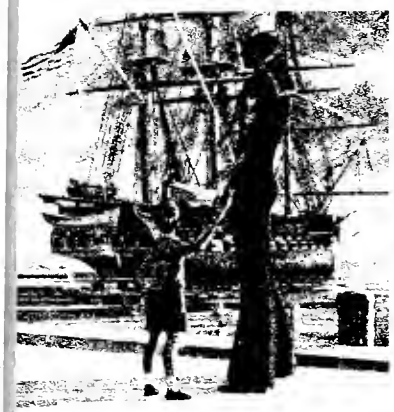

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- ☐ FAMILY PRACTICE
- ☐ PSYCHIATRY
- ☐ INTERNAL MEDICINE
- ☐ NEUROLOGY
- ☐ RADIOLOGY
- ☐ PATHOLOGY
- ☐ PEDIATRICS

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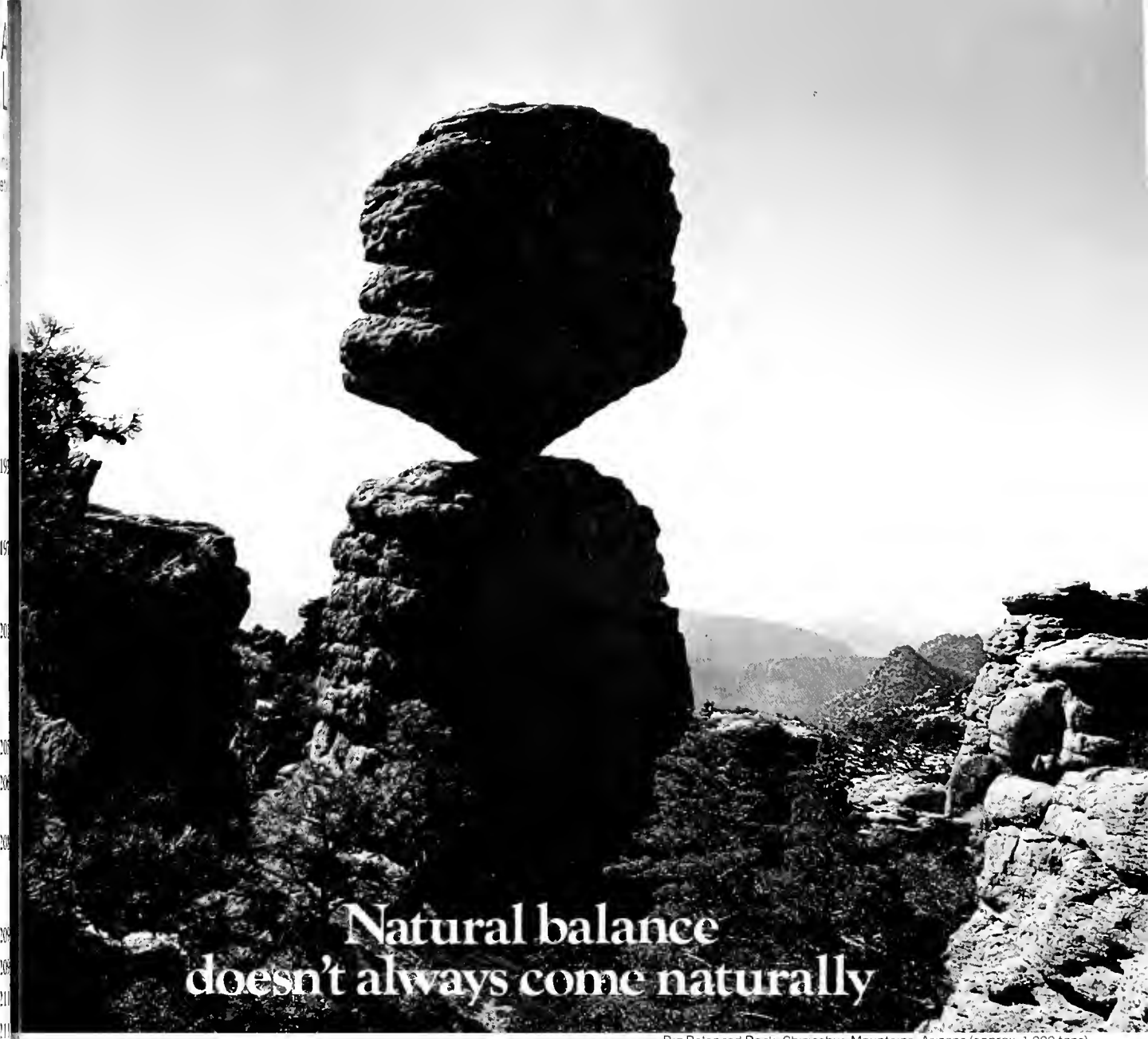
NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina
Medical Society

April 1976, Vol. 37, No. 4

NORTH CAROLINA MEDICAL JOURNAL, 300 S. Hawthorne Rd., Winston-Salem, N. C. 27103, is owned and published by The North Carolina Medical Society under the direction of its Editorial Board. Address manuscripts and communications regarding editorial matter to this Winston-Salem address. Questions relating to subscription rates, advertising, etc., should be addressed to the Business Manager, Box 27167, Raleigh, N. C. 27611. All advertisements are accepted subject to the approval of a screening committee of the state Medical Journal Advertising Bureau, 711 South Blvd., Oak Park, Illinois 60302 and/or by a Committee of the Editorial Board of the North Carolina Medical Journal in respect to strictly local advertising. Instructions to authors appear in the January and July issues. Annual Subscription, $10.00. Single copies, $1.00. Publication office: Edwards & Broughton Co., P.O. Box 27286, Raleigh, N.C. 27611. *Second-class postage paid at Raleigh, North Carolina 27611.*

Contents listed in *Current Contents/Clinical Practice*



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

ound useful in the management of vertigo* associated with
ases affecting the vestibular system.
an relieve nausea and vomiting often associated with vertigo:*
sual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
lso available as Antivert (meclizine HCl) 12.5 mg. scored
ets, for dosage convenience and flexibility.
ntivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for
sea, vomiting and dizziness associated with motion sickness.

E SUMMARY OF PRESCRIBING INFORMATION

IDICATIONS. Based on a review of this drug by the National Academy of
ences—National Research Council and/or other information, FDA has classified
indications as follows:
ffective: Management of nausea and vomiting and dizziness associated with
tion sickness.
Possibly Effective: Management of vertigo associated with diseases affecting the
tibular system.
inal classification of the less than effective indications requires further
estigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

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Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children. Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy. See "Contraindications".

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
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Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4

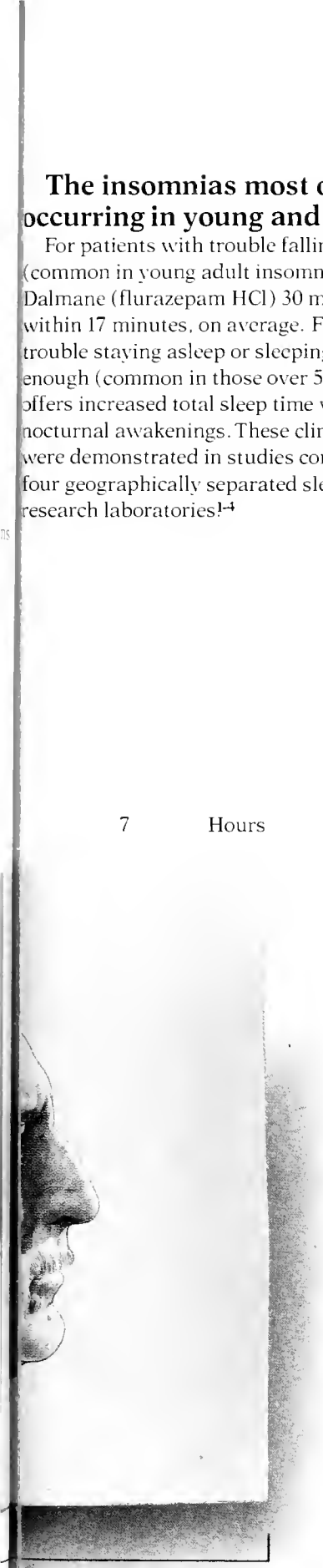
The insomnias most often occurring in young and older adults

For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories[1-4]

The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



Awake too early

Dalmane®
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One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
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- induces sleep rapidly
- reduces nighttime awakenings
- lengthens total sleep time

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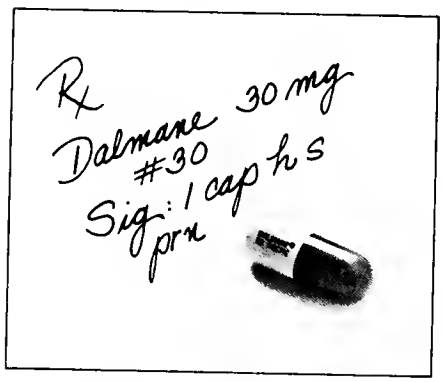
Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) Ⓒ IV



Objectively proved in the sleep research laboratory, Dalmane

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- ☐ provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum benefit effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971

2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971

3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

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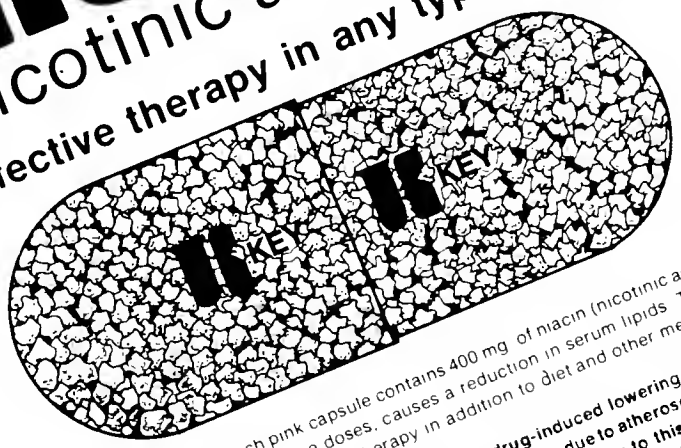

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ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown

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Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a beneficial or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache

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Testing in Humans: Who, Where & When.

The weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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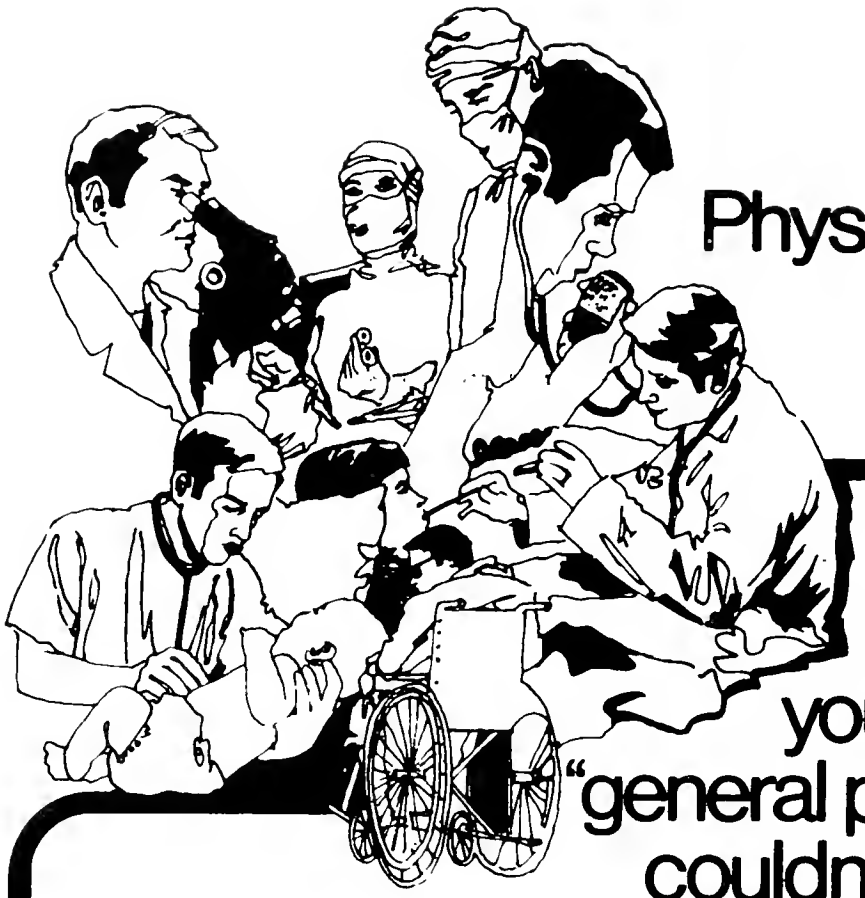

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Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

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Training the Internist to Provide Primary Care—Are We?

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THIS report, part of a continuing study of the practice of internal medicine in a southern urban community, compares the activities of private internists with those of the medical house staff in the community's teaching hospital. Its intent is to identify areas in the educational program that might be modified to provide a training program more comparable with the requirements of community practice. Therefore, we have attempted to describe and quantify the clinical activities of six internists who are primary care physicians in the same community.

Over the past decade, much has been written about the appropriateness of the clinical exposure interns and residents get during their training programs.[1-7] In most programs, the early years are spent dealing with critical, catastrophic illness and end-stage disease. Analyses of the patient populations of house officers usually reflect the social deprivation of the populations served by many teaching hospitals. Diseases spawned by poverty, as well as end-stage cardiac, renal, hepatic, and central nervous system problems predominate. In this milieu, clinical responsibility is shared by the attending physician and various members of the house staff hierarchy. Involvement of a house officer with a patient is measured in days or weeks — rarely in months, and almost never in years. Moreover, the patient is often unable to identify by name any of the several house officers responsible for his care.

By contrast, the general internist in private practice spends much time dealing with the early sick and the worried well. His patients are upright rather than horizontal, unattached to life support systems, tubeless, conscious and expecting to recover. Many of them have sought medical advice because of ill health which is feared rather than real. Some have presented for routine comprehensive examinations. Of the problems they present, most are self-limited and few are critical or life-threatening. The physician's responsibility for continuing care, though it may be shared at times with consultants, is implicit in his unwritten contract with each patient who has identified him as "my doctor."

By no means do we imply that house officers should not experience a healthy dose of "blood and guts" medicine, for such experiences develop professional competence in dealing with clinical crises. Indeed, it is imperative that the intern or resident, during his early postgraduate years should through trial and error make the transition from bookish recall to clinical reflex. However, during these formative years, the art of medicine is too often relegated to a position of secondary importance.

When a patient presents with a virtual portfolio of end-stage pathologic abnormalities substantiated by abnormal physical, chemical and radiologic findings, the scientific approach to his problems must predominate. Evaluating family dynamics and psychosocial influences on irreversible disease may be interesting from an epidemiologic standpoint, but it is rarely relevant to his immediate or long-term management. However, when a patient presents for help having few or minor demonstrable abnormalities, it is incumbent upon the physician to probe more deeply, orienting himself not only toward the patient but toward his family and his environment. Such patients appear infrequently on teaching wards and in hospital medical clinics. When they do, they receive little priority from the house staff, whose time must be spent attending those seriously and critically ill.

As the educational community responds to public and political demands for more physician manpower, it is inevitable that community hospitals will expand their roles in the education of internists.[8,9]

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Proponents of community hospital training programs anticipate that they will afford the resident a more realistic spectrum of clinical experience and thereby better prepare him for community-based practice. Before the validity of this conclusion can be tested, significant changes will have to be effected by those responsible for the design of such programs. An effort must be made to provide a more balanced experience incorporating more of the problems seen in the private practice of internal medicine. Serious pitfalls threaten community hospital programs which only duplicate the ward experiences offered at university teaching centers. In the urban community, practitioners of the science and the art and their patients offer a great resource for balanced educational exposure; but many barriers to the proper use of these resources exist. Unless these barriers can be eliminated, it seems unlikely that physicians training at community hospitals will be better equipped as primary care physicians than their counterparts from university hospital programs. That most general internists spend a large proportion of their time providing primary care and that their preparation for this role has been incomplete are conclusions reached in several recent studies.[2]

BACKGROUND AND METHODS

Charlotte Memorial Hospital is an 850-bed, acute care facility serving a county population of 400,000. A referral center for medical, pediatric and surgical subspecialties in a region of approximately 1,000,000, it has an average daily census of 751 of whom 26 percent are staff (charity) patients.

The medical teaching service has as its potential patient pool the adult indigent population of the county. Of the approximately 19,000 recipients of public assistance in the county, some 5,000 are active patients in the adult medical clinic, accounting for 14,000 visits per year. Six interns on the medical service work in the indigent clinic nine hours a week and spend approximately 60 additional hours a week on inpatient duties. Only those non-indigent patients who require emergency admission and do not have a physician on the visiting medical staff are treated by the interns. A member of the visiting staff is promptly assigned to assume primary responsibility for their subsequent care.

The six private physicians in this study practice in a clinic close to the hospital, which they use exclusively. This clinic, with active medical records of 18,000 patients, had a total of 21,000 office visits for the one-year study period. Most of these private patients were from the same county as the indigent population of the teaching service. Seeing patients by appointment, each practitioner averaged 28 hours a week in the office. He spent 12½ hours a week attending inpatients and was "on call" every third weekend. On weekends, the two physicians on call spent an average of four and one-half hours each at the hospital.

The internists are all certified by the American Board of Internal Medicine. Several have subspecialty interests: two in hematology, one in pulmonary disease and one in gastroenterology.

During the one-year study period, which ended in September, 1973, admissions to the medical teaching services were not managed by the same six interns. A total of 18 interns were involved, each serving an average of four months. The service was divided into three teams, each consisting of a junior assistant resident, two interns, and sometimes a senior medical student serving an elective rotation.

RESULTS

Table 1 compares the number of admissions of the six internists in a private clinic with those of the three medical teaching services. Only 1.0 percent of the private admissions were beneficiaries of Medicaid, while 17.0 percent of staff admissions were so covered. Of all private patients, 40.5 percent were covered by Medicare or Medicaid, as were 37.6 percent of all staff patients. Almost all private patients not covered by these two federal programs had hospital insurance. Most of the 62.4 percent of staff patients not covered by Medicare or Medicai had limited, if any, insuranc coverage.

Table 2 lists selected specifi primary disorders chosen to com pare the types of admissions of th two groups. Not all patients wer included in this list. Only thos categories of illness that reflecte either a significant number of ac missions or some difference be tween the two populations are in cluded. The number of patient listed in Table 2 for the teachin services represents 64.0 percent o admissions to those services; 49. percent of the admissions of the pri vate clinic are reflected in the table Those patients excluded from th study represented a wide variety o diagnoses, with few patients fallin into the same category. The teach ing service had 24.0 percent mor admissions than the private clini during the study period. The degre of severity of illness between th two groups is reflected by the fac that more than 95.0 percent of th staff patients were admitted on a emergency basis, while only 18.(percent of private admissions wer emergencies. The staff death rat was double that of private patients and 20.0 percent of the indigent pa tients required subsequent care i an extended care facility as com pared with only 8.0 percent of th private population.

If one looks at physical disorder commonly associated with alcohol ism — delirium tremens, seizures liver disease and acute pancreatiti — one can see that there were 1 times as many admissions with suc disorders on the teaching service a there were on the private service.

In the realm of serious infectiou diseases — tuberculosis, meningiti and gonococcal sepsis — there wer 28 times as many admissions to th teaching service. The house officer were exposed to almost three time the number of cerebrovascular ac cidents as were the private inter nists, which is not surprising in vie of the fact that 49.0 percent of al visits to the indigent clinic are re lated to hypertensive disease a compared with 15.0 percent of th visits to the private clinic. The per centage of admissions for docu

ented myocardial infarction was 4 percent on the indigent service nd 6.1 percent for the private service. Eight patients with malignant ypertension were admitted to the aching service and none to the ivate service. There were almost vice as many admissions on the ivate service for ischemic heart sease without infarction as there were on the teaching service. Eleven cases of myocarditis were seen in the indigent population; two in the private population. More than twice as many cases of pneumonia requiring hospitalization were seen in the indigent population and there were seven lung abscesses in this group. Over four times as many patients with ulcer disease without hemorrhage were admitted to the private service, whereas upper gastro-intestinal hemorrhage was only slightly more common in the indigent population. There were more than five times as many patients with small and large bowel disease admitted to the private service, and four times as many cases of gallbladder disease.

TABLE 1
Admissions of Six Internists and Six Interns for a One-Year Period

	Private	Staff
Patients	830	1,030
Hospital Days	7 662	9 508
Average Stay	9 23 days	9 23 days
Patients (Medicare)	328 (39 52%)	212 (20 58%)
Hospital Days (Medicare)	3 214 (41 95%)	1 788 (18 81%)
Average Stay (Medicare)	9.80 days	8 43 days
Patients (Medicaid)	8 (0.96%)	175 (17 0%)
Hospital Days (Medicaid)	132 (1 72%)	1 590 (16 72%)
Average Stay (Medicaid)	16 5 days	9 09 days
Deaths	57 (6 87%)	139 (13 50%)

TABLE 2
Number of Hospital Admissions by Selected Primary Disorder

	Admissions to Teaching Service	Admissions to Private Service
Tuberculosis	16	1
Bacterial Meningitis	7	0
Gonococcal Arthritis	5	0
Sarcoidosis	6	0
Carcinoma		
Stomach	2	0
Lung	14	10
Breast	0	5
Colon	0	3
Leukemia (all types)	2	11
Multiple Myeloma	2	2
Lymphosarcoma	0	2
Hodgkin s Disease	0	2
Renal Disease (Nephritis Nephrotic Syndrome etc.)	31	10
Attempted Suicide	19	2
Diabetic Ketoacidosis	21	4
Diabetes without Ketoacidosis	13	29
Delirium Tremens (acute alcoholism)	43	0
Seizures	23	1
Valvular Heart Disease	9	7
Malignant Hypertension	8	0
Essential Hypertension	23	24
Myocardial Infarction	66	51
Ischemic Heart Disease (without infarction)	44	79
Myocarditis	11	2
Congestive Heart Failure	31	8
Cerebral Vascular Accident	84	31
Dissecting Aneurysm	4	2
Pneumonia	86	41
Lung Abscess	7	0
Gastric or Duodenal Hemorrhage	12	8
Ulcer Disease without Hemorrhage	4	17
Enteritis and Colitis	6	31
Cirrhosis	30	6
Gallstones and or Cholecystitis	3	12
Acute and Chronic Pancreatitis	27	2

DISCUSSION

The specialty of internal medicine has undergone a striking metamorphosis during the past 40 years. The internist of the 1930s played the role of diagnostician and consultant — largely for patients with obscure or complicated illnesses beyond the ken of the general practitioner. During the decade of the 1970s, the young internist who trained intensively as a specialist, and often as a subspecialist, has found himself assuming the role of a primary physician — a role for which his residency training may have failed to prepare him completely.

It is estimated that 72.0 percent of internists serve as primary practitioners for their patients.[10] The editor of the *Bulletin of the American College of Physicians* implies that such a professional lifestyle is encouraged by the American College of Physicians — that "the College thinks a man certified by the American Board of Internal Medicine is the ideally trained man for adult family practice as currently defined."[11] Acceptance by the internist of the role of primary physician has been fostered by public demand.[12] The number of general practitioners and their proportion to the total physician population have declined steadily since the 1930s; the number and percentage of internists to the total physician population have increased.[13–15] In many urban areas, patients seeking a family physician find the internist to be more accessible than the general practitioner. Meanwhile, educational campaigns by the American Cancer Society, the American Heart Association, the USPHS, and articles in the lay press encouraged preventive medicine and periodic health appraisals, channeling patients in increasing numbers to in-

ternists, whose dedication to thorough initial workups and periodic re-examinations had by this time become well known. The respect, confidence and rapport which the internist engendered in each new patient at the time of the initial encounter established firmly his status as that patient's personal physician. Well prepared to manage such problems as bacterial endocarditis and systemic lupus, the internist (as primary physician) soon found himself inundated with patients having upper respiratory infections, backaches and paronychiae. He was forced to make decisions about the care of patients with psychiatric, gynecologic and traumatic illness. In many instances he considered himself overtrained for his role. In others, he felt uneasy and insecure because of his limited exposure during residency training to the gamut of problems encountered by the primary care physician.

That most internists function largely as primary physicians rather than consultants is documented by detailed analysis of the daily professional activities of the internist and the clinical problems he encounters.[16,17]

One must then ask whether the internist's period of training prepared him appropriately for his eventual role as provider of primary care. Is there a close parallel between the problems managed by the house officer and those managed by the private primary care physician — or indeed should there be? Does the house officer's experience encourage him to practice preventive and prospective medicine, give him an overview of the problems involved in providing continuing comprehensive care to each patient, provide adequate exposure to the problems of office management and of the economics of medical practice, afford him an opportunity to acquire close rapport with most of his patients and to accept and feel the major responsibility for the accuracy of diagnosis and the effectiveness of treatment for each patient to whom he ministers? Such questions are difficult to answer with objective data. However, the observations recorded in this study lead us to the inevitable conclusion that such questions suggest that major deficiences might exist in traditional residency programs in general internal medicine. Responses to a survey conducted among internists in Monroe County, N.Y., indicate that many of them consider their postgraduate experience in ambulatory medicine, gynecology, psychiatry and other disciplines to have been inadequate.[18]

Those educators and practicing physicians who have established guidelines for residency programs in family practice, keenly aware of the disparity between the activities of the hospital-based resident physician and the community-oriented family physician, have chosen the model family practice unit as a vehicle for lessening this difference.[19] The chairman of the department of internal medicine at a leading medical school has suggested that the model family practice unit concept might profitably be introduced into residency programs in internal medicine.[20] An alternative, incorporating some of the features of the model family practice unit in a medical outpatient teaching service, is the subject of a recent report.[21]

CONCLUSIONS

It would seem reasonable to assume that many community as well as university training programs would have patient diagnostic profiles and intern activities similar to those enumerated above. Indeed, this paper simply attempts to describe objectively what many medical educators have expressed subjectively in the past.

A beginning has been made in the residency program at the study hospital to overcome some of these deficiences. During his senior assistant resident year, the house officer rotates through six medical subspecialties, spending two months in each. During a rotation, he is assigned to a visiting staff member for whose private patients he is responsible. He works them up, writes orders, makes hospital rounds with the private physician attending and in most cases works in his offic several days weekly. In this way h studies the subspecialty in depth More important, he acquires som insight into the relationships of th private physician and his patien To a lesser extent, the first yea resident has a similar two month ex posure during an elective period.

How can we modify the progran at the intern level so that it provide not only the care of the acutely an seriously ill patient but the begin ning concepts of long term man agement of "his practice?"

If training programs are t change, a careful integration of am bulatory activities with more realis tic expenditure of time and energy on inpatients must evolve. Mode practice units for training the inter nist as well as the family prac titioner would seem a logical nex step.

ACKNOWLEDGEMENTS

We thank Mrs. Zoë Wood for technica assistance.

This study was supported in part by a gran from the Commonwealth Fund of New York

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Training in North Carolina for Family Practice

William B. Herring, M.D.

SINCE the first meeting in February, 1969, of the Residency Review Committee for Family Practice of the Council on Medical Education of the American Medical Association*, family practice residency programs have been approved for the Moses H. Cone Memorial Hospital, Greensboro; North Carolina Memorial Hospital, Chapel Hill; Watts Hospital (Duke-Watts Family Medicine Program), Durham; Charlotte Memorial Hospital, Charlotte; Womack Army Hospital, Fayetteville; and the North Carolina Baptist Hospital, Winston-Salem. This report summarizes the collective productivity of these six programs to date and projects their future performance and its probable effect on the number and distribution of family physicians in North Carolina.

METHOD

The director of each program provided information for a questionnaire including the numbers and origins of residents enrolled, the numbers and locations of graduates, the numbers of paid faculty, and estimates of the numbers of residents to be trained and of faculty required when each program reaches its projected capacity. Five directors gave approximate current costs of operation. Estimates of the costs of construction of planned facilities or of renovation of existing space were also supplied.

RESULTS

The first residents enrolled in the first program in 1969. In 1971 and in each subsequent year one additional program was established. A total of 108 residents are now enrolled in the six programs; the number ranges from 7 to 30. Twenty-five (22%) attended North Carolina medical schools; 83 (78%) came from out-of-state schools. Only twenty-two (20%) list North Carolina as their native state.

The first graduates, having entered residency training at the second-year level after internships elsewhere, finished the three-year program in 1971. Of the 22 physicians who completed the training requirements for examination by the American Board of Family Practice in these six programs, 18 (81%) are practicing in North Carolina. Figure 1 shows their distribution across the state. Entry into practice was delayed for some by military service obligations, but this is no longer a significant factor.

When all six programs reach their projected capacities (a total of 150 residents), they will be expected to produce 50 graduates per year. Two programs reached their planned maximum enrollments in 1975, two others are expected to do so in 1976 and 1977, and two will be filled in 1980. Figure 2 shows the number of graduates by year since 1971 and the projected number through 1981. The projections for 1976-1978 are firm, since these physicians are already enrolled.

Seven of the 22 graduates have taken the examination of the American Board of Family Practice with a success rate of 100 percent.

Paid faculty include 23 fulltime family physicians and six fulltime faculty representing other disciplines. Sufficient data to estimate the number of "fulltime equivalents" is lacking, but there are 12 part-time family physicians and 129 "other" salaried part-time faculty. The latter figure is misleading, however, for it includes a large number of full-salaried physicians whose individual contributions are small and limited to only two programs. When they are excluded this figure becomes 19 and probably more rep-

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*The Coordinating Council on Medical Education, organized in 1973, has the responsibility for coordination and direction of accreditation of medical education at all levels

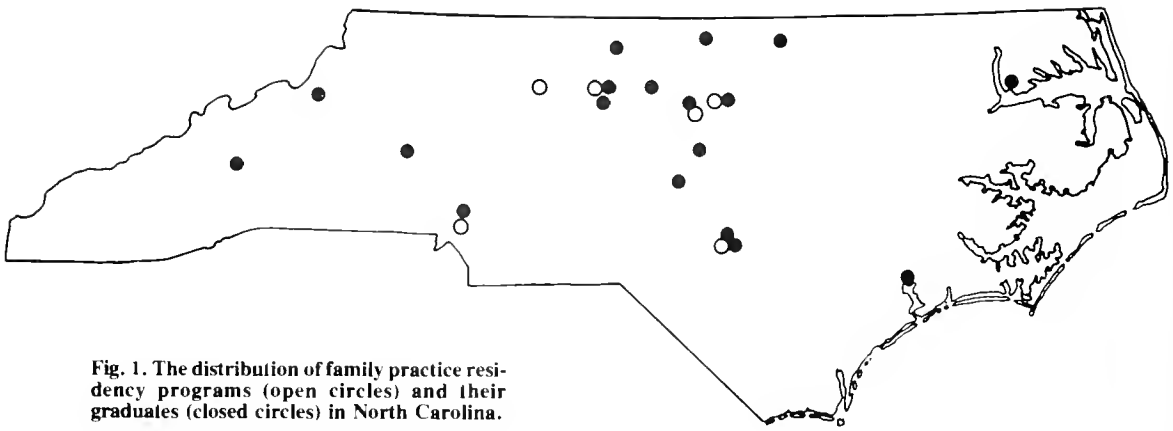

Fig. 1. The distribution of family practice residency programs (open circles) and their graduates (closed circles) in North Carolina.

resentative. The usual salaried hospital staff (radiologists, pathologists and emergency room physicians) are not included although they are indispensable to these programs. Likewise, the essential contributions of a large number of volunteer part-time clinical faculty cannot be adequately evaluated for lack of data.

By 1980, when all six programs are expected to be functioning at capacity, 36 fulltime family physicians and 11 fulltime faculty in other disciplines will be required. An increment of five part-time faculty is anticipated.

The present resident/faculty (fulltime) ratio averages 3.7; the projected average ratio is 3.2. Resident/faculty ratios vary widely, from 1.75 to 6.0.

Crude estimates of current operational costs for five programs were furnished. They average $38,000 per resident per year. The figures range widely and show no consistent relationship to numbers of residents or faculty or to resident/faculty ratios.

The sources of financial support for the five programs whose directors furnished this information are diverse and their relative contributions are highly variable. The program in Fayetteville is unique in that it is financed entirely as a cost of operation of the Womack Army Hospital. The remaining four show a pattern of sources that is too variable for meaningful quantitation but which permits some important generalizations:

1. The State of North Carolina, through the University of North Carolina and its Area Health Education Centers (AHEC) program is the largest single source of support for the training of family physicians in the state.

2. Sponsoring hospitals contribute a relatively small proportion of the total costs, ranging from none to 35 percent.

3. Practice income (derived from the model family practices) is a consistently minor source, ranging from 10 to 28 percent.

In addition, federal grants have made important contributions to three programs and medical schools have assisted two.

To meet the absolute requirement of the approving body for a model family practice unit, two directors have secured space that has been or will be remodeled at an approximate total cost of $250,000. The remaining four plan to build new facilities; estimates of the costs of construction total $4,700,000.

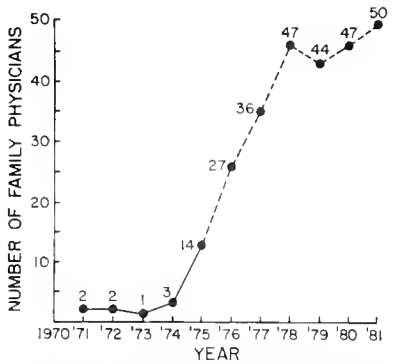

Fig. 2. Numbers of family physicians who have completed training (solid line) or who are expected to (broken line) by year in six residency programs in North Carolina. The peak in 1978 results from two programs having exceeded their complements of first-year positions in 1975.

DISCUSSION

Since 1969, training for family practice has made rapid progress in North Carolina, as in the rest of the nation. Evidence for this is the number of approved programs in the state, their success in recruitment of residents and faculty and the establishment of departments of family medicine in our medical schools. Whether the purpose of this effort (i.e., to make uniformly available throughout North Carolina family-oriented primary health care of high quality) will be realized remains to be seen, but it seems likely that our present position with respect to the numbers and distribution of family physicians will rapidly improve.

The combined output of these programs to date is 22 family physicians. Twenty-seven residents are due to complete their training in June, 1976. At the present rate of retention they will more than double the number of graduates of these programs now practicing in North Carolina. This number will rapidly increase until 1981, when current projections of maximum output will be reached (Figure 2). By 1990 these six programs may be expected to have produced about 720 family physicians. Eighty-one percent of our graduates have remained in North Carolina, in accordance with the well-known fact that physicians tend to enter private practice in the state in which they receive their residency training.[1] Assuming that at-

rition, including "losses" to other tates, does not exceed 20 percent, 'e may expect about 575 of these hysicians to be practicing in North 'arolina in 1990, a number equiva- nt to over 30 percent of our cur- nt total of *all* primary care physi- ians.[2]

At the present rate of decline in neir numbers,[2] however, the naximum annual output of these six rograms will be only about half the umber required to maintain a sta- le primary care physician popula- on in North Carolina. To what ex- nt family physicians from pro- rams yet to be established and ther primary care physicians, in- luding immigrants, will help to neet or exceed this deficit is uncer- ain.

While some graduates have re- nained near those programs that ave produced them (Figure 1), this s partly due to their retention as aculty. To date, 4 of our 22 raduates have taken fulltime eaching-practice positions, a rate 18%) considerably higher than the ational average of 5.9 percent of 975 graduates.[3] Since the number f these opportunities in North 'arolina is limited, this rate might e expected to diminish.

Predictions have been offered nat while the deficit of total physi- ians is decreasing and may have isappeared by 1980, "maldistribu- on" of primary care physicians is kely to persist.[4] This term is gen- rally equated with the shortage of hysicians in small communities. A ational survey of those physicians 'ho graduated from family practice esidencies in 1975 reveals that 14 ercent and 35 percent entered ractice in communities smaller nan 5,000 and 15,000 population, espectively.[3] The distribution of ur graduates in North Carolina hows a similar trend (17% and 50% espectively), suggesting that the istribution problem may be solved n due course.

The fact that 80 percent of the esidents now enrolled are from tates other than North Carolina nd that 78 percent come from out- f-state medical schools indicates nat these programs are able to at- ract out-of-state medical gradu- ates. Since these are *new* residency positions, they will increase the net number of medical graduates entering residency training in North Carolina by up to 50 per year.

Data that would permit an assessment of the quality of these programs is meager. Presumably it bears some relationship to the resident/faculty ratios, the medical school background and personal qualifications of the residents, and the performance of their graduates on examination by the American Board of Family Practice.

The present overall resident/faculty (fulltime) ratio is 3.7, an acceptable figure, but it varies widely among the programs. While there are no substantiated data to indicate an ideal ratio, a consensus of program directors suggests that 3.0 is optimal. Resident/faculty ratios must be interpreted with caution, however, for they fail to reflect the highly variable but often critical input of volunteer faculty. This important contribution cannot now be measured but it may possibly be a function of the numbers of residents and volunteer faculty where such faculty are available.

Information on the background and personal qualifications of the residents was not gathered for this study. However, all the residents in the program at the author's institution are graduates of 18 reputable, well-established American medical schools. Forty percent achieved overall academic honors in college and/or medical school, and matching through the National Intern and Resident Matching Plan was completed within approximately the top half of the rank order preference list in each of the last two years. If these characteristics apply generally, the average medical graduate entering a residency in family medicine is at least as well qualified as the average medical graduate entering other training programs.

Finally, the graduates who have been examined by the American Board of Family Practice have passed.

To the extent that these indices apply, the quality of these programs must be considered acceptable. Other determinants, such as the qualifications of the faculty, the variety and effectiveness of teaching modalities, the quality of administrative support, and the kinds and continuity of clinical experiences, cannot be measured at this time.

It is not possible to establish with precision the per capita costs of training family physicians at present. The estimates of current operational costs of these programs indicate an annual figure of about $38,000 per resident. While national surveys are in progress, there are no hard data available with which this figure can be compared. Anecdotal data gathered from a number of family practice programs in 1973 yielded an estimate of about $30,000 per resident per year (Stern TL, personal communication). Considering inflation, our current average figure seems fairly comparable. This figure must be treated with great caution, for the estimates from which it is derived are crude. Its lack of a discernible relationship to resident/faculty ratios also detracts from its credibility. A more precise analysis of per capita costs and comparison with the results of national surveys now in progress would be of great interest.

Although its accuracy is in doubt, the figure of $38,000 per family practice resident per year should be regarded as an acceptable cost, for there has been no alternative proposed that can match the potential of these programs to improve the number and distribution of family physicians in so short a time. For this reason also, the amounts projected for capital expenditures (for the construction of model family practice units and related education facilities) seem modest indeed.

From the examination of the sources of financial support it is evident that the state of North Carolina has made a major commitment to the training of family physicians through these programs. While any judgment of cost-effectiveness must be ventured with caution at this point, it appears likely that this will prove to be a sound investment by the state.[4] Pending a reliable assessment of needs and the contributions to

primary care from other sources, the state might well consider increasing its support in order to strengthen and expand this effort. AHEC is an existing mechanism through which increased support might conveniently be channeled.

An appropriate source of anxiety for hospital officials is the proportion of costs that must be borne by the sponsoring hospital and, usually, passed on to the patient. This varies with the degree of success each program has in finding sources of funds other than AHEC, such as training grants, but it appears to be a relatively small part of the total.

It is evident that income derived from model family practices will never fully support residency programs in family medicine, nor are model family practices, as components of residency programs, likely even to be self-supporting. There are significant time commitments by faculty and residents to teaching and learning that substantially reduce the amount of service delivered. Model family practices must support staff members having both service and teaching functions, including social workers, technologists, and administrators, and mechanisms for quality control (of both patient care and teaching) that are not found in private practices. In theory an ideal model would be an efficient, tightly run private practice, but since residents must participate in order to learn, some compromises with efficiency are unavoidable.

Hospitals sponsoring family practice residency programs will require that a majority of the financial support come from outside sources. Since the state, rather than the communities where these programs are located, will be the primary beneficiary, it is appropriate that the state provides this support.

ACKNOWLEDGEMENT

I am indebted to the following for information about their programs and for reviewing the manuscript: Drs. Donal Dunphy, William J. Kane, David Citron, Milton Smith, Charles H. Duckett and George T. Wolff.

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When the combination of liver and stomach affection is established, we have a train of well-marked phenomena indicative of their coexistence. The appetite is fickle, being sometimes ravenous, at others almost annihilated, and sometimes whimsical. Whatever is eaten produces more or less of distention, discomfort, or even of pain in the stomach, the duodenum, or in some portion of the alimentary canal, till the faecal remains have been evacuated. On this account the bilious and dyspeptic patient is very anxious to take aperient medicine, as temporary relief is generally experienced by free evacuations. I say *temporary* relief; for purgation will not remove the cause of the disease; it only dislodges irritating secreations, soon to be replaced by others equally offensive. Indeed the usual routine of calomel at night and black-draught in the morning, if too often repeated, will keep up rather than allay irritation in the bowels, and produce, as long as they are continued, morbid secretions from the liver and whole intestinal canal.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 28-29.

Ethical Implications of Professional Standards Review Organizations

James F. Toole, M.D.

AM pleased to have the opportu-
nity to discuss the changes in our
edical ethic which, I fear, the
ewly activated Professional Stan-
ards Review Organizations may
ring about. In my opinion, the
ng-range effects of PSRO and its
andmaiden, a system of national
ealth insurance, will become key
sues not just for physicians but for
ur entire citizenry. Among the
amifications of widely available
overnment-supported health care
re our ability to prolong the lives of
ie mentally retarded, the comatose
nd the senile; the increased cost of
iedical care to insure the survival
f our aged; and the impact these
rograms will have on our society
nd its economics. The PSRO prog-
am will bring equally dramatic
hanges to the practice of medicine,
ltering in fundamental ways the
rovision of medical care to our
opulation.

Up to now, a few physicians have
restled with these potential prob-
ems, but most have ignored them
nd concentrated on their primary
esponsibility of providing the best
iedical care for their patients.
ikewise, our national advisory
ommittees have often failed to foresee and plan for obvious problems attending the rapid development of medicine during the past decade. Some of my experiences with such committees are directly applicable to these potential difficulties which I would like for you to consider.

During the past 10 years I served on committees of the American Heart Association (AHA) and the National Institutes of Health, National Heart and Lung Institute (NHLI) and National Institute of Neurologic Diseases and Stroke (NINDS). This decade was an era of great excitement — human heart transplantation, surgery for strokes and development of the concept of brain death. To a surprising degree, however, researchers or scientists did not consider the long-term effects of these radical developments. Shortsightedness was far too common. Several personal examples illustrate this point.

For instance, the research committee of the AHA seldom tolerated a discussion of the broad implications of a research project they were deliberating. We considered only the rigor of the scientific design and the validity of any data that might be forthcoming. The specific duty of the research committee is to rank in order of excellence projects and investigators seeking financial support. These multimillion-dollar decisions determine the funding and, therefore, the direction of the scientific effort of the AHA.

In 1965-66, our committee had before it applications from surgeons who were transplanting animal hearts and working on implantable artificial hearts. Despite what should have been apparent to all of us, our cardiovascular research establishment was thrown into disarray when Christiaan Barnard transplanted the first human heart in 1967. This electrifying news put the AHA and the NHLI in the public eye; yet neither of these groups had an advance position. As best as I can ascertain, no one had anticipated this event or its ethical, moral and legal dimensions. No one had thought through such questions as the availability of donor hearts, who should receive them, or how much of our national research budget should be devoted to this area; therefore, no one had formulated position papers on whether we as a nation should encourage this research. For instance, given a feasible system for transplantation without rejection, there remains a factor that should have been obvious from the beginning — the limited availability of donor hearts. Therefore, one might have expected questions such as: Is the effort worthwhile?

Professor and Chairman
Department of Neurology
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Where will a successful program lead?

What was the result of this unforeseen event — the first human heart transplantation? The AHA called an emergency meeting of our committee and gave us four hours to come up with a position statement the AHA could use in a release to the media. Because of the inadequate handling of this problem, some of us pressured the AHA into forming a standing committee on ethics, composed of scientists, cardiologists, ethicists, theologians, philosophers, historians and others. The role of the committee was to be neither regulatory nor judgmental, but rather to bring to the attention of the lay and medical members of the AHA ethical issues relating to research. Those of us on the committee debated, discussed and digested issues relating to artificial hearts, randomized studies, brain death, informed consent and other topics. One of our products is entitled "Ethical Implications of Investigations in Seriously and Critically Ill Patients."[1] Another is "Ethical Considerations of the Left Ventricular Assist Device."[2]

The committee met semiannually for four years to ponder these weighty subjects and attempt to provide insights into what might be logical consequences of certain types of research. I expected the deliberations of the group to be well received and thought of the committee as a forward step that added a new dimension to science. I was surprised to find out that the committee was deeply resented by some researchers, who finally forced it to cease its activities in 1974.*

At first I thought this action might be an aberration. Who could be against flag, country, motherhood and ethics? I was particularly disturbed, therefore, when a proposal for a similarly constituted group put forth in the U.S. Senate and House was opposed by many of my fellow scientists, who lobbied actively for its defeat. As you all know, a commission was set up and is beginning its deliberations — over the objections of many in the scientific community. Why? What do we have to fear? Is there something threatening in the public consideration of scientific endeavors? What happened, I believe, is a result of the uneasy relationship between ethics, which is intrinsically subjective, and basic science, which is objective. The televised "Ascent of Man" segment on Galileo illustrated this point well.[3] From the time Galileo had to retract his public statements that the earth moved around the sun rather than the reverse — presumably he would have gone to the stake had he not done so — we have had very uneasy relationships vis-a-vis academic freedom, scientific inquiry, and the state, whatever the state might be. Since Galileo, scientists have feared and resisted attempts by governments to curb their freedom of inquiry. I believe my colleagues have an unexpressed anxiety that ethics committees may change from forums for exchange of ideas to regulatory bodies that will police their activities and limit their freedom. The former is precisely what our society needs and the latter is what prevents its realization.

One might think that what I have outlined does not relate to the ethics of PSRO, but it does. The medical community will face similar problems as it adapts to the new requirements of a regulated system unless we recognize potential trouble areas. Some problems I foresee are the inhibition of new modes of treatment, the rating of physicians and institutions, the politicalization of the viability of any program such as PSRO, and regulated uniformity of medical treatment.

How can PSRO inhibit the development of good treatment programs? Quality care delivered in a timely fashion often determines the course of disease. Shifting patients from individualized attention to a more standard form of care will greatly reduce physicians' freedom to weigh the results of their treatments and to try improvements that deviate from accepted norms. It may eventually eliminate the inquiring attitude that has made American medicine the world's leader. Here are a few examples:

Both endarterectomy and long term anticoagulation are accepted forms of treatment for cerebral vascular insufficiency. Yet the exact circumstances under which one or the other is justified have not been elucidated. Whether either treatment provides an advantage is debatable. But PSRO standards are being set now. Choices must be made now despite the lack of convincing data. My medical ethic requires a randomized study of a large population in order to gather valid data, but PSRO will tend to inhibit this. PSRO will not create the problem but will prevent its solution by impeding the use of randomized trials to determine the best forms of therapy.

Other treatment programs still being debated are coronary artery bypass for angina pectoris, simple vs. radical mastectomy or other forms of treatment for carcinoma of the breast, and radiation vs. surgery for pituitary tumors. Frequently we in medicine have differences of opinion about which treatment is better for a given problem. Physicians must have the freedom to deviate from the therapeutic norm — even after it is set down by the PSRO — long enough to accumulate results and to present and debate them in scientific form. The quest for truth must not be impaired. A system to insure the evaluation of new treatments must be built into the PSRO; it is the obligation of PSRO to help determine that its guidelines include the best range of treatments. To do this, it must build these options into the requirements for clinical vascular programs so that these answers may be found.

What is the best therapy for malignant brain tumors? Or is no treatment worth giving? What about costly surgery for the severely retarded when the chances of improving their mental capacity are nil? These are ethical questions about which PSRO must make judgments and the system must have built into it, from the beginning, methods for encouraging this activity. This will require the adoption of randomized trials and the use of deception in therapy — a point that will generate much political argument. Can

*The committee has been reactivated in 1976 under the leadership of Dr. Harriet Dustan.

lacebos be given in a system where uality care is demanded and informed consent involved? At the resent time, none of these, as far as can determine, are a part of the SRO system.

Quality care depends, in large art, on the training and skill of the hysician who administers it. Within a short time, accumulated ata will show that one institution or hysician has a far better recovery ate than another institution or hysician. It is well known that ome surgeons have extraordinarily ood results and that others have ery poor results in carotid endarerectomy. I refer my patients to hose who have the good results, nd I assume everybody else does he same. Under PSRO, this information will become available in the ase of all illnesses and all physiians. Therefore, a mechanism for topping those who do poorly and or upgrading marginal physicians nd institutions must be planned for ow. Furthermore, I suspect that, espite all pious mouthings to the ontrary, information of this nature ill become public knowledge and a ew form of shopping for medical are, in terms of price as well as afety, will develop. Up to this oint, I have never heard a patient sk, "What is the percentage hance of my surviving or improvng after this operation?" When I uggest surgery for a patient, I have ever had one in a true spirit of inquiry say, "Give me my cost-enefit ratio and comparative prices f different modes of treatment." hey may well be doing that before oo long.

Now I would like to consider nother aspect of the ethics of SRO — the ethic of initiating a nedical-care delivery system that is ubject to political pressures. Drawng once more on personal experience, I would like you to consider our recent involvement in the soono-be-defunct Regional Medical rogram (RMP). Born during a emocratic administration, it was eceived in some corners with great nthusiasm. Programs were constructed, people recruited and delivery systems initiated. Then, just s it was beginning to run smoothly, a change in philosophy took place at the federal level and the programs came under attack. Political battles raged and finally RMP is being abandoned. I maintain that the ethical considerations in starting and then discontinuing programs for the delivery of care are submerged in the politics and economics of these programs.

This could happen to PSRO if we are not careful to make it apolitical and broadly based in all walks of society. As you know, it is not apolitical at the moment, and there are many walks of society, particularly in medical circles, where it is being resisted. Therefore, you can be certain that it will be attacked and could be abandoned just as RMP was if there is a change in administrative philosophy.

Now let us consider where new therapeutic approaches may lead. Most of us are aware that our extraordinarily successful program to prevent infant and childhood deaths in underdeveloped countries has led to explosive population growth that threatens the societies that they were designed to improve. Could some unanticipated result of PSRO lead to deleterious social consequences? Consider this scenario. With population control and severely limited immigration, our population will stabilize. As we prevent premature death with better medical care, the proportion of aged citizens will increase. The requirements for geriatric care will become an ever-increasing proportion of our national health-care budget. The burden of taxation on the shrinking middle-aged population will likewise increase to support these needs.

As a nation, we have adopted the moral and ethical concept that everybody has an equal right to high quality care, and PSRO is a monitoring system to guarantee that right. As we watch the inception of PSRO, the emphasis is being put on quality, and physicians are being asked to set down usual types of evaluation in hospitalizations. Presumably, this standard of care will be established nationally and maintained equally for all citizens as soon as a national health law is enacted. In the short run, PSRO will result in gratifying improvements in medical care, particularly in peripheral areas where physicians have been working alone, unaccustomed to having others more knowledgeable than they close at hand, as is the case in medical centers where many eyes watch every act performed by the attending physician. In some outlying hospitals, care is delivered in private and mistakes can go unrecognized, ignored or be buried. This state of affairs will cease as marginal practices cease, and a stratification of levels of care with so-called major problems treated only in medical centers will develop.

The ethic of equal access to care requires that if one institution provides a unique form of treatment better than all other institutions this particular form of treatment be distributed nationally so it will be available to all citizens. The distribution of quality care is thus carried to its logical extension. In the long run, the cost of care will increase as every citizen begins to exercise his right. Congress will be forced to consider means by which to contain costs. At that point, the standard of care will become an issue. Choices currently made on an individual basis by a physician and his patient will be made on the collective basis of public policy and, therefore, in the political arena. The Congress and the courts will become the final arbiters of health care and, therefore, of the ethics of health-care delivery.

Already, the U.S. Supreme Court has decided that abortion, previously an ethical and moral issue, is a legal issue also. The testing of the concept of brain death is under consideration. As time goes on, we will see many more such issues — for example, the denial of access to care. Segments of our population interested in particular diseases will lobby for the standards and types of care that they desire. We will have economics and politics as the final arbiters of the ethics of who gets care and how much. This is already an issue in England in the case of renal dialysis. Even now, we have an illustration of this trend in our

own local community as our elected and appointed officials attempt to decide who has financial responsibility for the medically indigent. This concept will be elevated to the national level as soon as this type of issue is transposed to the health-care laws.

CONCLUSIONS

1) PSRO is a rational, short-term approach to complex problems for assuring quality care for all our citizens.

2) It is a public response to problems that the medical profession has been unable to resolve for itself.

3) Resistance to the new system by the medical community has its origins in deeply rooted fears that bureaucratic interference in what has been a private enterprise would lead to the destruction of the system as we know it.

4) Clinical investigators in academic medical centers have resisted public inquiry into their hitherto private research activities for fear that their freedom of inquiry will be limited. There are signs that the latter is happening, for example, moratoria on fetal research and on psychosurgery.

5) I predict current restrictions on clinical investigators will, within a few years, be imposed on practicing physicians under the system of the PSRO. (I have lived under these restrictions and I cannot say that I have resisted them, but I feel them.)

6) Public inquiry will lead to politicalization of the system wher in special interest groups will se to influence the delivery of ca through their legislation and the congressmen.

7) In the long run, the delivery care by physicians will be dete mined by legislation, and the co of medical ethics currently used b physicians will be superseded b federal guidelines.

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I lately saw a gentleman of brilliant talents and prolific genius, who could sit down and write extemporaneously, whole pages of superior poetical effusions, with scarcely an effort of the mind, and who would yet, from a sudden derangement of the digestive organs, be so completely and quickly prostrated in intellectual power, as not to be able to write three lines on the most common subject. On a late occasion, when he had merely to communicate an official transaction that required not more than half a dozen lines in the plainest language, he could not put pen to paper, though the attempt was fifty times made in the course of two days. At length, he was forced to throw himself into a post-chaise and perform a long journey, to deliver orally what might have been done, in one minute, by the pen. In half an hour after this task was performed, he sat down and wrote an ode descriptive of his own state of nervous irritability, which would not have done discredit to the pen of a Byron!—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 31.

Editorials

AN AUDIENCE FOR A DISCOURSE

"The primary difficulty is that instruction has to be carried out largely in the wards and dispensaries of hospitals rather than in the patient's home and the physician's office." F. W. Peabody[1]

"Justice demands that every citizen should have so far as possible an equal chance to develop his talents. . . Therefore every citizen should have an equal right of access to the means of good health, so far as it is available." Alasdair MacIntyre[2]

Despite television's appeal to the eye, there has been no letup in the parade of papers describing the known, the unknown and the dimly glimpsed. Our accelerated specialization in all fields of business, science and religion has spawned so many scribes under compulsion to publish that there is some danger of worthy discourses forlornly seeking audiences. So prolific have we become that the times cry for some sort of literary contraceptive.

We have only to look at medicine's problems today to realize the near futility of recognizing, let alone understanding or adequately describing, the many forces in action. When such complexity confronts us, the temptation is to retreat, protesting that the doctor-patient relationship is being threatened or to offer overly simple suggestions or catch phrases as answers to poorly posed questions. But solutions lie neither in such generalities or in ill-conceived, poorly defined, uncertainly financed federal intervention. For example, since the introduction of Medicare and Medicaid, there has been a striking increase in the outlay of federal funds for these programs, much greater than earlier estimates. Part of the cost spiral can perhaps be attributed to the removal of restrictions imposed by poverty on the provision of adequate medical care and is reflected in rising hospital costs and some of the increase to the pressure, in the interest of social justice, to offer more comprehensive service to all groups, each in itself a noble course. Such pressures require a careful assessment of the quality of care, of cost effectiveness and indeed of what the physician's role really is. As a result, we are faced with a strange vocabulary; we speak now of health providers, health consumers, health screening, peer review, life support, often without a clear view as to what we really mean. Health, instead of being a biologic state, now seems to be a commodity to be consumed, a right conferred by citizenship, a category subject to metaphorical abstraction if not to precise measurement. Such a movement has its evangels and its skeptics who must grapple with rising expectations of a public stimulated by the hope that health may really be delivered like merchandise from a store.

This issue of the Journal is devoted to several aspects of these problems — who is responsible for medical care, how is it to be provided and what is the acceptable cost. Lyle, Citron and McCall offer several cogent observations which deserve careful consideration. They have confirmed that our general hospitals do deal with two populations, a sicker, poorer group and a more prosperous segment with different diseases. This, of course, comes as no surprise and has previously been well-defined in similar vein by Hollingshead and his associates[3] in the realm of mental health. Particularly noteworthy is the appreciation that separate hospital populations are still tended separately by staff and house staff physicians and that such division has important implications for those concerned with proper training for the infantry of medicine: internists, family practitioners and pediatricians who will eventually go out to the trenches: office practice. New models[4] for training are being developed and offer great promise for the better equipping of doctors who care for patients. Some of these models suggest that conventional wisdom which makes the hospital the cathedral of medicine must be revised because home care may be cheaper and because the doctor as a "therapeutic self" may function better in the patient's own environment, not in the hospital.[5,6] Herring's observations in this regard indicate that concern is not limited to Boston but alive and improving in Greensboro as well as Charlotte.

One of the great fears of the medical infantryman is that his colleagues at base headquarters don't appreciate his plight and encumber him with imperatives, directives, definitions which have little bearing on the realities of the market place. As Toole points out, there are dangers inherent in any program which sets standards which may be too restrictive, perhaps in an effort to minimize risks, and may in the long run be detrimental to patients and limit the physician in the exercise of his mature medical judgment.

We have long known that such concern about the relationship between health and medicine is not restricted to the United States and have been particularly perplexed by the nature of things in England.[2] For those who feel the need of looking beyond the current issue of the Journal, there is a proper discourse which unfortunately will not find the medical audience it deserves in the United States. Scott's

paper,[7] which recently summarized the state of things in New Zealand, has a most attractive title "Health and Medicine: Is There a Connection? or A White Paper for Politicians." Scott points out that despite the expansion of medical knowledge and the many more tools for diagnosis and treatment that we have today, health as general welfare has been better approached by improving economic and social conditions. What can organized medicine do in the United States about environmental hazards, too much alcohol, too much tobacco, handguns, fast drivers? Perhaps the phrase health consumer is well chosen because consumption does suggest the use of resources which are often irreplaceable.

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ETHICAL OBLIGATIONS OF PHYSICIANS TO PEER REVIEW

Difficult questions about the legal and medical ethics of peer review are raised by Toole in this issue of the Journal. But the outcome he predicts — government control of medical ethics and health care — need not occur. There is an alternative — one which the North Carolina Medical Peer Review Foundation has already begun to pursue; it will need total support from physicians in North Carolina if it is to be effective.

The foundation was established by the State Society to promote quality medical care and has contracted with the State of North Carolina to review services rendered Medicaid patients to determine whether these services are medically necessary, are rendered at the appropriate level and generally conform to professionally accepted judgments. The foundation will use in its reviews model screening criteria sets to select from a large number of cases being screened a small number for further review. The screening criteria identify those cases where medical care may have been substandard in quality or services improperly utilized. The criteria, which are short and based on easily obtainable objective data, were developed with help from all the major medical specialties and most of the subspecialties.

It is important to note that the foundation's criteria *do not* (1) define rigid standards of quality, (2) define which services will be paid for as part of claims review, or (3) preclude innovation by physicians. The foundation is attempting to identify potential gaps in practioners' knowledge and capabilities and problem areas in facilities and support personnel operations. The system being used is the foundation's Hospital

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Admission Review Program (HARP), controlled and administered by individuals under the direction of physicians. The data collected will be used by the foundation's Norms Committee to correct identified deficiencies through educational means whenever possible.

An intangible benefit exists for alleviating some malpractice problems through having corrected some of the deficiencies identified. Patients have exerted their influence on the profession in those cases where they feel they have not received appropriate treatment and that physicians did not demonstrate accountability. Some patients have voiced their protest through the courts and this, in part, has resulted in the malpractice crisis. With the kind of peer review system the foundation envisions, physicians will be accountable and will be correcting deficiencies through education, whenever possible.

Physicians, generally, have been aware of their ethical obligations to their patients but many have tended to think only in terms of the private physician/patient relationship. The review system being developed by the foundation will not interfere with this relationship but will address some of the broader principles of medical ethics as developed by the American Medical Association "to aid physicians individually and collectively in maintaining a high level of ethical conduct."[1] Since these principles are consistent with the philosophy and approach of the foundation's peer review program, they warrant summation:

> "The principle objective of the medical profession is to render service to humanity with respect for the dignity of man. . .
>
> "Physicians should strive continually to improve medical knowledge and skill. . .
>
> "The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-improved disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.
>
> "A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.
>
> "The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community."[2]

If physicians do not support a review system controlled and operated by their peers, then health care dictated by government and consumers will almost certainly occur — to the detriment of all concerned. However, physicians working together to improve health care, using the type of review system being developed in North Carolina, can prevent further intrusion by government into the practice of medicine while at the same time demonstrating accountability to the public — M. FRANK SOHMER, M.D., President and Medical Director, and WOODFORD BURNETTE, Director, Hospital Review Services and PSRO Activities, North Carolina Medical Peer Review Foundation.

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MIDWINTER MEETING OF THE EXECUTIV COUNCIL OF THE NORTH CAROLINA MEDICAL SOCIET

February 1, 1976

A bleak, windy, wet February day is hardly appr priate for a pilgrimage to Raleigh, or anywhere else f that matter, but custom and need dictate that the must be a midwinter meeting of the Executive Counc of the Society and so it sat February 1, 1976. To th gloom of the day was added the constant concer about how to maintain clinical freedom in an atmo phere of regulation and counter-regulation and th awareness that, despite our good intentions, many our best efforts would be in vain. But February ha forever been a gray and cheerless month.

Still the day brought some enlightenment and with encouragement. Dr. Tilghman Herring, on the trail the balanced budget, led the council calmly from th arcane to the understandable, not without pointing o that deficits lurked if we didn't follow his trail car fully. In short, while the Society still has an operatir surplus, demands on the dollar threaten such a happ state. But the Society now claims more than 4,0 AMA members and so has earned the right to sele another delegate to the AMA House of Delegates b cause state organizations can elect one delegate p thousand members or a fraction thereof. The counc named past-president Frank Reynolds the new del gate and president-elect Jesse Caldwell alternate; th House of Delegates of the State Society ordinari does the selecting, but we are not notified of the fra tions thereof until the House has had its annual se sion. Dr. David Welton was recognized by the counc for his efforts to swell our roles in the AMA an accepted on behalf of everyone involved. The counc also endorsed the nomination of past-president an AMA delegate, John Glasson, to a position on th AMA Council on Medical Service and recognized D Archie Johnson for devoted services in governme and in the practice of medicine to the people of Nor Carolina and to the medical profession.

The council then directed its attention to continuir efforts to do something about the problems of profe sional liability. Dr. Shahane Taylor spoke for the Pr fessional Liability Legislative Action Committee an Dr. Ira Hardy summarized the report of the Profe

ional Liability Legislative Research Commission. Members of these groups have taken the place of esterday's postman: they seem to "post o'er land nd sea without rest." To achieve an equitable solution to the problem, it was apparent that economic, olitical and humanitarian impulses and aspirations emanded the closest attention, that vigilance, fairess and work were essential and that few could gain nd many suffer if a workable scheme were not volved with dispatch. The report of the commission as accepted in principle and efforts to secure its doption by appropriate legislative action encouraged. The Legislature meets in May and members of he Society have been urged to impress upon their representatives and senators the need to allow legislation to be introduced and passed at that session.

The council also heard from Dr. Rose Pully on behalf of the Committee on Cancer, from Dr. Louis Shaffner who assured us that the revision of the constitution and bylaws was being carried out with due deliberation and calm contemplation and accepted information, resolutions and comments about matters great and small, some of which will require action by the House of Delegates in annual session. After having assured himself that all who sought it had had the opportunity to speak, President Jim Davis then graciously and with good humor accepted a motion for adjournment.

Bulletin Board

NEW MEMBERS
of the State Society

Ainslie, John Durham, MD, (P), 216 Shoreline Dr., New Bern 28560
Altvater, Arnold Hugh, MD, (PTH) (Renewal), 205 Edgewood Dr., Boone 28605
Andrus, Thomas Ross, Jr. (STUDENT) 103 Deblyn Ct., Durham 27707
Blackman, Jesse Aycock, MD, (FP) 107 S. Sycamore St., Fremont 27830
Broadrick, Gary Lee, MD, (GS) 318 Wards Bridge Rd., Warsaw 28398
Bultman, Charles Keene, MD, (ORS) 3659 N. Patterson Ave., Winston-Salem 27103
Burns, Robert Henry, III, MD, (IM) Baldwin Woods, S. W. Whiteville 28472
Carter, Thaddeus Cox, MD, (U) 1001 N. Washington St., Shelby 28150
Carr, John Ferguson, II, MD (P) 3411 Angus Rd., Durham 27707
Chudgar, Kalpana Mukesh Kumar, MD, 222 S. Main St., Stanley 28164
Craft, William Hugh, Jr., (STUDENT) 500 Umstead Rd., Apt. 201-D Chapel Hill 27514
Crumley, Charles Edwin, MD, (IM) 824 S. Aspen St., Lincolnton 28092
Dolly, Forrest Ray, (STUDENT) 210 Henderson St., Chapel Hill 27514
Fabian, Denis, MD, (PS) 503 Owen Dr., Fayetteville 28304
Fisher, Carl Ellis, MD, (PD) 318 South St., Gastonia 28052
Friedland, Gerald Wilfred, MD, (R) 3421 Kirklees Rd., Winston-Salem 27104
Gantt, Charles Bernard, Jr., MD, (R) Rt. 12, Box 674, Sanford 27330
Geils, George Frederick, MD, (IM) 808 N. DeKalb St., Shelby 28150
Grooms, Gary Allen, MD, (GS) 1501 Medical Center Dr., Wilmington 28401
Hamby, James Lawrence, MD, (U), 2 Furman St., Boone 28607
Harvin, Allan Brabham, MD, (ORS) 809 Simmons St., Goldsboro 27530
James, Francis Marshall, III, MD, (AN) 2845 Fairmont Rd., Winston-Salem 27106
Jones, Edward Claude, (STUDENT) P.O. Box 382, Chapel Hill 27514
Jones, James Marshall, Jr., MD, (IM) 1225 E. Fifth St., Winston-Salem 27101
Kahl, Frederic Ross, MD, (CD) 3501-H Hyde Park, Winston-Salem 27101
Kim, Kyung-Hwae, MD, (OBG) P.O. Box 190, Plymouth 27962
Marston, Charles Thomas, Jr., (STUDENT) RFD 6, Box 462, Chapel Hill 27514
Maurer, Frederick Sigurd, MD, (FP) Route 1, Grover 28073
McClain, Eldon Duane, MD, (PTH) 306 W. Wilson Creek Dr., New Bern 28560
McCloud, Willard Laverne, MD, (OBG) 1334 N. Patterson Av., Winston-Salem 27105
McRee, Christine Ellis, MD, (CHP) Route 1, Wake Forest 27587
McLamb, Joseph Timothy, MD, (ORS) 809 Simmons St., Goldsboro 27530
Otteni, Gerald Vincent, MD, (R) 102 Ingleside Dr., Concord 28025
Park, Yong Ho, MD, (GS) 230 Hawthorne Rd., Elkin 28621
Parker, Michael Young (STUDENT) 411 N. Columbia St., Chapel Hill 27514
Ramsdell, Charles Michael, MD, (IM) 1705 W. Sixth St., Greenville 27834
Reams, Calvin Joshua, MD, (Intern-Resident) 12 Ashley Rd., Durham 27704
Smith, Ronald Steven, (STUDENT) 1902 Queen St., Apt. E-2, Winston-Salem 27103
Walker, John Ingram, MD, (Intern-Resident) 4312 Samoa Ct., Durham 27705
Willis, Henry Stuart Kendall, Jr., MD, (FP) 125 W. Central Av., Mount Holly 28120
Zemp, Charles Hubert, MD, (PD) (Renewal) 328 S. Mulberry St., SW, Lenoir 28645

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category I credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only

when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

May 6-9

122nd Annual Session of the North Carolina Medical Society
Place: Pinehurst Hotel and Country Club, Pinehurst
For Information: William N. Hilliard, Executive Director, North Carolina Medical Society, Box 27167, Raleigh 27611

May 7

"Alternatives for the Aged" — Saint Albans Psychiatric Hospital Annual Spring Conference
Place: Saint Albans Psychiatric Hospital, Radford, Va.
For Information: George K. White, Administrator, Saint Albans Psychiatric Hospital, Radford, Va. 24141 Tel: 703-639-2481

May 7-9

Pulmonary Infections in Pediatric Patients
Place: Quail Roost Conference Center, Rougemont
Registration: Limited to 50 participants
Credit: 11 hours; AAFP credit applied for
For Information: Alexander Spock, M.D., P.O. Box 2994, Duke University Medical Center, Durham 27710

May 12-13

Breath of Spring '76: Respiratory Care Symposium
Fee: $25
Credit: 12 hours; AAFP credit applied for
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 14-16

11th Annual Meeting, North Carolina State Society, American Association of Medical Assistants
Place: Great Smokies Hilton, Asheville
Fee: $25; Students $20; Saturday only $10
For Information: Miss Shirley J. Mathis, Convention Chairman, c/o Jean M. Harkey, L.P.T., P.O. Box 5731, Asheville 28803

May 20-21

Management Dimensions of Medical Staff Leadership
Place: Sheraton National Motor Inn, Arlington, Virginia
For Information: American College of Hospital Administrators, Glen C. Irving, 450 West Broad Street, Suite 313, Falls Church, Virginia 22046

May 20-22

National Conference — Daycare for Older Adults: The New Modality
Sponsor: Older American Resources and Services Program, Center for the Study of Aging and Human Development
Fee: $60; enrollment limited to 200
Credit: AAFP credit applied for
For Information: Mrs. Dorothy K. Heyman, MSW, Executive Secretary, P.O. Box 3003, Duke University Medical Center, Durham 27710

May 21-23

10th Annual Duke — McPherson Otolaryngology Symposium
Place: McPherson Hospital, Durham
For Information: Joseph Farmer, Jr., M.D., P.O. Box 3805, Duke University Medical Center, Durham 27710

May 26

Recent Trends in Therapy of Myocardial Infarction Including Efforts to Limit the Size of Myocardial Infarction
Place and time: Elks' Club, Southern Pines, (Country Club of Southern Pines); 6:30 pm
Fee: $11.50
Credit: 2 hours; AMA Category 1; AAFP approved
For Information: C. Harold Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

May 27-28

The 27th Scientific Sessions and Annual Meeting of the North Carolina Heart Association
Place: Benton Convention Center and the Winston-Salem Hyatt House, Winston-Salem
Sponsors: The North Carolina Chapter of the American College of Cardiology will be one of the co-sponsors of the sessions, and will hold its sessions, which are open to all physicians, on May 28. Special concurrent sessions will be held for nurses, emergen medical technicians, and cardiology technologists
For Information: Thomas R. Griggs, M.D., North Carolina Hea Association, P.O. Box 2408, Chapel Hill 27514

June 22-24

North Carolina Hospital Association Annual Meeting
Place: Blockade Runner, Wrightsville Beach
For Information: Diane Turner, NCHA, P.O. Box 10937, Raleig 27605

ITEMS OF SPECIAL INTEREST

Humanities Seminars for Medical Practitioners

The National Endowment for the Humanities will provide tuitic to 60 physicians and other health professionals who wish to partic pate in seminars to be presented during 1976 by distinguishe humanists from the fields of philosophy, religion, sociology ar history. "The Endowment's goal in sponsoring these seminars is t help improve the quality of leadership in the medical profession, b bringing humanistic knowledge and understanding to bear on prol lems which arise in the practice of medicine." The date, location seminar, application deadline, name and position of seminar dire tor, and address to write for additional information on respectiv seminars is as follows:

June 1-30, 1976 (applications by April 15) Write: Prof. Renee Fox, Chairman, Dept. of Sociology, 128 McNeil Bldg. CR, U. Pa., Philadelphia, Pa. 19174.

June 28-July 23, 1976 (applications by April 15) This seminar wi be held at Stanford Univ., Stanford, Calif. Write: Prof. William May, Chairman, Dept. of Religious Studies, Sycamore Hall 23 Indiana Univ., Bloomington, Indiana 47401.

August 9-September 3, 1976 (applications by May 13) Write: Pro John C. Burnham, Dept. of History, The Ohio State Univ., 23 West 17th Avenue, Columbus, Ohio 43210.

September 13-October 8, 1976 (applications by May 13) Writ Prof. H. Tristram Engelhardt, Jr., Institute for the Medica Humanities, Univ. of Texas Medical Branch, Galveston, Texa 77550.

The Endowment awards will provide free tuition, $1,200 to hel cover expenses, and travel reimbursement up to $300.

Courses In Ultrasound

A series of three ten-week postgraduate courses in Soni Medicine at Bowman Gray School of Medicine will be offered o the following dates: September 27-December 3, 1976, January 1 March 18, 1977, and April 11-June 17, 1977. These courses ar designed to provide background, techniques, experience an knowledge so that the individual will be able to set up both a ultrasonic laboratory and a training program. Participants may at tend the entire course or only those portions which are of interest t them. Enrollment is limited. Graduates receive 30 credit hours pe week in Category 1.

The program will cover acoustics, instrumentation, scanning an applications to obstetrics, gynecology, ophthalmology, adult an pediatric cardiology, the abdomen, the breast, radiation therap planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D. Director, Postgraduate Medical Sonics, Bowman Gray School o Medicine, Winston-Salem, North Carolina 27103.

PROGRAMS IN CONTIGUOUS STATES

May 3-5

The 1976 Southeast Emergency Medicine Congress
Place: Fairmont Colony Square Hotel, Atlanta, Georgia
Sponsors: The Southeast Chapters of the American College o Emergency Physicians, School of Medicine Medical College o Georgia (sic.), and in conjunction with the Emergency Depart ment Nurses Association
Fees: $100 (ACEP), $125 (Non-ACEP Physician), $40 (EDNA), $5 (Non-EDNA Nurse), $40 (Registered EMT), $50 (Non Registered EMT), $25 (Residents, Interns, Medical & Nursin Students with Letter from department chief), $100 (EMS Ad ministrators with letter on EMS System stationery), $12 (Others).
For Information: Registrar, 1976 Southeast Emergency Medicin Congress, 1919 Beachway Road, Suite 5C, Jacksonville, Florid 32207

May 10-13

The Frontiers in Cardiology
Place: Royal Coach Motor Hotel, Atlanta, Georgia
Sponsors: Council on Clinical Cardiology, American Heart Associ

ation; Department of Medicine, Emory University School of Medicine in cooperation with the Georgia Heart Association
e: ACC members $125; non-members $175
edit: AMA Category I
r Information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

May 21-22

inical Rheumatology for the Practicing Physician
ace: Bonhomme Richard Inn, 500 Merrimac Trail, Route 143, Williamsburg, Virginia
onsors: Virginia Chapter of The Arthritis Foundation; Virginia Regional Medical Program; Medical College of Virginia — Virginia Commonwealth University; University of Virginia School of Medicine; Eastern Virginia Medical School
e: $25
edit: 8¼ hours; AMA Category 1; AAFP credit applied for
r Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, P.O. Box 91, Richmond, Virginia 23298

Medical College of Virginia

The number in parenthesis, following the title, indicates the mber of hours for that particular course.

May 17-18	EEG Symposium (14)
May 21	Annual Spring Forum for Child Psychiatry (4)
June 2	Pediatric Nephrology for Practicing Physicians (4)

For further information on the above CME opportunities write to e Department of Continuing Education, School of Medicine, edical College of Virginia, Box 91, Richmond, Virginia 23298

The items listed in this column are for the six months immediately llowing the month of publication. Requests for listing should be ceived by WHAT? WHEN? WHERE?, P.O. Box 15249, urham, N.C. 27704, by the 10th of the month prior to the month in hich they are to appear. A "Request for Listing" form is available request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

"Busy work" is the phrase which for years has been he accursed nomenclature of women's auxiliaries. In male-dominated society, whatever the "little woman" found to do outside the house was often regarded as an attempt to seem important on her own rather han working in partnership with men to accomplish wice as much.

Several years ago the Auxiliary to the North Carolina Medical Society dropped "woman" from its itle because it was no longer appropriate. Today the auxiliary works hand in hand with the doctors to achieve the same goals for the medical profession and he health of the state. The joint effort for legislation to mprove the professional liability situation in the state s a recent example. Assuring the medical doctor an even shake requires education of the lay public as well as the General Assembly. The auxiliary has willingly taken an active role in instructing friends and neighbors and assisting in letter writing campaigns to help improve climate and get legislation considered and passed.

The February 18, *AM News* spoke of the crisis in medical education. Tuitions are rising and federal financial aid has been severely curtailed. Even the most liberal members of the Senate and House say that the states and the private sector should take up the burden of financial assistance to medical students. The auxiliary has been aware of this situation for some time and has been pushing for increased contributions to AMA-ERF. (As a sign of the times, well-endowed Stanford University Medical School, for the first time this year, sought $150,000 in AMA-ERF funds and hopes to double that next year.) Even now awareness of the crisis is not all it should be. These funds are made available to the "medical school of your choice" for tuition and other critical school expenses. The North Carolina Medical Auxiliary is stressing individual personal contributions of at least $15 per member and/or spouse as well as making available for sale a number of items such as a bicentennial plate from which $5 of the $13.50 price goes to AMA-ERF.

Last year the auxiliary gave approximately $24,000 to AMA-ERF. This year the auxiliary is stressing the need for much, much more.

The county auxiliaries also contribute to the state auxiliary's Student Loan Fund, an additional source of aid to those who qualify for financial assistance to complete their education in the health sciences. Again the source is small compared to the need.

The auxiliary works alongside the medical society in AMPAC-MEDPAC in the areas of political education and candidate support. Many medical crises could be eased if not eliminated by the election of well-informed, understanding representatives on the state and national levels.

Another strong unifying push is afoot in health education. Five auxiliary members, in conjunction with the medical society and the Department of Public Instruction, are working to improve the qualifications of health education teachers from kindergarten through high school. It takes training to teach not just treatment in crisis but sanitation, safety and maintenance of good health. The future rewards are mind-boggling. What better way to fight drug addiction, obesity, venereal disease and dangerous driving habits?

Members of the North Carolina Medical Auxiliary are busy, and not even the most dyed-in-the-wool male chauvinist, once informed, could call what the auxiliary does "just busy work."

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. Herman Grossman, professor of radiology and pediatrics, is acting chairman of the Department of Radiology while a search is under way for a new department head.

The absence was created by the resignation of Dr. Richard Lester who left to join the faculty at the University of Texas Medical School in Houston.

Grossman earned his B.A. at the University of North Carolina, an M.A. at Wesleyan in Connecticut and his M.D. at Columbia in 1953. He has been at Duke since 1971.

Dr. Hsioh-Shan Wang, 47, a member of the Duke faculty since 1964 and chief of the Day Unit in the Department of Psychiatry, has been promoted to full professor of psychiatry.

* * *

A major research effort to determine the feasibility of using concentrated amounts of a natural body chemical to dissolve gallstones is getting under way here.

Successful results could mean a considerable reduction in the number of gallstone disease patients requiring hospitalization and surgical treatment.

Funded by a grant from the National Institutes of Health, the study is to run for three years and eventually will involve up to 900 patients nationally. As one of the 10 institutions chosen as treatment centers, Duke's share of the total grant is $499,520.

The study involves the use of chenodeoxycholic acid (CDCA) which is one of the primary bile acids normally produced by the liver. The bile is stored in the gallbladder until it is needed to aid in digestion of fats in the diet. Stones form when there is a heavy concentration of cholesterol in the bile.

Dr. Malcolm P. Tyor, head of the division of gastroenterology in the Department of Medicine, said the study will attempt to show that by "feeding" additional quantities of CDCA it is possible to improve the body's ability to cope with cholesterol buildup, thus preventing the formation of stones.

In addition, he said, it is hoped that the treatment will make it possible to dissolve stones that already have solidified.

* * *

Duke is ahead of the national average in the number of women being admitted to and graduating from medical school.

There were 34 women among the 114 students in the 1975 entering class. This amounted to 29.8 percent of the class compared to a national average of 27 percent.

The number of women graduates from the medical school has risen steadily over the past 10 years.

In 1966 Duke was slightly behind the national average. Its five women accounted for 6.2 percent of the medical graduating class that year as compared with 6.9 percent nationally.

But by 1971 women at Duke made up 12.5 percent of the class while the national average was 9.2 percent.

The gap widened slightly by last year. Duke's medical graduates in 1975 included 21 women, or 17.2 percent of the class, compared with 13.4 percent nationally.

The national figures are from the American Medical Association's 75th Annual Report on medical education.

* * *

A new program in family medicine designed to make the family doctor a better scientist is starting here.

Dr. E. Harvey Estes Jr., chairman of the Depart-

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ment of Community Health Sciences, reported that a faculty research and training grant amounting to $802,885 has been received from the Robert Wood Johnson Foundation of Princeton, N.J., to support the program for three years, beginning July 1.

Focusing on epidemiology — the basic science discipline dealing with the cause, distribution and control of disease within a community — the project will attempt to make doctors better able to recognize the cause of illness among their regular patients, and to be more effective in drawing up plans for control of the illness.

"We want to equip the family doctor with the ability to recognize unique phenomena, and to interpret their significance," Estes said. "We want him to be able to evaluate whether it means something. That's what epidemiology will teach him to do."

"Intensive training in epidemiology hasn't been given to family doctors in the past," he said, "just to public health doctors." With such training, Estes believes that doctors in a community setting could contribute greatly to existing knowledge within epidemiology, as well as improve the quality of care to their own patients.

The family doctor with such training should also be more able to study the occurrence of illness in the family unit, and to distinguish between the effects of heredity and the effects of a common exposure in the home, he said.

The new project will be a joint endeavor between Duke and the University of North Carolina School of Public Health at Chapel Hill.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

A four-drug therapy first proposed at the Bowman Gray School of Medicine is yielding promising results in the fight against stages three and four of Hodgkin's disease.

An international evaluation of the therapy, conducted since 1972 by Acute Leukemia Group B, has shown that 75 per cent of patients using the therapy for remission induction and long-term followup maintenance are free of the disease 36 months after the therapy was started.

The drug regimen proposed at Bowman Gray consists of Nitrosourea, Vinblastine, Prednisone and Procarbazine. The standard treatment for advanced Hodgkin's disease, in use since 1964, consists of nitrogen mustard, Vincristine, Prednisone and Procarbazine.

The therapy which originated at Bowman Gray was proposed as a way of reducing the side effects associated with nitrogen mustard and Vincristine in the standard treatment for advanced Hodgkin's.

So many people treated with the new drug therap are still in complete remission that the average lengt of remission has yet to be determined. And no on knows what the median length of survival will be.

But the new treatment is producing better result than the standard therapy for advanced Hodgkin's which produces an average length of remission of 3 months and a median survival time of 59 months.

A total of 562 patients were in the comparativ study as of November, 1975, making it one of the larg est studies of treatment for Hodgkin's disease eve done.

* * *

The federal government's Indian Health Servic has adopted an instructional program, developed a Bowman Gray, for teaching physician assistants.

It is being used in the PA program at the India Health Service Hospital in Gallup, New Mexico. Stu dents enrolled in the program represent Indian tribe in New Mexico, Oklahoma, Arizona and Sout Dakota, as well as natives of Alaska.

The Bowman Gray instructional program, called a self-instructional/tutorial (S.I./T.) curriculum iden tifies that material which is essential for the physicia assistant to learn to function effectively. The physi cian assistant program at Bowman Gray has identifie 106 of the most common medical problems seen in a primary care practice.

Learning under the S.I./T. is generally done in smal groups, with the first quarter of the curriculum in volved in the basic sciences and the last three-quarters of the nine-month S.I./T. curriculum placing emphasis on those 106 complaints. The remainder of the two year Bowman Gray PA program is taken up wit clinical training.

The Indian Health Service's use of the S.I./T. has been a field test for the new curriculum and represents the first "export" of the curriculum. Bowman Gray believes that several other physician assistant programs will adopt the new curriculum within the next couple of years.

* * *

E. Lawrence Davis, a Winston-Salem attorney an a member of the North Carolina Senate, has beer elected vice chairman of the Medical Center Board o the Bowman Gray School of Medicine and North Carolina Baptist Hospital. Dr. R. F. Smith Jr. o Hickory is chairman of the board.

The board was established in 1974 to provide a better means of coordinating the work of the hospital and medical school. The board consists of eight trustees of Wake Forest University, eight trustees of Baptist Hospital and a member of the professional staff o the medical center.

Wake Forest trustees recently appointed to two year terms on the board include Mrs. Polly Lambeth Blackwell of Winston-Salem; Robert R. Forney o Shelby; Dr. George W. Paschal Jr. of Raleigh; and Leon L. Rice Jr. of Winston-Salem.

Appointed from the Baptist Hospital Board o

rustees were E. J. Prevatte of Southport; Dr. Ernest . Stines of Canton; and Miss Joyce E. Warren of inton.

Dr. Jesse Chapman of Asheville was re-appointed a one-year term.

Elected to the board's executive committee were Edwin Collette of Winston-Salem and Francis E. arvin of Wilkesboro.

* * *

Dr. James E. Leist, instructor in community edicine, has been appointed assistant dean for continuing education at Bowman Gray.

Dr. Leist also is deputy director of the Northwest rea Health Education Center (AHEC).

* * *

Dr. Paul B. Comer, assistant professor of anesesia, has been named to the editorial advisory board *Respiratory Therapy*.

* * *

Dr. Courtland H. Davis Jr., professor of eurosurgery, was installed as president of the South-n Neurosurgical Society during the organization's nual meeting in New Orleans.

Dr. Frederick W. Glass, assistant professor of surgery, has been appointed to the Undergraduate Education Committee of the American College of Emergency Physicians. The same organization has appointed Dr. David S. Nelson, clinical assistant professor of surgery, to its Emergency Medical Services Committee, and Dr. George Podgorny, clinical assistant professor of surgery, as its chairman of the Section on Education and as chairman of the college's Scientific Assembly and Symposium.

American Academy of Family Physicians

Six North Carolina physicians were named to commissions and committees of the American Academy of Family Physicians when its board met in December in Hawaii.

James G. Jones, M.D., of Greenville was named to the commission on education; George T. Wolff, M.D., of Greensboro, chairman of the commission on health care services; Thornton R. Cleek, M.D., of Asheboro to the finance committee; Clement C. Lucas Jr., M.D., of Edenton, to the publication committee; George W. Brown, M.D., of Hazlewood to the committee on scientific program; and Cranford O. Plyler Jr., M.D., of Thomasville to the committee on 1976 state officers' conference.

Month in Washington

Opposition to the Administration's proposals to change Medicare appears to be almost universal on Capitol Hill. The American Medical Association, the American Hospital Association, the AFL-CIO, the National Council of Senior Citizens are among many frequently crossed organizations that have joined in assailing the President's proposal.

The Administration has asked Congress to approve a new catastrophic benefit for Medicare coupled with much higher cost-sharing, to impose percentage "caps" on Medicare reimbursement for hospitals and physicians, and to change Medicaid into a block grant program for the states.

The House Ways and Means Health Subcommittee, headed by Rep. Dan Rostenkowski (D-Ill.), chaired three days of hearings as the Ford proposal was intended to take effect in March and Congressional approval was necessary. Any illusions the Administration may have entertained that some important support might surface for the Medicare plan were swiftly dispelled by the parade of hostile witnesses.

Rostenkowski chided the Administration for seeking early enactment without being able to provide Congress with a legislative proposal by the time hearings started. From the tone of Rostenkowski and other Subcommittee members in their questioning, there seems little chance of the proposal getting anywhere.

Raymond T. Holden, M.D., Chairman of the AMA's Board of Trustees, said, "The proposed changes would not only be impractical, but would also be inherently unfair to all parties concerned. Unfortunately, the unfairness would be especially hard upon the beneficiaries of the Medicare program."

Discussing the proposed four percent limitation in 1977 on increases in Medicare physician reimbursement, Dr. Holden said, "We must point out unequivocally that the percentages proposed are wholly unrealistic. The proposal ignores the realities occurring in our economy throughout the country. Moreover, inflationary conditions existing generally in our economy cannot justifiably be the basis for imposition of arbitrary and discriminatory ceilings on a single segment of the economy."

"To impose such arbitrary limits on only one segment of the economy and then to expect a continuation of beneficiary satisfaction for having benefits paid by Medicare (as promised by the program) is naive. The health care sector of our society cannot operate in a vacuum. It is subject to the same costs of living and costs of doing business as is any other segment of society. It cannot be expected to provide high quality care while having reimbursememt limited to unrealis tic levels."

The AMA Chairman told the Subcommittee th proposed limitations on increases in charges are i reality a response to a problem created in large mea sure by government itself. "Providers and physician cannot be subject to ever increasing regulations an requirements . . . and yet be expected to keep charge at less than cost levels. These special requirements ar on top of the inflationary problems faced by ther along with everyone else."

Dr. Holden noted that both physicians and hospital also "are experiencing highly unusual expenses rela tive to professional liability insurance."

"If the limitations were imposed, some healt facilities could face bankruptcy," Dr. Holden saic "The patient will pay more, and the federal goverr ment will again have promised a broad program whil seeking to limit payment for the care received. Unde the guise of holding down costs to the federal goverr ment, the costs would, in fact, be increased to pa tients. The federal government must realize that onc a program is legislated the service does not becom free. But that, as with services generally, paymer must be provided. In this instance we believe that it i unconscionable on the part of the Administration t shift costs to the beneficiary under the pretense c trying to limit the costs of the program to the federa government."

The proposals creating the four and seven percer (on hospitals) limitations "are clearly discriminator and arbitrary," he said. "They should be rejecte summarily. Physicians have already been subjected t unreasonable and arbitrary controls. First the 83r percentile formula, then the various phases unde price controls, and now the 75th percentile whic itself is controlled by an arbitrary economic index.

"These inequities are further magnified by the ur realistic Medicare practice which bases current pay ments upon data almost two years old. While phys cians have accepted their responsibility in meeting th needs of the elderly, it is time for the government t meet its responsibility of fulfilling the commitment made to the elderly under Medicare."

Bert Seidman, Director of the AFL-CIO's Soci Security Department, said Labor was "dismayed" b the Administration's recommendations, which he de clared would "create a most serious barrier to healt care for the elderly." Seidman argued that the pr posed reimbursement controls on hospitals and phys cians would simply shift the financial load to nor

Medicare patients in hospitals and result in fewer physicians accepting assignment.

* * *

The sounds of a catastrophic-only national health insurance plan for this year still reverberate through Senate halls.

Senate Majority Leader Mike Mansfield (Mont.) and Republican Leader Hugh Scott (Pa.) recently agreed during a joint television appearance on backing catastrophic and on predicting it has a good chance of clearing Congress this year.

Chief Congressional sponsor of a catastrophic-oriented plan — Sen. Russell Long (D-La.) — said in a separate appearance that he believes Congress will approve his bill this session. Congress will go beyond what President Ford recommended in the way of catastrophic benefits for Medicare beneficiaries, Long said, and extend the concept to all Americans. The Chairman of the Senate Finance Committee said that for the average working man with a long siege of illness and very high medical expenses "we are going to provide some help for him, too."

* * *

The Administration has told Congress it won't oppose a national health insurance (NHI) program until the economy brightens. However, Health, Education and Welfare Secretary David Mathews has conceded the plan — when submitted — will be close to the Nixon Administration's so-called CHIP plan mandating comprehensive private health insurance coverage to be offered by employers.

Mathews appeared before the House Commerce Subcommittee on Health as it opened the 1976 hearings on NHI. Under questioning from Subcommittee Chairman Paul Rogers (D-Fla.), Mathews said CHIP remains the basic Administration NHI plan and that opposing it "is a matter of timing."

* * *

A Senate report charges that some clinical laboratories involved in Medicaid have operated on a kickback basis with physicians and clinics.

Chairman Frank Moss (D-Utah) of the Senate Special Committee on Aging said the report "concludes that, at least in the states which came under investigation, kickbacks are widespread among labs specializing in Medicaid business. In fact, it appears necessary to give a kickback to secure the business of physicians or clinics who specialize in the treatment of welfare patients."

The report focused on Illinois. Other states mentioned were New York, New Jersey, Michigan, California and Pennsylvania.

A staff witness told the Committee at a hearing that the staff estimates that at least $45 million of the $213 million Medicare-Medicaid payments to clinical laboratories is either fraudulent or unnecessary. Average kickback was 30 percent of the lab's charge, the report estimated.

The report says a small number of labs control the Medicaid business in the involved states. In New York, according to the report, 17 facilities control 70 percent of the Medicaid business; in New Jersey, 12 labs control nearly 60 percent of Medicaid payments; in Illinois, 26 labs handle over 90 percent of the volume.

In response to numerous press queries generated by the Committee's report including a filmed version of the charges carried nationally by CBS's program "Sixty Minutes," Max H. Parrott, M.D., AMA President, made the following statement:

"I would remind physicians and the public alike that the AMA Code of Ethics is very clear on the matter of laboratory charges.

"The physician's ethical responsibility is to provide his patients with high quality services. As a professional man, the physician is entitled to fair compensation for his services. But he is not engaged in a commercial enterprise and he should not make a markup, commission or profit on the services rendered by others.

"If after due process a physician is found to have violated the Code of Ethics in this or any other respect, he is fully liable for whatever professional penalties may be imposed, in addition to whatever penalties may be imposed by law."

* * *

The Health, Education and Welfare Department has been accused of attempting a shocking invasion of privacy in proposing to collect social security number identification of hospitalized patients and their physicians.

The AMA told HEW that "In this age of great concern over the right of privacy on the part of all citizens in our country, we are shocked that a federal department would now formally propose to establish a mechanism by which most physicians and every hospitalized Medicare, Medicaid, and Title V recipient could be classified, identified, matched, compared, reviewed and computerized with the impersonal ease of electronic machines."

The social security information would be part of the data collected by the Dept. for Uniform Hospital Discharge Abstract (UHDA) for federal medical programs. Purpose is to gather and coordinate statistical information which also could be used by planning bodies, accrediting organizations, hospitals, and private third-party payors.

The form would require the names of patient and attending physician and operating physician as well as their society security numbers.

The AMA noted in a formal comment that such use of social security numbers as universal identifiers has been criticized both by Congress and HEW in the past as a significant threat to peoples' right of privacy.

"There is well founded reason to fear that universal identifiers might be potentially available for abuse," the AMA said. "If, for example, each individual is identified in all of his activities by a single number and

his activities are tabulated in a number of different record systems, all computerized, the universal identifier tends to erode the barriers between information systems. The fact that the social security number is already in such wide use makes any further encouragement for its use as contemplated by the proposed UHDA, highly dangerous."

* * *

Staff of the House Commerce Health Subcommittee has prepared a discursive dictionary designed to steer lawmakers through the maze of terms — medical, legal, and federal — involved in an intelligent discussion of national health insurance.

The 183-page document also will help physicians who have dealings with the federal government and Congress. It contains concise definitions of most of the pertinent legal and governmental terms and acronyms ("alphabet soup expanded") flavored with a touch of whimsy.

Illustrations range from a drawing of the lower intestines (see borborygmus) to a handsome full-page sketch of andreas vesalius and a two-page biography ("a wonderful man").

In an introduction, Subcommittee Chairman Paul Rogers (D-Fla.) said the developing debate on NHI ("a term not yet defined in the United States") employs a "bewildering array of new and unfamiliar terms." He described the discursive dictionary a "the first reasonably complete dictionary of term relevant to the consideration of NHI and health car available."

Skipping through the document one finds defini tions of such terms as triage, trolley car policy (benefi for injuries only when hit by a trolley car), slip law respondent superior (employers' liability for malprac tice of an employee), ping-ponging (passing patient from one physician to another), halo effect, gork chainside and backdoor authority.

A typical definition—*legislative history:*

> the written record of the writing of an act of Congress. It may be used in writing rules or by courts in interpreting the law to ascertain or detail the intent of the Congress if the act is ambiguous or lacking in detail. The legislative history is listed in the slip law (final version) and consists of the House, Senate and conference reports (if any), and the House and Senate floor debates on the law. The history, particularly the committee reports, often contains the only available complete explanation of the meaning and intent of the law.

Put together by Lee Hyde, M.D., professional staf member of the Commerce Health Subcommittee, th dictionary is available in limited quantities on writte request to: (Please enclose a self-addressed envelope Interstate and Foreign Commerce Committee, 212 Rayburn House Office Building, Washington, D.C 20515.

Book Reviews

Physician's Handbook. Eighteenth Edition. Marcus A. Krupp, M.D., et al (eds). 754 pages. Price, $8.00. Los Altos, California: Lange Medical Publications, 1976.

Current Medical Diagnosis and Treatment. Fifteenth Edition. Marcus A. Krupp, M.D., and Milton J. Chatton, M.D. (eds). 1,062 pages. Price, $14.00. Los Altos, California: Lange Medical Publications, 1976.

These perennials from Lange have long been among the best buys in medical books. With rare exceptions, each edition is up to the high standard set by its predecessor; writing is clear and to the point, the price is right and the contents up to date. The *Handbook* even fits the hand, no mean feat these days, and should be very attractive for the house officer. *Current Medical Diagnosis and Treatment,* while primarily for the general internist and family practitioner, is worth the attention of medical subspecialists and even surgeons faced by some everyday problems which can be solved without getting a consultant or picking up the knife.

JOHN H. FELTS, M.D.

In Memoriam

Warren Harding Crumpler, M.D.

Warren Crumpler died on January 7, 1976, at the age of 55 following a long illness. He had practiced in Mount Olive, North Carolina, from 1946 until his retirement because of illness.

A native of the Roseboro area in Sampson County, he graduated from Roseboro High School, Wake Forest College and the Bowman Gray School of Medicine. His internship was at Rex Hospital in Raleigh and he did a year of residency at the Duke University School of Medicine. During World War II he served in the United States Navy.

He was a member of the Wayne County Medical Society, North Carolina Medical Society, Southern Medical Association and the American Academy of Family Practice.

A long time member of the Mount Olive Volunteer Fire Department, he was serving as department chaplain at the time of his death. He was active in church and civic affairs until illness curtailed his activities.

He is survived by his wife, Adelaide, five daughters and three sons.

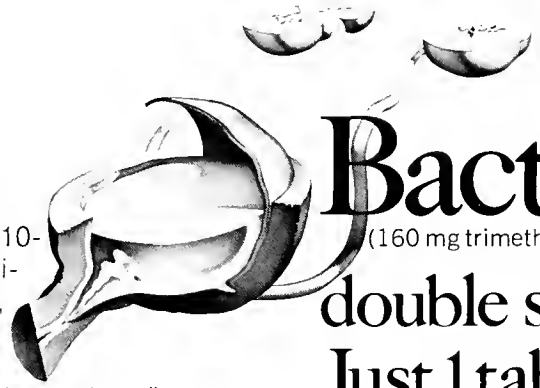
Dr. Crumpler's dedication to his profession and his patients as well as his genuine concern for people have marked his career since its inception. He was beloved by colleagues, patients and his community in general.

Warren Crumpler was a devoted physician and will be sorely missed by the Society and by his patients.

WAYNE COUNTY MEDICAL SOCIETY

Index to Advertisers

10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions were mild (*e.g.*, nausea, rash), more serious reactions can occur with these drugs. See manufacturers' product information for complete listing.

Note: Bactrim single strength tablets were used in these clinical trials. However, studies have established the bioequivalency of Bactrim DS with the single strength tablets.

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(160 mg trimethoprim and 800 mg sulfamethoxazole)

double strength tablets Just 1 tablet B.I.D.

Bactrim™

(80 mg trimethoprim and 400 mg sulfamethoxazole)

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For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections.

The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

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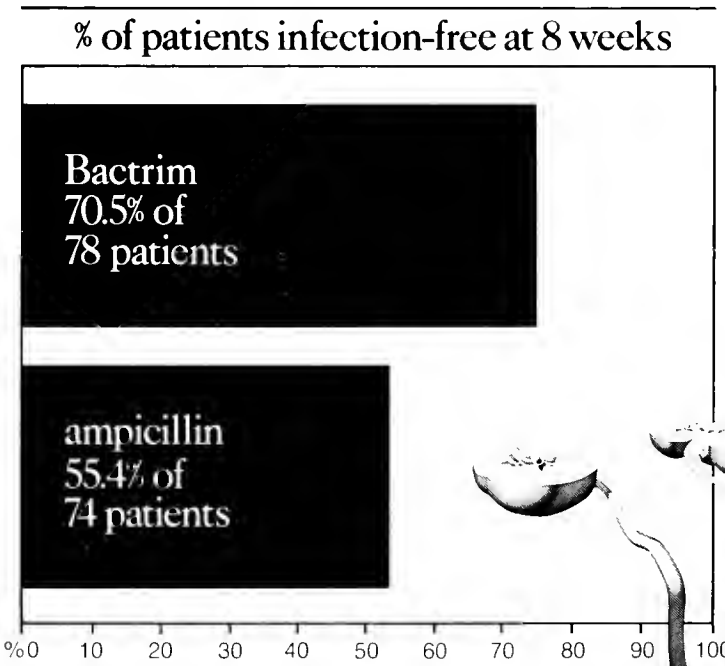
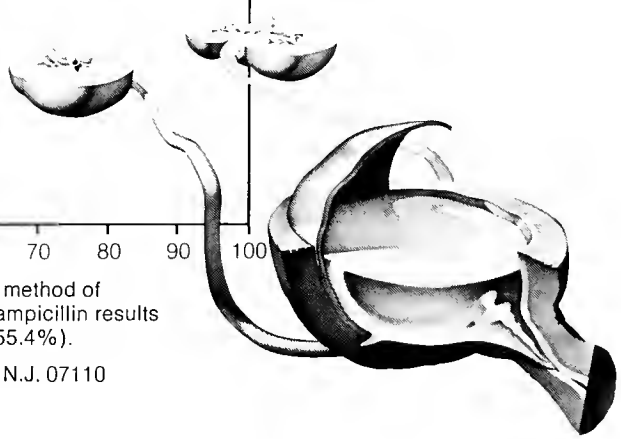


*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07110



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Please see summary of product information on preceding page.

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The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY May 1976, Vol. 37, No. 5

NORTH CAROLINA
Medical Journal

IN THIS ISSUE: Metachronous Quadruple Malignant Neoplasms: A Case Report and Review of the Literature, Lloyd H. Harrison, M.D., John M. Nordan, M.D., Martin I. Resnick, M.D., and Richard T. Myers, M.D.; Microsurgical Composite Tissue Transplantation: A New Horizon in Plastic and Reconstructive Surgery, Donald Serafin, M.D., and Nicholas G. Georgiade, M.D.; Cardiopulmonary Resuscitation (CPR) as Treatment of Cardiac Arrest (First of Three Articles), James T. McRae, M.D.

1976 Committee Conclave
Sept. 22-26—Southern Pines

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

Both often

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

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in psychoneurotic anxiety states with associated depressive symptoms

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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Published Monthly as the Official Organ of
The North Carolina
Medical Society

May 1976, Vol. 37, No. 5

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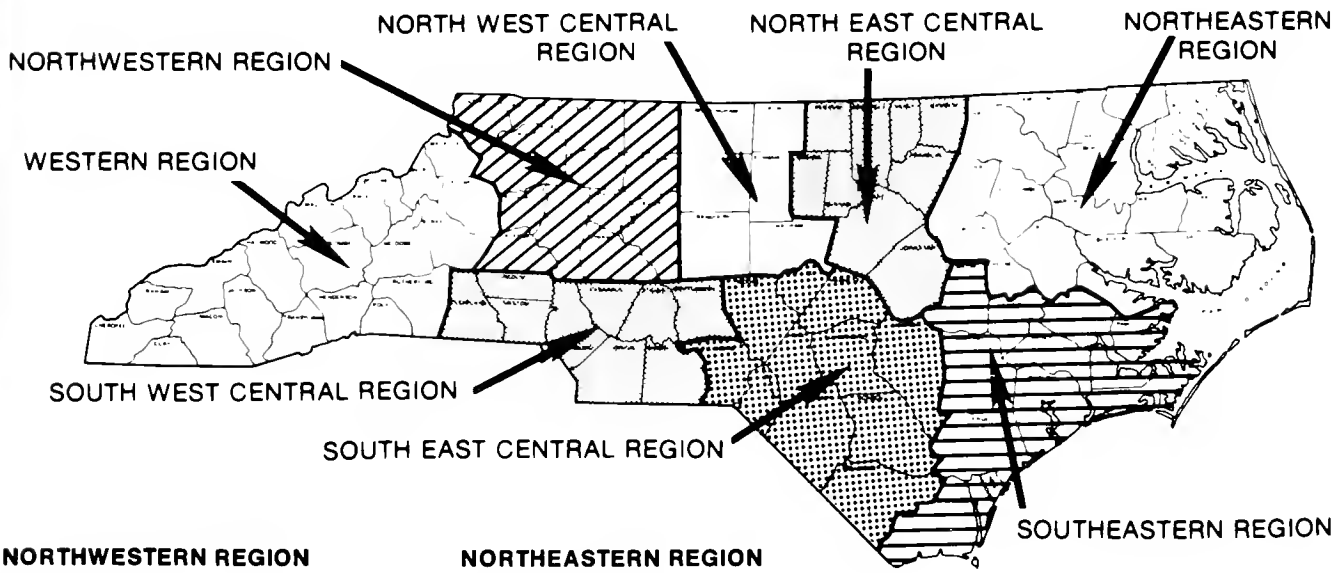

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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
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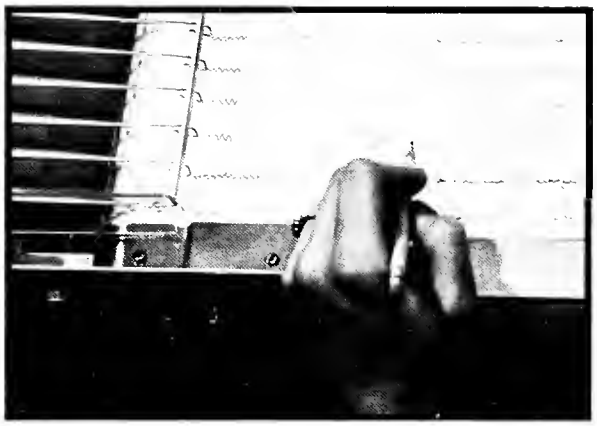

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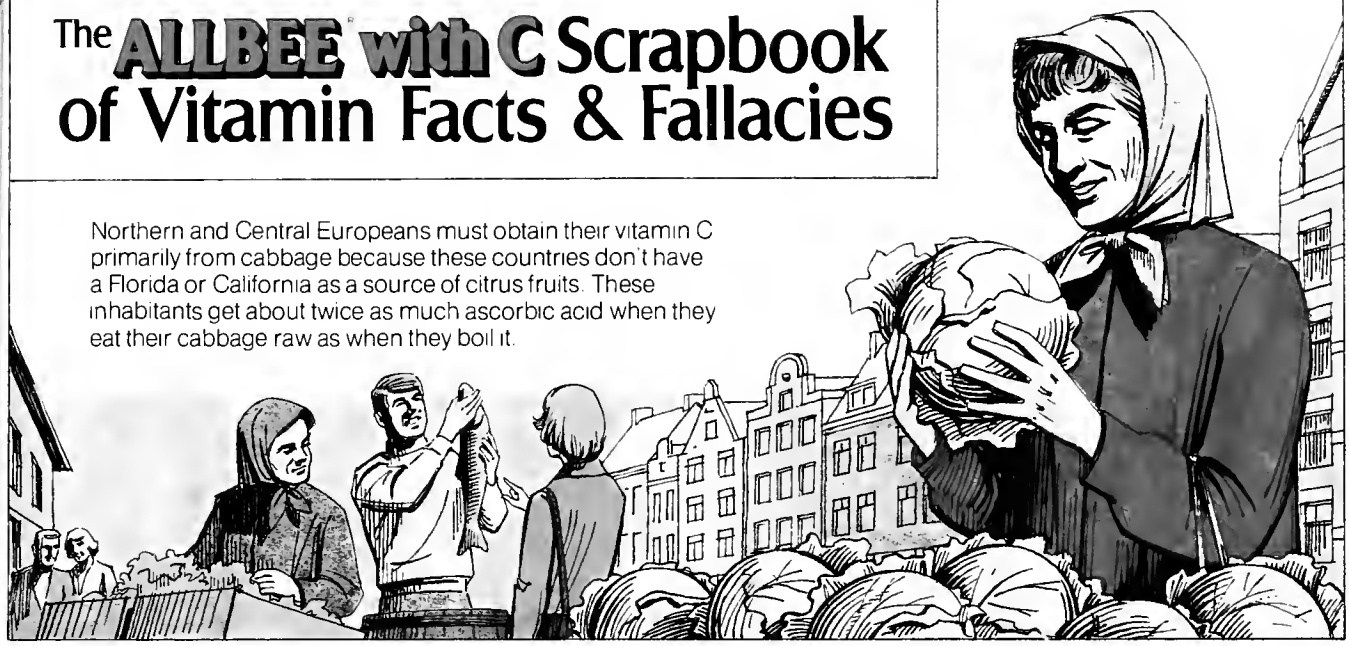

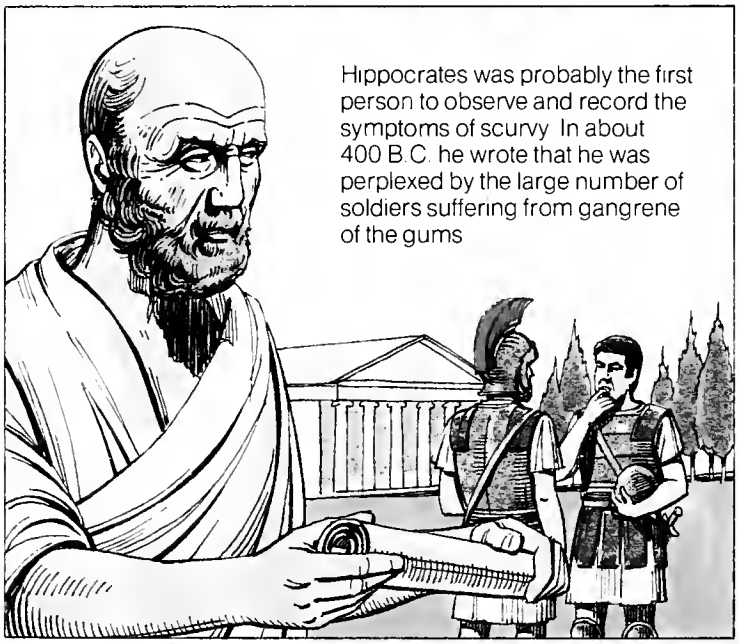

Hippocrates was probably the first person to observe and record the symptoms of scurvy. In about 400 B.C. he wrote that he was perplexed by the large number of soldiers suffering from gangrene of the gums

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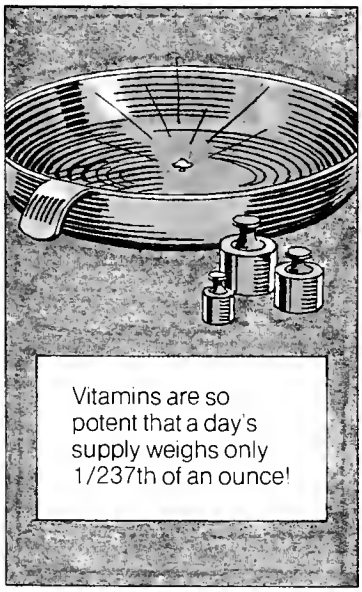

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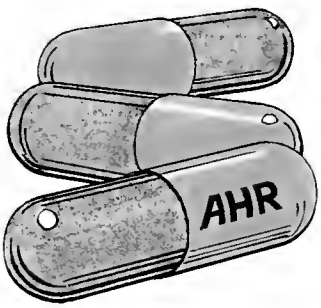

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Metachronous Quadruple Malignant Neoplasms: A Case Report and Review of the Literature

Lloyd H. Harrison, M.D., John M. Nordon, M.D., Martin I. Resnick, M.D., and Richard T. Myers, M.D.

ALTHOUGH considered rare at the time of the first report by Billroth[1] in 1819, multiple primary malignant neoplasms now occur frequently.[2] More than 200 skin carcinomata have been reported in an individual[3] but three or more primary carcinomas in different organ systems remains rare. [2,4,5] This report describes a new case of quadruple primary malignancy and reviews 26 previously reported cases of multiple primary malignant tumors in different organ systems.

CASE REPORT

Mrs. H. F. was first seen in this institution in May, 1961, at the age of 49. She complained of lumbar back pain radiating to the lateral aspect of the right thigh. The pain was more severe when she walked, stood or strained. She said she had had a total hysterectomy for adenocarcinoma of the uterus and postoperative irradiation at another institution in 1955. She had been well until April, 1960, when she had a partial resection of her transverse colon for adenocarcinoma which on pathologic examination had metastasized to two of nine regional lymph nodes. Tissue sections of these tumors were reviewed and the diagnoses of adenocarcinoma of the endometrium and adenocarcinoma of the colon were confirmed. At this time she showed no evidence of malignancy but had a herniated intervertebral disc at L4 and L5 which was removed. After surgery her symptoms resolved.

She returned in December, 1961, complaining of easy fatigability and dizziness. She had observed red blood mixed with each stool over the preceding week and had noted small amounts of blood in her stool intermittently for about three months. She was anemic with a hemoglobin of 9.5 gm. Chest x-ray showed no evidence of metastatic disease but barium enema revealed an annular constriction in the region of the hepatic flexure. On December 27, 1961, the distal 3-4 inches of ileum, cecum, and the colon to the mid-transverse area were removed. The area of previous anastomosis was easily identified and was free of tumor both grossly and microscopically. Five centimeters proximal to this anastomosis was a 3.0 x 3.5 cm circumferential mass in the wall of the colon. In the adjacent mesentery was a 4.0 x 2.5 x 2.5 cm mass. These masses were identified as moderately differentiated adenocarcinoma of the colon.

She did well following this colon resection though she was seen on several occasions due to back pain from what proved to be a traumatic compression fracture of the T_{12} vertebral body.

In April, 1973, she was readmitted for evaluation of left flank pain which had been present for about three months. Two months before admission her local physician had found some microscopic hematuria, and a month before admission she had had an episode of gross hematuria with passage of clots. In each case she was treated with antibiotics and the bleeding cleared. But her flank pain persisted.

At admission, her hemoglobin was 13.3 gm. The urine contained over 50 white blood cells and only 3-4 red blood cells per high power field. Blood urea nitrogen was 32 mg%. Chest x-ray and barium enema showed no evidence of recurrent or metastatic tumor, but intravenous pyelography revealed non-visualization of the left upper urinary tract. Retrograde pyeloureterograms demonstrated numerous filling defects in the left ureter with pyelocaliectasis. A selec-

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Reprint requests to Dr. Harrison

tive renal arteriogram showed a small, hydronephrotic left kidney with no tumor vasculature. Urine cytology was reported as positive for malignant cells.

On May 1, 1973, the patient underwent left nephroureterectomy. Multiple tumor masses were found in the left ureter. These were identified as poorly differentiated transitional cell carcinoma. No bladder tumors were noted at the time of cystoscopy and there was no evidence of hepatic or other intraperitoneal malignancy.

The patient is presently alive with no evidence of recurrent disease 36 months following her last operation.

DISCUSSION

Criteria of Selection

Criteria for selection of cases of multiple malignant tumors were defined by Billroth[1] who stated that: (1) each tumor must have an independent histological appearance; (2) the tumors must arise in different situations, and (3) each tumor must produce its own metastases. These criteria proved to be too strict primarily because even solitary malignant tumors could be excluded if they had not yet metastasized.

In their 1932 review, Warren and Gates[5] proposed more liberal criteria on which subsequent reports including the present case have been based. They proposed that: (1) each of the tumors must present a definite picture of malignancy; (2) each must be distinct, and (3) the probability that one is a metastasis of the other must be excluded.

The patient described in this report had four documented separate malignancies; adenocarcinoma of the uterus, transitional cell carcinoma of the ureter, adenocarcinoma of the transverse colon and adenocarcinoma of the colon in the region of the hepatic flexure. Multiple colon tumors are not a rare occurrence[2,4,5] and though one cannot be absolutely certain, it appears that each of the two bowel tumors in this patient represents a primary neoplasm. Their distance apart and separate nodal metastasis point to different sites of origin. Other indications that each is a primary tumor are the lack of diffuse metastasis or other bowel tumors at the time of the second colon resection, the absence of any evidence of tumor recurrence and the long tumor-free status of the patient.

Due to the frequent occurrence of multiple primary tumors in some single tissues and organs, and some paired organs, Werthamer[6] proposed more restrictive criteria stating that: (1) the malignancies must be primary in different organs, (2) paired-organ primary malignant degenerations, whether synchronous or metachronous, should be considered as representing one tumor, (3) multiple malignancies in the same organ should be considered as representing a single primary malignancy, (4) the lower intestinal tract, as well as the uterus, should be considered single organs, (5) there must be histologic evidence of the aberrant growth in the organ tissue, and (6) a careful histologic attempt to exclude metastasis should be made. Only 26 cases of quadruple malignant neoplasms fulfill these criteria.

Frequency

The frequency of multiple malignant tumors varies from less than 1%[7] to 11%[8] in generalized series. If one considers multiple carcinomas in single tissues the incidence has been recorded as high as 21%[9]. Table 1 tabulates several series of carcinoma patients and the incidence of multiple primaries. These include clinical and autopsy series and show an overall incidence of 3.4%. This agrees with the large cumulative series reported by Malmio[2] who found an incidence of 3.5%.

Age and Sex

The age at which the highest incidence of multiple cancer occurs varies. Goodner[10] reported the highest incidence between 60 and 90 years of age and others have noted similar findings.[11,12] Hanlon[13] states "they (multiple primary malignant tumors) occur among persons who are several years older than those who harbor but one carcinoma." However, Warren and Gates[5] found no difference in age distribution between patients with single and multiple carcinomas. More recent studies show that the age of highest incidence is the same in patients with single and multiple primaries though the incidence of carcinoma in females begins to rise earlier due to the earlier age of occurrence of some female genital tumors.[2,7,14]

There is a slight increased incidence of multiple carcinomas in males in most large series[2,4,7] though Warren and Gates[5] initially reported a higher incidence in females. There is generally a higher ratio of males to females in autopsy series[14,15] and a higher ratio of females to males in clinical series.[12,16] Lerman and colleagues[17] surveyed patients with papilloma of the urinary bladder and found that about one-third of females and about one-seventh of males with papilloma developed later or concomitant cancers of sites other than the urinary tract.

Blood Groups

Since the initial report of an association between carcinoma of the stomach and blood group A,[18] investigators have examined blood groups in cases of multiple carcinoma for a similar association. While some small series have reported a relationship between blood group A and multiple carcinoma,[19] larger series[20,21] have reported no difference in blood types (ABO or Rh) between patients with multiple carcinoma and either the normal population or patients with single malignancies.

Immunologic Factors

Recently Dellon and colleagues[22] evaluated the cellular immunity and histocompatability antigens of 42 patients who had had from two to four primary malignant neoplasms. No pre-existing impairment in immunocompetence or abnormal HL-A antigens were observed, suggesting that multiple neoplasms may result from an unidentified immunologic defect or from repetitive exposure to some unknown inducing agent.

TABLE 1
Incidence of Multiple Primary Malignancies

Author	Number of Cancer Patients	Number of Multiple Primaries	% With Multiple Primaries
Haddow and Boyd NY J Med 63: 95, 1963	61,288	428	0.73%
Nixon South Med J 65: 305, 1972.	4,260	50	1.17
Mohamadi Grace Hosp Bull 48: 90, 1970	10,990	249	2.27
Kuehn Am J Surg 111: 164, 1966.	19,711	460	2.33
Schreiner Am J Cancer 20: 418, 1934	11,212	307	2.7
Bugher Am J Cancer 21: 808, 1934	983	30	3.1
Hurt and Brodero J Lab Clin Med 18: 765, 1933	2,124	71	3.34
Peller Am J Hyg 34: 1, 1941.	5,876	270	3.9
Thomas Am J Med Sci 247: 427, 1964	2,346	99	4.2
Wallace Br J Surg 45: 165, 1957.	3,006	134	4.5
Stalker Surg Gynecol Obstet 68: 595, 1939	2,500	113	4.5
Owen JAMA 76: 1329, 1921	3,000	143	4.7
Cameron J Clin Pathol 14: 574, 1961	924	45	4.88
Moertel Cancer 14: 221, 1961	37,580	1,909	5.1
Warren and Ehrenreich Cancer Res 4: 554: 1944	3,907	234	6.0
Watson Cancer 6: 365, 1953	16,626	1,182	7.11
Burke Am J Cancer 27: 316, 1936	583	46	7.8
Yashar Am J Surg 112: 70, 1966.	1,470	88	8.4
Tsukada Cancer 17: 1229, 1964	3,647	310	8.5
Goodner Cancer 9: 1248, 1956	1,315	126	9.5
Pickren NY J Med 63: 95, 1963	2,094	232	11.0
TOTAL	195,442	6,526	3.34%

TABLE 2
Synchronous Quadruple Primary Neoplasms

Author	Age	Location of Primary Tumors				Survival
Goetze[30] 1913	75	Colon	Stomach	Rectum	Prostate	Autopsy Report
Lauda[31] 1925	54	Epith Ca Tonsil	Epith Ca Esophagus	Common Bile Duct	Adenoca Rectum	4 mos
Hornback[27] 1964	63	Adenoca Rectum	Leukemia	Adenoca Gallbladder	Renal Cell Ca	2 mos
McKee[32] 1967	74	Sq Cell Ca Esophagus	Carcinoid Small Bowel	Adenoca Colon	Adenoca Prostate	1 yr 3 mos
Yamasaki[33] 1970	51	Esophageal Melanoma	Stomach	Adenoca Colon	Trans Cell Ca Ur Bladder	10 mos
Average	63 yr					7 mos

Susceptibility

The prognostic significance of the occurrence of one malignant tumor with regard to the development of subsequent new primary malignant tumors has been extensively debated. Most investigators[4,14,16,23] agree with the theory proposed by Warren and Gates[5] that multiple carcinomas occur more frequently than would occur by chance and that these individuals make up a group with increased susceptibility to malignancy. These conclusions have been based on series in which multiple tumors of single tissues or organs were included with multiple tumors of separate organ systems and considered as single entities. On this basis Warren and Ehrenreich[4] reported susceptibility in this group 11 times that of the normal population.

Various studies have shown that if an individual has had one malignancy he is more likely to have a second malignancy in the same tissue organ system than an individual who had never had a carcinoma.[16,24,25] This presumably occurs because the entire organ system has been exposed to the same or similar carcinogen.[23] An increased incidence of multiple malignant tumors has been observed in paired organs. This most commonly occurs in the female breast[26] but has also been seen in the ovary,[27] testes[28] and lung.[29]

SURVEY OF REPORTED CASES OF METACHRONOUS QUADRUPLE MALIGNANCIES

We have been able to collect only 26 cases of quadruple primary malignant neoplasms which fulfill the criteria of Werthamer.[6] In the over 195,000 cases reviewed this represents an incidence of 0.014%. We have been unable to confirm the original report in one case (Aoki, 1967) but have included it because it appears to conform to the above criteria.

There were five cases[27, 30–33] of synchronous quadruple malignancies (Table 2). These are considered separately since their clinical course and prognosis differ distinctly from those with metachronous disease. The average age of

these patients at the time of death was 63.4 years. All died of their first known malignant tumor or at the time of surgery for the tumor. The longest reported survival after the diagnosis of malignancy was 15 months and the average survival was slightly over six months.

The majority of patients with quadruple malignancies are in the group with metachronous disease (Table 3). There are 20 such cases reported with an average age of 60.0 years at the time of their initial neoplasm. Eleven of these patients had died at an average age of 69.2 years while nine were alive at an average age of 63.8 years. Of these nine, eight had no evidence of tumor at last report and one had marked regression of carcinoma of the prostate following orchiectomy and estrogen therapy. The average length of survival from their first malignancy for the entire group was 10.9 years and of those eight tumor-free patients the intervals since their last malignancy ranged from two months to five years.

The eleven patients who died succumbed to either progression of the malignancy or to complications of surgery for removal of the tumor. However, none died of their first malignancy and most died of their third or fourth. In only one case was evidence of the first tumor present at the time of death.

It has been suggested that pa-

TABLE 3
Metachronous Quadruple Malignant Neoplasms

Author	Age*	Location 1st Tumor	Interval	Location 2nd Tumor	Interval	Location 3rd Tumor	Interval	Location 4th Tumor	Survival**	Alive Without Malignancy	Cause Of Death
Leyden Ztschr f Krebsforsch 7 675, 1909	Not Reported	Ca Uterus and Cervix		Bilateral Breast Ca		Skin Ca		Stomach Ca	15 yr		4th Ca
Luchsinger Frankfurt Z Path 40 417, 1930	87	Basal Cell Ca	3 yr 6 mos	Sq Cell Ca Bronchus		Kidney		Lung Osteosarcoma	3½ yr		2nd Ca
Goldman Am J Surg 69 265, 1945	47	Breast	17 yr	Sq Cell Ca Skin	1 yr	Cervix	1 yr	Adenoca Rectum	19 yr		? 4th Ca
Holland JAMA 128 356, 1945	55	Adenoca Breast	6 yr	Sq Cell Ca Esophagus		Basal Cell Skin	3 yr	Adenoca Rectum	11 yr		
Mass Gen Hosp N Engl J Med 235 691, 1946	74	Trans Cell Ur Bladder	4½ yrs	Gallbladder		Adenoca Prostate		Adenoca Rectum	4½ yr		2nd Ca
Goldstein Bull Sch Med Univ Maryland 32 140, 1948	53	Trans Cell Ur Bladder	8 mos	Renal Cell Ca	1 yr 5 mos	Adenoca Sig Colon		Basal Cell Ca Skin	2 yr		Peritonitis
Ettinger Am J Surg 78 894, 1949	53	Trans Cell Ur Bladder	4 yr	Adenoca Jejunum + Colon	1 yr	Adenoca Recto-Sigmoid		Sq Cell Ca Skin	7 yr	+	
Duncan NY State J Med 50 1278, 1950	56	Ca Vulva	8 yr	Adenoca Rectum	7 yr	Adenoca Uterus	3 yr	Basal Cell Ca Skin	18 yr	+	
Frech Southern Surgeon 16 13, 1950	59	Adenoca Breast	1 yr	Adenoca Ovary	10 mos	Ca Pancreas		Papillary Ca Renal Pelvis	1 5/6 yr		3rd Ca
Albrecht Oncology 5 12, 1952	60	Adenoca Stomach	4 yr	Esophagus		Adenoca Prostate		Basal Cell Ca Piriform Sinus	4 yr		2nd Ca
Watson Plast Reconstr Surg 11 183, 1953	50	Breast	4 yr	Sq Cell Ca Skin		Thyroid		Fibrosarcoma Esophagus	12 yr	+	
Cameron J Clin Pathol 14 574, 1961	65	Cecum	2 mos	Breast	2 yr 2 mos	Basal Cell Ca Skin	1 mos	Adenoca Rectum	2 5/12 yr		Pulmonary Embolism
Werthmer JAMA 175 558, 1961	61	Endometrial Ca	2 yr 7 mos	Adenoca Breast	8 mos	Basal Cell Ca Skin	9 mos	Adenoca Duodenum	4 1/6 yr		4th Ca
Hankins JAMA 179 896, 1962	50	Sq Cell Ca Cervix q	6 yr	Adenoca Breast	5 mos	Sq Cell Ca Bronchus	6 mos	Trans Cell Ca Ur Bladder	13 yr	+	
Schapira J Mount Sinai Hosp NY 30 228, 1963	61	Adenoca Stomach	14 yr	Renal Cell Ca	2 yr	Basal Cell Ca Skin	6 yr	Ca Prostate	22 yr	+***	
Gracey Arch Intern Med 115 217, 1965	40	Adenoca Thyroid	13 yr	Sq Cell Ca Cervix	18 yr	Trans Cell Ca Ur Bladder	3 yr	Adenoca Stomach	35 yr	+	
Baldwin Am J Surg 111 230, 1966	68	Adenoca Stomach	3 yr	Sq Cell Ca Tonsillar Pillar	2 yr	Broncho-genic Ca		Renal Cell Ca	5 yr		3rd Ca
Oren South Med J 60 280, 1967	50	Trans Cell Ca Ur Bladder	5 yr	Sq Cell Ca Larynx	4 yr	Adenoca Colon	3 yr	Sq Cell Ca Bronchus	13 yr	+	
Aoki Strahlentherapie 140 275, 1970	57	Cecum		Ovary		Cervix		Stomach			
Caselnova Obstet Gynecol 32 826, 1968	18	Basal Cell Ca Scalp	3 yr	Adenoca Ovary	2 yr	Adenoca Colon + Endometrium	5 yr	Adenoca Rectum	5 yr	+	
Nixon South Med J 65 305, 1972	56	Adenoca Rectum	13 yr	Alveolar Cell Ca Lung	1 yr	Sq Cell Ca Lip	3 yr	Osteogenic Sarcoma	17 yr		4th Ca
Average	56		6 yr		2.5 yr		1.5 yr		10.9 yr		

*Age - Refers to Age at Time of Diagnosis of First Tumor
**Survival - Total Interval From Diagnosis To Time Of Case Report
***Alive With Regression Of Prostatic Ca

tients who have multiple malignant tumors have survived mild types, such as skin carcinoma, and not survived more aggressive tumors. This is not true of the patients reviewed here. The nine living patients have survived carcinomas of the urinary bladder, breast, colon, esophagus, lung and stomach.

The patient who survives a tumor in one organ system appears to have at least as good a chance for cure of the second tumor as the patient who has his first malignancy.[4] Therefore, one should always consider the possibility of a second or third primary malignancy and should attack each new primary neoplasm aggressively. A patient should not be allowed to die of a second or third primary neoplasm because the possibility of multiple primary tumors was not considered or the patient was felt to have a high susceptibility to carcinoma and, therefore, a poor prognosis for cure.

Why these patients appear to be cancer-prone is not known. Possibly some defect has occurred in the immunologic surveillance system; however, studies in this area have been inconclusive. Repeated exposure to a specific carcinogen, as has been suggested by others, could certainly explain the predisposition observed in these individuals.[14] Obviously further investigations are required to define the abnormality. More important, these patients need to be identified so that they may be more closely followed.

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Equally astonishing and unaccountable is the degree of timidity, terror, incapacity, or whatever other magic-like spell it is, which annihilates, for a time, the whole energy of the mind, and renders the victim of dyspepsia afraid of his own shadow — or of things more unsubstantial (if possible) than shadows! It is not likely that the great men of this earth should be exempt from these visitations, any more than the little; and if so, we may reasonably conclude, that there are other things besides CONSCIENCE, which "make cowards of us all" — and that, by a temporary gastric derangement, many an enterprise of "vast pith and moment" has had its "current turned awry," and "lost the name of action." The philosopher and the metaphysician, who know but little of these reciprocities of mind and matter, have drawn many a false conclusion from, and erected many a baseless hypothesis on, the actions of men. Many a happy and lucky thought has sprung from an empty stomach! Many an important undertaking has been ruined by a bit of undigested pickle — many a well-laid scheme has failed in execution from a drop of green bile — many a terrible and merciless edict has gone forth in consequence of an irritated gastric nerve! — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 31-32.

Microsurgical Composite Tissue Transplantation: A new horizon in plastic and reconstructive surgery

Donald Serafin, M.D., and Nicholas G. Georgiade, M.D.

THROUGHOUT the ages extensive soft tissue defects and losses have encouraged surgeons to find better methods for wound coverage. Local cheek flap reconstruction of noses was described as early as 600 B.C. in the Sushruta Veda[1] of India. The surgery was performed by the Koomas caste of potters to reconstruct noses amputated for punishment.[2,3]

The inadequacy of local tissues for flap reconstruction led to the concept of distant direct flap coverage. The ravages of syphilis and dueling injuries of the 16th Century prompted Tagliacozzi[4,5] in 1597 to describe a method of total nose reconstruction using the arm flap.

Filatov[6] in 1917 introduced the concept of the tubed pedicle flap. This concept was later popularized by Gillies[7-9] and the idea grew to include the movement of large amounts of distant composite tissue on an intermediate forearm carrier to its new location. Moving large blocks of tissue required multiple stages and often left a significant secondary deformity of the flap donor site.

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Presented in part to the 121st Annual Session of the North Carolina Medical Society, Pinehurst Hotel and Country Club, May 1-4, 1975.

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McGregor in 1972[10] is credited with making the distinction between an axial pattern and a random pattern flap. McGregor and Jackson[11,12] noted that the presence of a predictable vascular pattern within a flap permits it to be raised and transferred without delay despite a significantly increased length-breadth ratio.

The introduction of microsurgical technique by Jacobson and Suarez[13] in 1960 began the era of replantation. Digital vessels with an external diameter of 1.0 mm could be anastomosed with predicted patency rates.[14-16] Due to experience gained in replantation efforts and in the experimental laboratory, transplantation of composite tissue became a clinical reality in 1973.[17] Since the first report by Daniel, other series have demonstrated an awakening interest.[18,19]

CASE REPORT

A 50-year-old man was admitted to the Division of Plastic and Reconstructive Surgery at Duke University Medical Center for treatment of a close-range shotgun blast to the left side of his face. He underwent initial debridement of the extensive soft tissue injury with open reduction and fixation of left hemimandible, tracheostomy and cervical esophagostomy (Figure 1). The postoperative course was complicated by meningitis and diabetes insipidis which were treated nonoperatively with resolution of symptoms.

Thirteen days later a free composite groin flap (Figure 2) was used to provide soft tissue coverage to the left side of his face (Figure 4). The posterior or intra-oral portion was resurfaced with a split thickness

Fig. 1. Status five days after shotgun wound left hemiface, debridement and open reduction mandible.

Fig. 2. Groin flap dissected from surrounding tissue preserving vascular attachment.

Fig. 3. Composite tissue transplantation complete with split thickness graft to resurface intra-oral portion of flap.

Fig. 4. Approximately two weeks post composite tissue transplantation.

graft (Figure 3). The superficial circumflex iliac artery and vein were anastomosed to the external facial artery and vein which had not been damaged. The postoperative course was uncomplicated (Figure 5).

Reconstruction of extensive tissue defects can now be accomplished in a single operative procedure, without lengthy delays or multiple hospitalizations and with no significant deformity of the donor site. The groin flap is most frequently used since the ensuing defect can be concealed in the "bikini line."[20]

A two-team approach is employed. One team dissects out the groin flap and maintains its viability on the blood supply, the superficial circumflex iliac artery and vein. The other team prepares the recipient bed, locating and isolating the recipient vasculature. When all is in readiness the donor flap is separated and transferred to its recipient area. The artery and vein (1.0-3.0 mm external diameter) are meticulously approximated using the Weck* operating diploscope (16X magnification). Interrupted 10-0 Ethicon† suture on a BV6 needle is used in the anastomosis; four to six sutures are placed in the artery and six to eight in the vein. The operative procedure, which takes about 11 hours, completes the major reconstructive attempt.

Twenty-nine such procedures have been done at Duke to reconstruct areas of extensive tissue loss in the head, neck and extremities. Twenty-one cases have been completely successful, three have been partially successful (flap surviving at least 50 percent) and five have failed. In unsuccessful cases, the older, longer method of staged flap transfer can still be employed.

Fig. 5. Approximately one year after composite tissue transplantation and flap insetting.

Two factors directly influence the success of microsurgical composite tissue transplantation: The quality of the recipient vasculature and the technical expertise of the surgeon performing the anastomosis.

With increased experience, operative time should be significantly reduced.

SUMMARY

Microsurgical composite tissue transplantation is routinely employed for the immediate reconstruction of extensive tissue defects. Nineteen patients with extremity defects have had the benefit of this procedure and avoided prolonged and expensive hospitalizations and multiple operations. Ten patients with bone and soft tissue loss in the region of the head and neck have also been operated upon with this method.

Refinement of microsurgical technique and flap viability studies are continuing in our microvascular laboratory and new applications of the technique are being explored both experimentally and clinically.

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The skin and its functions are very much affected in bilio-dyspeptic complaints. It is either dry and constricted, or partially perspirable, with feelings of alternate chilliness and unpleasant heat, especially about the hands and feet. The skin, indeed, in these complaints, is remarkably altered from its natural condition; and the complexions of both males and females are so completely changed, that the patients themselves are constantly reminded, by their mirrors, of the derangement in the digestive organs. The intimate sympathy between the external surface of the body and the stomach, liver and alimentary canal, is now universally admitted, and explains the reciprocal influence of the one on the other. Many of the remote causes, indeed, of indigestion and liver-affection will be found to have made their way through the cutaneous surface. On the other hand, the great majority of those eruptions on the skin, which disfigure the countenance and cause so much irritation and suffering in various parts of the body, are now clearly traced to disorder in the stomach and bowels. The purely local treatment of these cutaneous affections, by external applications, is generally ineffectual; whereas a restoration of healthy function in the digestive organs, is almost sure to remove them, with the aid of a very few outward applications. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 33-34.

Cardiopulmonary Resuscitation (CPR) as Treatment of Cardiac Arrest

INTRODUCTION

(First of three articles)

James T. McRae, M.D.

MYOCARDIAL infarction occurs in a million Americans each year. Of these, 650,000 die, 350,000 of them before they reach a hospital.[1] Most of the deaths outside the hospital occur within two to four hours after onset of symptoms, many within the first 15 minutes. It is my belief, and that of others in the field of emergency medical care, that many of those who now die could be saved by prompt response of patients to warning symptoms and prompt action by trained personnel who can keep the victim alive until definitive care is available. Such efforts are termed life support or cardiopulmonary resuscitation (CPR). The same resuscitative techniques are useful in the early stages of both primary respiratory arrest and primary cardiac arrest. Both disorders have several causes and either, left untreated, leads quickly to the other.

Three pathophysiological types of cardiac arrest lead to sudden death unless treated early and aggressively: ventricular asystole or cardiac standstill; ventricular fibrillation; and electromechanical dissociation, formerly called profound cardiovascular collapse.

The two levels of cardiopulmonary resuscitation are basic and advanced. Basic CPR is administered by a trained person at the site of the victim's collapse without any equipment or drugs. It is sufficient to maintain life in a person with arrested breathing or cardiac arrest. Basic CPR includes artificial respiration by a mouth-to-mouth technique and, if needed, external cardiac massage. Advanced CPR is practiced by persons trained in the use of emergency medical equipment and may be done at the site of the victim's collapse, en route to a hospital or in the hospital. It adds to basic CPR the techniques of intravenous infusion, drug therapy, isolation of the airway by endotracheal intubation, ventilation with oxygen in high concentrations, monitoring and treatment of cardiac arrhythmias, and defibrillation if needed.

Both basic and advanced CPR training have been standardized by the American Heart Association and the National Research Council of the National Academy of Sciences. The American Medical Association published the first standardized CPR instructions in 1974 as a supplement to the association's journal.[1*]

The American Heart Association offers courses in CPR to physicians at national medical meetings. The physicians are asked to return to their communities and help train other instructors, who, in turn, can teach others, both laymen and physicians. The American Medical Association is offering similar courses to professionals and the American National Red Cross is giving courses to the lay public. Changes in technique are incorporated into the training as new information and experience dictate.

The success of such training depends on strict adherence to the standardized training procedure, close rapport between the American Heart Association and the instructors at all levels, recognition of the American Heart Association's authority in this area and the willingness of physicians to refresh their skills in CPR.

This article is the first of three dealing with basic and advanced CPR. The series provides an overview of the problem; it is not meant to be a substitute for a refresher course. It is intended for all in the medical profession who might be called upon to carry out CPR and is written with more than one level of education and training in mind.

CPR is primarily for the prevention of sudden, unexpected death. The emphasis in these articles will be on resuscitation of the patient with cardiac arrest from myocardial infarction since that disease is the major cause of cardiac arrest in our society. Resuscitation of children and of adults with cardiac arrest from causes other than myocardial infarction will be mentioned where pertinent.

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* Available from local American Heart Association offices.

REFERENCE

1. Standards for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care (ECC). JAMA 227 (Supplement): 833-868, 1974

Editorials

HUMAN TISSUE DONATIONS

Pursuant to a study authorized by the 1973 North Carolina General Assembly, the Legislative Research Commission in 1974 conducted a study of human tissue donation. Key testimony was heard from medical schools at Duke, Bowman Gray and UNC, the North Carolina Medical Society, the Department of Human Resources, the Department of Transportation and Highway Safety, and voluntary agencies such as the North Carolina Eye and Human Tissue Bank and the Kidney Foundation of North Carolina.

The Legislative Research Commission found that despite the efforts of groups involved in procuring and transplanting human tissue, there is still a critical need within the state for more donations of human tissue. The commission further found that the need for such tissue will continue to expand in the foreseeable future. Citing the lack of coordinated efforts between the various groups interested in the area of human tissue utilization and the restrictive classification of individuals permitted by statute to enucleate eyes, the commission made several recommendations to the 1975 General Assembly:

1. Establishment of a coordinated human tissue program within the Department of Human Resources.
2. Establishment of a Human Tissue Advisory Council to the Department of Human Resources comprised of representatives of all agencies and groups in the state involved with the acquisition and distribution of human tissues.
3. Amendment of the Uniform Anatomical Gift Act to allow groups such as physicians assistants, licensed practical nurses, registered nurses and third- and fourth-year medical students to enucleate eyes.

Last June 16, the General Assembly ratified House Bill 68 entitled, "An Act to Establish A Coordinated Human Tissue Donation Program." This bill amended Chapter 130 of the General Statutes at 130-235.1-3. The bill mandated the establishment of a human tissue program within the Department of Human Resources and an advisory council to the Human Tissue Program, and provided $50,000 to establish and conduct the program during the 1976-77 fiscal year.

The human tissue bill also calls for the support and cooperation of other departments and agencies of the state, as well as public and private groups, with the Department of Human Resources. To this end, activity has already begun. Even before actual funding begins on July 1, the Drivers License Division of the Department of Motor Vehicles has begun distributing an organ donor brochure along with drivers license renewal notices sent to each licensed driver every four years. Every month approximately 70,000 citizens will receive an organ donor brochure along with their license renewal notices. Thus over a four-year period almost every adult in North Carolina will at least be apprised of the need for organ donors and have the opportunity to sign and carry a donor card. The brochure features an "Organ Donor" sticker which may be affixed to the reverse of the drivers license. This will serve as notice to emergency or hospital personnel that an individual has expressed a preference to donate tissue for transplantation after death. The Uniform Donor Card, signed and witnessed by two persons, is a legal will and is recognized by all 50 states.

The first meeting of the Human Tissue Advisory Council created by the new legislation was in Raleigh on February 18. The council will advise and make recommendations to the Secretary of Human Resources relating to the establishment and conduct of the Coordinated Program for Human Tissue Donations. Perhaps input from this new and innovative program will decrease the deficit between tissue needed for transplantation and that available. Certainly needs for transplanting tissue such as cornea and kidney are as yet unmet, although our techniques for transplanting them are quite advanced. Education to convince the public to become donors after death must go hand in hand with vigorous efforts to educate medical professionals to use the donors who are available. Efforts such as this will mean the gift of life or sight to many who must now wait or die.

CHARLES D. LEE
Executive Director
Kidney Foundation of North Carolina

DOWN HOME

Country Ham

Southerners, particularly conservative Southerners and even more particularly conservative Southern Republicans, in public office or out, make light of government as an institution for human betterment and even tend to blame it for many of our ills. So it comes as something of a shock to learn that Sen. Jesse Helms (R-N.C.) has entered the lexicographic lists at the Department of Agriculture in Washington in an effort to get government to tell us what country ham is.

It seems that small Carolina country ham producers got upset in 1971 when big business in the form of International Telephone and Telegraph Corp., Esmark, Inc., and Smithfield Foods, Inc., brought its talent to the hog and asked the Agriculture Department to spell out what a country ham is, as if taste weren't the best test. Obviously the small producers were threatened by the big boys and were fearful that big money and a uniform product would drive them to the wall and deprive us connoisseurs of great pleasure at table.

So the department proposed that a country ham couldn't be a country ham unless it had been aged 140 days. This ruling didn't sit well with Virginia curers who use higher temperatures for as few as 55 days in their processing. So Rep. Robert Daniel of Virginia entered the linguistic tournament as the champion of the Old Dominion definition of country ham. Washington, caught in the slough between Virginia's peaks and North Carolina's valleys, retreated and withdrew the regulation. A declaration in 1972 provoked the disputants again so the department again turned tail.

But late last year, North Carolina processors urged their champion to sally forth. So Sen. Helms, according to the *Wall Street Journal* (December 12, 1975), asked Secretary Earl Butz to help out. The secretary, probably happy to be dealing with a continental problem rather than with Russians and wheat, issued a call for recipes and got 200 from six states. After due deliberation, a ham then became a country ham if it were cured for at least 70 days at a temperature no greater than 95 degrees Fahrenheit.

Sen. Helms' constituency is pleased even though country ham can now be urban or rural country ham so long as the 70:95 formula holds. But the Mother of Presidents is unhappy; Rep. Daniel suggests that the Department of Agriculture is siding with the Tar Heel state. Let us hope that whatever the ultimate formula, the small producers will survive and even multiply to the greatest good of those of us who like to define country ham by our own fashions.

One group of consumers must, however, feel left out of such delicate deliberations: those forced to eat no salt because of high blood pressure or heart failure. What are their wishes? The relationship between salt, hog meat and hypertension in the South is an old and generally honorable one. We Southerners do tend to salt our food before tasting and to be more likely to have high blood pressure, be we black or white, than New Englanders, Midwesterners and the remainder of those unfortunate enough to be unconcerned with what country ham is. It is an established folk remedy though to leave off hog meat when hypertension is diagnosed, a practice preceding the appreciation of sodium's role in the development of hypertension.

As usual, there is more to the urge for salt than we might think because high salt intake, particularly early in life, may be a factor leading to hypertension later. If this is so, a recent report[1] that young blacks require higher concentrations of salt than young whites for satisfactory taste suggests that we also need a low or no-salt country ham for those forbidden the current products whether Carolinian or Virginian.

Chestnut Blight

While we are on the subject of ham, it is worth recalling the great chestnut forests of North America. In the North Carolina mountains, these trees provided timber, shade, warmth and even mast for hogs allowed to roam and scavenge for survival until the chestnut blight, caused by the fungus *Endothia parasitica*, stripped the slopes and left only bare trunks for fence rails. Although stumps continue to sprout, shoots no longer reach maturity and the search for a resistant hybrid has been no more successful than the struggle of the shoots.

It now appears that some progress toward controlling the blight is being made with the demonstration that the virulence of the fungus can be attenuated by transfer in tissue culture of a cytoplasmic determinant.[2] This determinant acts to limit host invasion and to induce hypovirulence of dangerous fungal strains. Since it has been shown in Europe that hypovirulence can control chestnut blight in nature, there is at last hope that the disease can be controlled in this country perhaps leading to the restoration of our chestnut forests.

References

1. Desor JA, Greene LS, Maller O: Science 190: 686, 1975.
2. Van Alfen NK, Jaynes RA, Anagnostakis SL, Day PR: Science 189: 890, 1975.

TALKING BACK: AN EDITORIAL BOOK REVIEW

Medicine as a social institution has survived its association with magic, its flirtation with astrology and its capture by the church in the Middle Ages because its ultimate concern has always been the well-being of the patient. But social institutions tend toward inertia, become bound to ritual and offer rich material for humorists and satirists and challenges to legislators intent on many things at once. The doctor occupies a dangerous position — he seems to preside over life and death — and sometimes yields to the temptations to speak too authoritatively. When he escapes such traps, he can become one with doctors described in one of Whitehead's dialogues with Price.[1]

W - "One of the most advanced types of human beings on earth today is the *good* American doctor."

P - "Because in him science is devoted to the relief of suffering?"

W - "I would place it on more general grounds: he is sceptical toward the data of his own profession, welcomes discoveries which upset his previous hypotheses, and is still animated by humane sympathy and understanding."

At other times, frustrated by his culture, his patients or his colleagues, he may have trouble maintaining such an advanced position and retreat to negativism, defend the status quo or erupt into polemics. And most polemicists do indeed have something to say if their audience can be sufficiently sceptical and selective in the listening.

Medicine, the institution, the art and the science, then is constantly being remolded from within and from without — in response to our own impulses and compulsions and to increasing concern by patients about what medical care is. We deal with the sick, the wistful well and that intangible called public health. And we are faced with rising demands and shrinking resources; health expenditures accounted for 8.3 percent of the gross national product in 1975, an increase of 14 percent over 1974.

Onto this scene steps a physician with a book with the imperative title *Talk Back to Your Doctor. How to Demand (& Recognize) High Quality Health Care** which has been cited with approval by a *New York Times* reporter in his midwinter exposè of things medical. Since this editorial reviewer does not have Dr. Levin as his physician, I am in no position to talk back to him about the quality of his book. If I were, I would congratulate him in recognizing that patients teach doctors and doctors instruct patients and in being aware that when this relationship is not well-developed, quality of care is inadequate. I would suggest, however, that he seems to lose his vision as he becomes bewitched with the trappings of technology and prestige; he offers us the cookbook of routine laboratory tests, the uncertain values of screening and the big city teaching hospital urging the "sophisticated health consumer" to seek the outpatient department of medical school hospitals where chances for continuity of care — person to person — are often slim indeed. He cites favorably the *Ladies Home Journal* list of outstanding hospitals, published in 1967, but fails to note how the adequacy of medical care can be evaluated in terms of its animation "by humane sympathy and understanding," an inconsistency I would ask him to clarify.

If restoration of trust between doctor and patient is one answer to some of our current problems, Dr. Levin hasn't been very helpful because he doesn't really outline the proper way for the patient to talk with his physician; he is more concerned about the patient as adversary, talking back. That is too bad; a really good book about the educational nature of the doctor-patient relationship is a must and Dr. Levin has offered a lot of valuable data. But seriousness and sincerity often lead to excess and excess to errors as on pages 28 and 85 where our author advises us to treat hypoparathyroidism with parathyroid hormone. How can this be considered "High Quality Care?"

What all of us as physicians must avoid is behaving like Edward Lear's Jumblies who

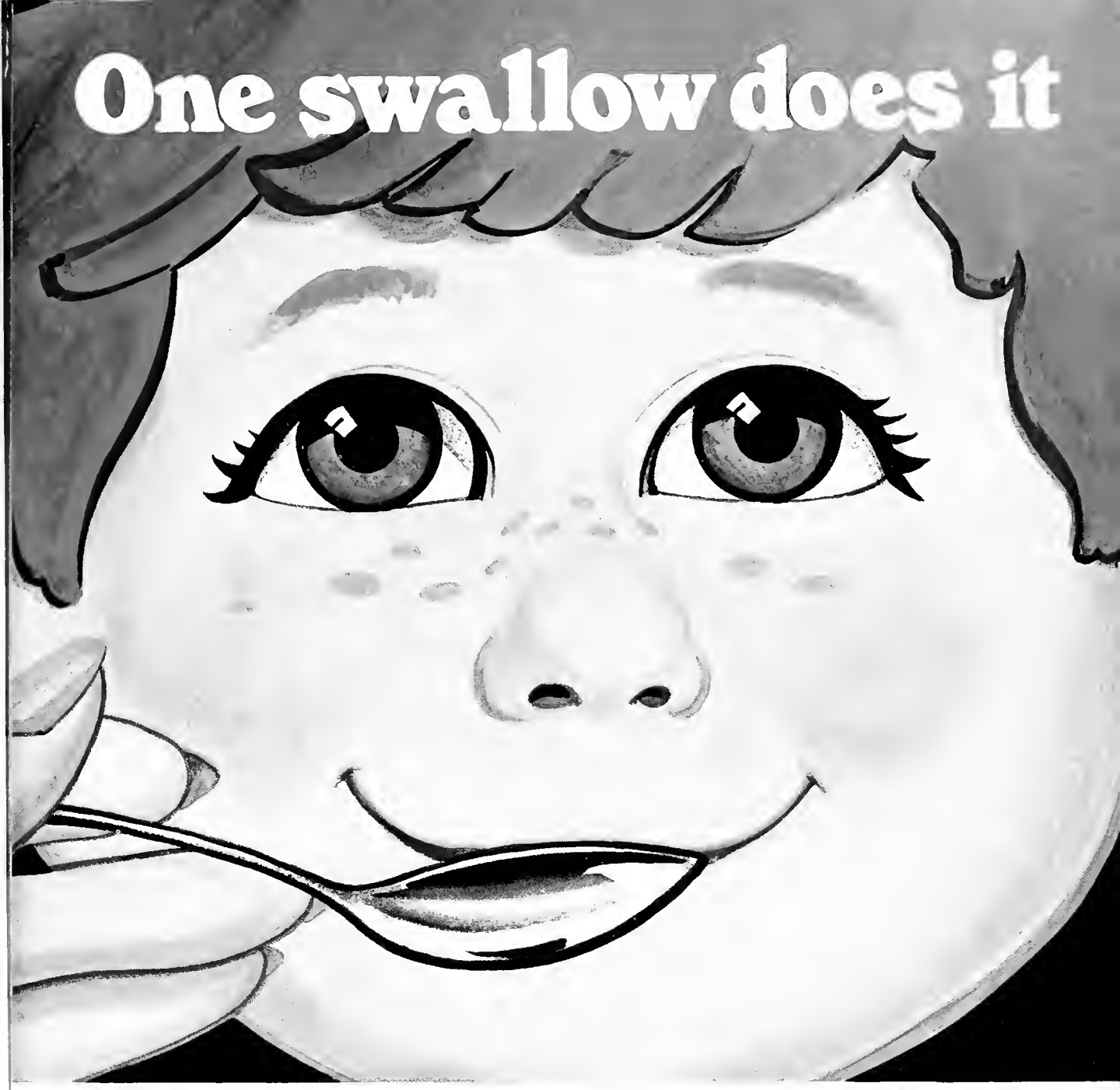
> "went to sea in a sieve, they did
> and each of them said 'How wise we are!'
> Yet we never can think we were rash or wrong
> while round in our sieve we spin."

JOHN H. FELTS, M.D.

REFERENCES

1 Dialogues of Alfred North Whitehead as Recorded by Lucien Price. New York: Mentor Books, 1956, p 136.

* *Talk Back to Your Doctor. How to Demand (& Recognize) High Quality Health Care.* Arthur Levin, M.D. 245 pages. Price, $7.95. Garden City, New York: Doubleday & Company, Inc., 1975.



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Correspondence

INSECT BITES

To the Editor:

Again this year I am compiling a biting insect summary and would appreciate any case reports of unusual allergic reactions, especially systemic reactions (sneezing, wheezing, urticaria) to bites of insects such as mosquitoes, fleas, gnats, kissing bugs, bedbugs, chiggers, black flies, horseflies, sandflies and deerflies.

I would like physicians to send me case reports covering the types of reactions (immediate and delayed symptoms), treatments, the age, sex, and race of the patient, the site of the bite(s), the season of the year, and other associated allergies.

If skin tests and hyposensitization were instituted, I would like reports of both. Please note that it is the biting (not stinging) insect in which I am interested.

If you have found any insect repellent, local treatment, or insecticides of value, I would also appreciate knowing about it.

Please send this information to:

CLAUDE A. FRAZIER, M.D.
4-C Doctors Park
Asheville, North Carolina 28801

Bulletin Board

NEW MEMBERS
of the State Society

Ali, Shamshad, MD (PD), Ste. B, 402 Fleming Ave., Marion, NC 28752
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Banfield, William John, MD (GE), 1109 Windemere Dr., Wilson 27893
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Cloninger, Timothy Earl, MD Craven Co. Hosp., New Bern 28560
Cox, Stanley Cullen, III, MD (OTO), 205 Crest Rd. Southern Pines 28374
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Hoffman, Carl Maurice, MD (OBG), 307 Lindsay St., High Point 27262
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Hucks-Follis, Anthony George, MD (NS), P.O. Box 2000, Pinehurst 28374
Hunt, William Bryce, MD (IM), 400 Edgehill Dr., New Bern 28560
Joyner, Raymond Edward, MD (U), 1002 Rollingwood Dr., Wilson 27893
Kim, Kyoung-Hi Park, MD (PD), Kinston Clinic, Suite 5, Kinston 28501
Lee, James Gary, MD (OTO), 104 E Northwood St., Greensboro 27401
Lee, Ying-Huey, MD (GS), 824 S. Aspen St., Lincolnton 28092
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Mattox, James Dwight, Jr., MD (P), 1546 Overbrook Ave., Winston-Salem 27104
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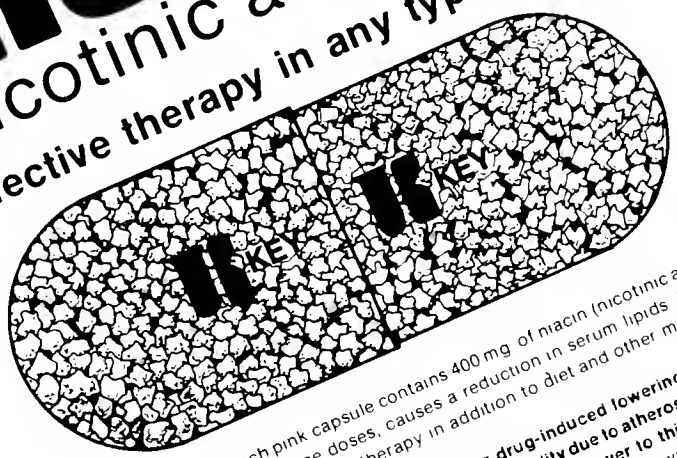

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ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache.

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Walthall, Julius Byron, Jr. (STUDENT), 215 Nature Trail Park, Chapel Hill 27514
Wang, Grena, MD (PD), 824 S. Aspen St., Lincolnton 28092
Williams, Rhoderick Thomas, Jr., MD (DR), 108 Daniel Dr., Goldsboro 27530

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

June 4

Cardiovascular Problems in the Aged
Fee: $25; James M. Johnston awards available
Credit: 6 CERP
For Information: Ruth J. Harris, Assistant Professor, UNC-CH School of Nursing, Chapel Hill 27514

June 17-19

Mountain Assembly
Place: Waynesville Country Club, Waynesville
Sponsor: Haywood County Medical Society
For Information: R. Stuart Roberson, M.D., P.O. Box 307, Hazelwood 28738

June 22-24

North Carolina Hospital Association Annual Meeting
Place: Blockade Runner, Wrightsville Beach
For Information: Diane Turner, NCHA, P.O. Box 10937, Raleigh 27605

July 4-6

Sixth Annual Sports Medicine Symposium
Place: Blockade Runner Motor Hotel, Wrightsville Beach
Fee: $20; physician and spouse or guest $40
For Information: Mr. Gene L. Sauls, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

September 10-11

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society
Place: Pinehurst Hotel, Pinehurst
For Information: Mrs. John McLain, Executive Secretary, 3209 Rugby Road, Durham 27707

September 16-19

Invitational Assembly for Advanced Urology: The Prostate
Place: Pinehurst Hotel & Country Club, Pinehurst
Fee: $135; registration is limited; pre-registration required
Credit: 18 hours
For Information: Ms. Virginia Jordan, Assembly Secretary, P.O. Box 3707, Duke University Medical Center, Durham 27710

September 17-18

6th Walter L. Thomas Symposium
For Information: William Creasman, M.D., P.O. Box 3079, Duke University Medical Center, Durham 27710

September 22-26

North Carolina Medical Society Annual Committee Conclave
Place: Mid-Pines Club, Southern Pines
Regular meetings will be scheduled for the chairman and members of almost all regular committees of the Medical Society. Committee members should plan to be present if at all possible.
For Information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

ITEMS OF SPECIAL INTEREST

Courses In Ultrasound

A series of three ten-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: September 27-December 3, 1976, January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category 1. The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.
For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem, North Carolina 27103.

October 25-29

New Concepts in General Radiology
Place: Southampton Princess Hotel, Bermuda
Fee: $250
Credit: 25 hours
Program: The scientific program will take place from 8:00 A.M. to 1:00 P.M. each day, and will be organized around a disease oriented format. Subject areas and guest faculty who will address these include: chest — Robert Heitzman, M.D., Syracuse, New York; gastro-intestinal tract — Roscoe E. Miller, M.D., Indianapolis, Ind.; genito-urinary — John A. Evans, M.D., New York, N.Y.; nuclear medicine — Alexander Gottschalk, M.D., New Haven, Conn.; pediatric radiology — J. Scott Dunbar, M.D., Cincinnati, Ohio; skeletal system — Elias G. Theros, M.D., Washington, D.C.
For Information: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham 27710

PROGRAMS IN CONTIGUOUS STATES

Note: At the time for submitting copy for the May JOURNAL the WHAT? WHEN?WHERE? editor had not received information on any continuing medical education programs which would take place in Georgia, South Carolina, Tennessee or Virginia during the period June 1976 through November 1976.

The items listed in this column are for the six months immediately following the month of publication. Requests for listing should be received by WHAT? WHEN? WHERE?, P.O. Box 15249, Durham, N.C. 27704, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

"Designed as an experience-oriented teaching device, the Hall of Health is one of the most sophisticated health education facilities in the Southeast . . ." This is how the brochure from the Mecklenburg County "Hall of Health" introduces its programs to the school classes throughout the area. Staffed by four health education teachers (three are registered nurses) and assisted by volunteers from the Mecklenburg Medical Auxiliary, the "Hall of Health" presents the

physiology of the human body appropriately from kindergarten through the 12th grade.

It all started in 1973 when the Charlotte Nature Museum director, Russell I. Peithman, called upon a member of Mecklenburg Medical Auxiliary, Freda Nicholson, the wife of H. H. Nicholson, M.D., to launch his "Hall of Health." Mrs. Nicholson accepted the challenge and by spring of 1975 the museum classes absorbed at least 15 hours a week. She suggested to the local medical auxiliary that it take on the "Hall of Health" as a project. The challenge was again accepted and auxiliary volunteers have provided the additional necessary womanpower to sustain the program. They staff the "Hall of Health," operate the projectors for film and slide presentations, operate the Transparent Anatomical Mannikin (TAM) and help with the touch-and-feel models. The hall's film library is available for the use of other auxiliaries on request.

Programs at the "Hall of Health" include such things as "The Five Senses," "The Digestive System" and a skeletal and muscle project for children from kindergarten through the second grade. Grades 3 and 4 learn more about the senses, heart and circulation and digestion. Ninth graders are required to attend a 1½-hour program on growth and development. Next year, a program will be scheduled for all the 5th graders in the area as well. This year the "Hall of Health" will handle at least 20,000 students and plans are in the works to expand the hall to handle several times that many.

* * *

Meanwhile, the Buncombe County Medical Auxiliary has had an exciting year with its Asheville Health Education Museum, housed now in a log cabin on the grounds of the Memorial Mission Hospital Complex but moving soon to the new Mountain Area Health Education Center. This year 3,500 people will visit the Health Education Museum. A successful fund-raising effort by members of the auxiliary has enabled the museum to hire a tour guide for the late afternoons when the volunteer auxiliary guides are unable to work.

A community advisory board should be implemented next year, and after further fund-raising projects the auxiliary hopes to hire a part-time director. Two auxiliary members went to Chicago to seek the advice of Richard Rush, an expert on health museums, and he has helped them develop a plan for continued growth of the museum.

* * *

The Greensboro Medical Auxiliary has purchased

the Transparent Anatomical Mannikin (TAM) to get a health museum under way in that area but no final action has been taken on the project.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Researchers at the Bowman Gray School of Medicine have found that it is possible to bring about the regression of some forms of atherosclerosis in rhesus monkeys through diet control.

Results of the research were recently presented to the American Association of Pathologists and Bacteriologists by Dr. M. Gene Bond, instructor in comparative medicine and a member of the research team.

The study originally involved 54 monkeys. All the monkeys were fed a high cholesterol diet to induce atherosclerosis.

After 19 months, 18 monkeys were removed from the study and examined to determine the extent of disease and the types of atherosclerosis created by the original diet.

Examination showed that the monkeys had developed all four of the uncomplicated forms of the disease, believed to be the same as the early forms of atherosclerosis in humans.

The remaining monkeys in the study were divided into two groups, with one group being fed a high cholesterol diet and the other group being fed a diet which kept serum cholesterol in a range normal for humans.

After 24 months on the diet, studies showed that the monkeys on the lower cholesterol diet had a reduction in two of the four types of uncomplicated atherosclerosis.

Studies are continuing on two other groups of monkeys to determine how longer periods on the diets will affect atherosclerosis.

* * *

Two of the 24 graduate fellowships in the medical sciences awarded nationwide by the National Science Foundation have been awarded to students at the Bowman Gray School of Medicine.

The two students are Mrs. Clara R. Dodge, a first-year graduate student in anatomy, and Donald R. Kohan, a first-year graduate student in physiology.

Each of the fellowships carries an award of $3,900 each year for three years of full-time study. But the fellowships can be used over a five-year period to permit students to incorporate experiences in teaching and research into their education.

More than 5,330 students competed for a total of 550 graduate fellowships awarded by the foundation in the sciences, mathematics and engineering.

Only five of the 550 fellowships were awarded to graduate students attending North Carolina schools.

* * *

Recently appointed to the medical school's full-time faculty are Dr. Paul Racz, visiting associate professor of microbiology and immunology; Dr. Janet E. Dacie, visiting assistant professor of radiology; Dr. Michael R. Adams, instructor in comparative medicine; and Patricia Ann Gibson, instructor in pediatric neurology (social work).

Appointed to the part-time faculty are Dr. Jack S. Billings and Dr. Davey B. Stallings, clinical instructors in family medicine; and Dr. Bill C. Terry, lecturer in plastic surgery (orthodontia).

* * *

Dr. E. Ted Chandler has been appointed associate professor of medicine at Bowman Gray. Dr. Chandler recently was appointed medical director for the Reynolds Health Center in Winston-Salem.

He is a 1951 graduate of Wake Forest College and holds the M.D. degree from the University of North Carolina School of Medicine. He took his internship and residency training at North Carolina Baptist Hospital.

* * *

Bowman Gray, in a cooperative arrangement with the University of North Carolina School of Medicine, is making computer assisted instruction (CAI) available to its medical students.

Four computer terminals have been installed in Bowman Gray's library, providing students with access to five major categories of computer programs.

The programs either were produced at the UNC medical school or were collected there after production elsewhere.

The five categories of programs are CRIB (computerized random item bank), which provides a self assessment process in the basic sciences for students; CNS (central nervous system) and MPNS (muscular and peripheral nervous system), both of which also are intended for student self assessment; CASE (computer aided simulation of the clinical encounter), which permits students to naturally interact with "patients" in 22 patient histories; and ACIBA (acid, base balance), a tutorial using slides in addition to the computer program.

* * *

Dr. Eugene R. Heise, associate professor of microbiology and immunology, has been elected chairman of the Committee of Histocompatibility for the Southeastern Organ Procurement Foundation. He also has been selected to serve on the Ad Hoc Contract Review Panel for the National Heart and Lung Institute.

* * *

Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology, has been elected a

member of the Lung SCOR Advisory Committee and a member of the Microbiology Test Committee of the National Board of Medical Examiners. He also has been elected president of the American Association of Microbiology Chairmen.

News Notes from the—
DUKE UNIVERSITY MEDICAL CENTER

A patient area in the Medical Center has been dedicated in honor of Dr. Julian M. Ruffin, professor emeritus of medicine. It is known as the Julian M. Ruffin Clinical Suite.

Ruffin is retired from the active faculty at Duke but is in private practice in Durham and serves as a consultant to both Duke and Watts hospitals.

A member of the original Duke medical faculty, he is a specialist in clinical gastroenterology.

* * *

Dr. William G. Anlyan was in Poland in March as a consultant to the U.S. government on medical education.

Anlyan, vice president for health affairs, addressed a session of the five-day U.S.-Polish Medical Symposium in Warsaw on the development of medical education in the United States and current programs in various countries.

In recent years Anlyan has studied comparative medical education systems on visits to countries in Europe, the Mediterranean and the Far East.

On the Warsaw trip he was consultant to the administrator of the Health Resources Administration, Department of Health, Education and Welfare.

* * *

Dr. Edward Orgain, professor emeritus of medicine, has been honored by the American College of Cardiology with its Gifted Teacher Award. The award was presented at ceremonies in New Orleans.

Orgain has been at Duke since 1934 and formerly headed the cardiovascular disease service. Last November the Duke Medical Alumni Association similarly honored Orgain with a Distinguished Teaching Award.

* * *

The Emergency Department in the new $90 million Duke Hospital North will benefit from a $300,000

grant from the Kate B. Reynolds Health Care Trust of Winston-Salem.

The grant will assist in the construction and equipping of the emergency care facility scheduled to open when the new hospital is completed in the spring of 1979.

Duke treats 40,000 persons a year through the Emergency Department. The new emergency area will have separate entrances for walk-ins and ambulance patients with a reception-triage area between them.

A helicopter landing pad will be constructed near the emergency entrance so patients can be taken directly to emergency care facilities without having to be transferred to another means of transportation and handled unnecessarily.

Duke's emergency care services are under the direction of Dr. Joseph Moylan, who came to Duke last year after directing the Emergency Medical Service Program at the University of Wisconsin. He also is a specialist in the treatment of burn patients.

* * *

A policy adopted in early April prohibits smoking in the Medical Center except in specified areas. The policy was designed to recognize the rights of both non-smokers and smokers.

Specific non-smoking areas include corridors and stairwells, examination and treatment rooms, elevators, nursing stations, food preparation areas, libraries, classrooms, conference rooms and lecture halls. Areas are clearly marked by signs.

While patients are permitted to smoke in their rooms, Medical Center personnel are prohibited from smoking in patients' rooms or in the presence of patients.

* * *

Dr. Samuel Katz, Chairman of the Department of Pediatrics, is a member of the Advisory Committee on Immunization Practices which recommended to President Ford that steps be taken to immunize Americans against swine flu virus.

Katz, who heads the Committee on Infectious Diseases of the American Academy of Pediatrics, said some of the early research trials on the vaccine will be conducted at Duke later this year.

* * *

Promotions and Appointments:

* Dr. Dolph O. Adams and Dr. Edward H. Bossen promoted to associate professorship in pathology.

* Dr. W. Allen Addison (M. D. '60, Duke) named assistant professor of Ob-Gyn; coming from private practice in Toccoa and Gainesville, Ga.

* Dr. Albert B. Deisseroth (Ph.D. '68 and M.D. '70, University of Rochester), named assistant professor of medicine; has been fellow in medicine at Harvard.

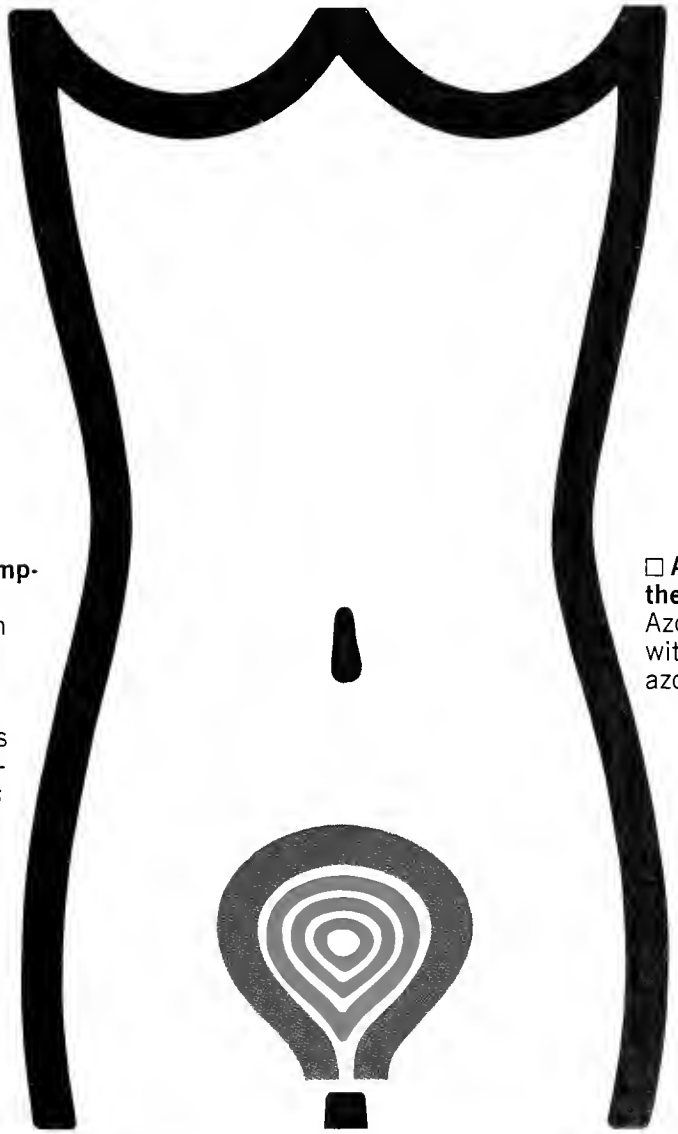
* Dr. Seymour Grufferman (M.D. '64, State University of New York), named assistant professor of community health sciences (epidemiology); coming

When pain complicates acute cystitis*

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain for the pathogens



☐ **Early relief of painful symptoms** such as burning and discomfort associated with urgency and frequency.

☐ **Effective control of susceptible pathogens** such as *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris.*

☐ **Appropriate antibacterial therapy:** up to three days with Azo Gantanol, then 11 days with Gantanol® (sulfamethoxazole).

*nonobstructed; due to susceptible organisms

ROCHE

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

*Warning

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

*Indications: *Edema* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

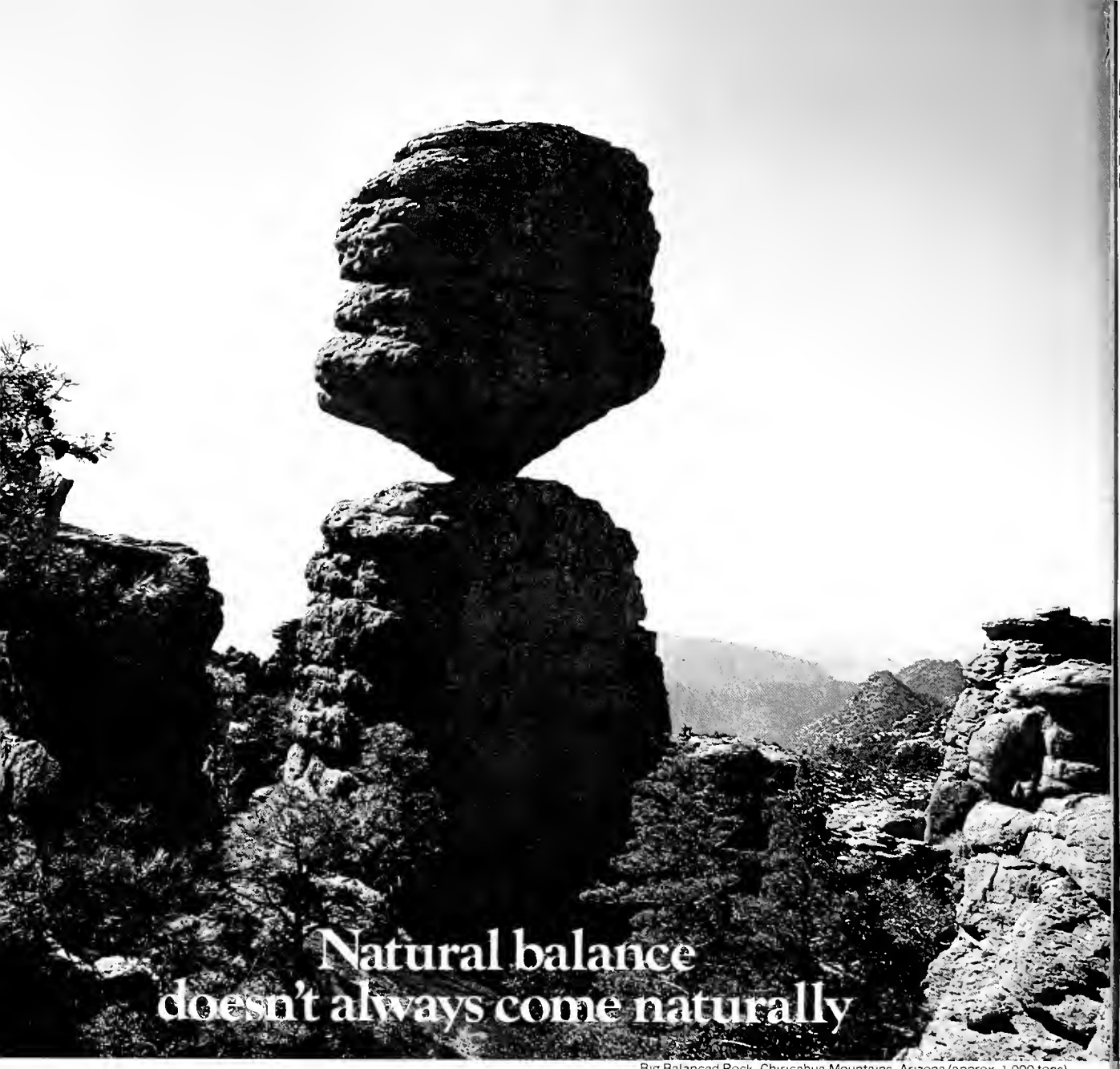
Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

- Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
- Can relieve nausea and vomiting often associated with vertigo.*
- Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
- Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
- Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS Based on a review of this drug by the National Academy of Sciences – National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system

Final classification of the less than effective indications requires further investigation

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg /kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery

Usage in Children Clinical studies establishing safety and effectiveness in children have not been done, therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

from Harvard where completing doctorate in epidemiology.

* Dr. Robert J. Ruderman (M.D. '68, Rochester), named assistant professor of orthopaedic surgery; has been chief resident in orthopaedic surgery at Duke.

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

North Carolina Chapter

Two Winston-Salem physicians have received appointments in emergency medical organizations. David S. Nelson, M.D., is chairman of the transportation subcommittee of the Committee on Technology in Emergency Medical Services of the American College of Emergency Physicians. George Podgorny, M.D., has been named to the council of the American Medical Association's Section on Emergency Medicine. Podgorny is president of the N.C. Chapter of the American College of Emergency Physicians; Nelson is secretary-treasurer.

Month in Washington

The American Medical Association has supported President Ford's decision to undertake a mass immunization program against the swine influenza virus.

The President asked Congress for $135 million for the program in an attempt to stave off a possible epidemic next fall and winter.

Most of the medical community seemed to agree with the Ford decision, though many pointed out it was a tough one. Albert B. Sabin, a partner in the development of the polio vaccines, said, "It has an aspect of — you're damned if you do and you're damned if you don't."

AMA leaders prepared to appear before the Senate and House in support of the Ford decision.

The AMA statement in full:

> "The American Medical Association supports the decision of President Ford to undertake a massive national immunization campaign against the swine influenza virus. Under the circumstances, we believe his decision is absolutely the correct one.
>
> "The AMA stands ready to assist in the national campaign in any way possible, including organizing the medical profession to insure that every person who wants to be vaccinated will be — regardless of ability to pay.
>
> "We speak for the medical profession in committing the doctors of this nation to make whatever efforts are necessary to vaccinate the entire population. It will not be easy, but it can and must be done."

* * *

A federal-state campaign to reduce Medicaid fraud and abuse has been launched by David Mathews, Secretary of Health, Education and Welfare.

A team of federal and state Medicaid examiners will begin work in Massachusetts soon at the invitation of Gov. Michael Dukakis. Another team will begin operations in June in Ohio at the request of Gov. James Rhodes.

HEW said it plans to focus the joint effort on states with the largest Medicaid programs. Reviews in at least five states are planned this year.

The examiners will have two objectives, Mathews said. They will identify fraud and abuse and refer violations for possible prosecution. They will also help states develop efficient program management and abuse detection systems.

HEW has developed a computerized Medicaid management information system (MMIS) to help process claims. MMIS will alert a state if, for example, a patient was in a hospital the same day a physician claimed to have treated him at home, or if a pregnancy test was ordered on a male, HEW said.

HEW is assembling a Medicaid fraud and abuse unit of 108 people in the Medical Services Administration and a criminal investigative branch of 74 investigators which will report directly to Undersecretary Marjorie Lynch.

HEW said it will coordinate its Medicaid investigations with the Department of Justice and the Internal Revenue Service.

Mathews said he plans to invite representatives of national health services provider organizations to Washington shortly to solicit their ideas and to urge them to undertake a self-policing program.

"We recognize that the overwhelming majority of health care providers are ethical and professional," Mathews said. "They share our desire to bring efficiency to Medicaid in its management and in the quality of health care it offers. We want to ferret out the comparative few who break the law. We believe the health professions organizations will give us their enthusiastic support in this effort."

Heading the HEW office of investigators will be John J. Walsh, senior investigator for the Senate permanent subcommittee on investigations and a former FBI agent.

* * *

Major changes in the Medicare-Medicaid programs are called for in legislation introduced by Sen. Herman Talmadge (D-Ga.). The proposal would establish incentives for physicians to accept assignment; restrict payment methods for hospital-based specialists; mold Medicare, Medicaid and the Bureau of Quality Assur-

ance into a single agency; and set up reimbursement incentive programs for hospitals.

Talmadge, chairman of the finance subcommittee on health, said in a Senate speech, "Either we make Medicare and Medicaid more efficient and economical or we reduce benefits. We have just too many worthwhile demands on the limited federal dollar to be able to allocate increasingly disproportionate amounts to Medicare and Medicaid."

Hearings will be held sometime this year, Talmadge promised, but he set no date. He stressed that the proposals are not "frozen in concrete" and are subject to change after the hearings.

Talmadge surprised the health field last year when he made a Senate speech outlining the ideas finally put in legislative form recently. Many of the recommendations are controversial, especially the reorganization of the health activities at HEW that are expected to be opposed by the administration and the restrictions on payment of hospital-based specialists.

Talmadge describes the specialist provision as follows:

"Under the legislation specialists — such as certain radiologists, pathologists, and anesthesiologists — would be eligible under Medicare-Medicaid for fee-for-service, or other reasonable fixed compensation agreed upon with a hospital, for services which they personally render or which are provided under their direct personal supervision. For their administrative and general supervision of an X-ray, laboratory or anesthesia department, the hospital could compensate them on a basis comparable to what a salaried radiologist, pathologist or anesthesiologist receives for comparable time and work. No percentage, lease, or direct billing arrangements would ordinarily be recognized for Medicare or Medicaid reimbursement purposes." . . .

Physicians who choose assignments, to be called participating physicians, would be able to submit simplified and fewer claims and receive a $1 per patient bonus for most office visit charges. Medicaid would have to pay not less than 80 percent of the Medicare reasonable charge for nonsurgical care. As a means of encouraging physicians to move into physician shortage areas, new physicians could establish customary charges at the 75th percentile of prevailing charges in the locality, rather than the present 50 percent.

A single administration for health care financing would contain the present Medicare, Medicaid and Bureau of Quality Assurance Agencies to be headed by an assistant HEW secretary. Within this agency a central fraud and abuse unit headed by an inspector general would monitor performance and violations.

The bill would abolish the Health Insurance Benefits Advisory Council.

A new reimbursement system is designed to reward

Preventive Medicine Makes Sense...

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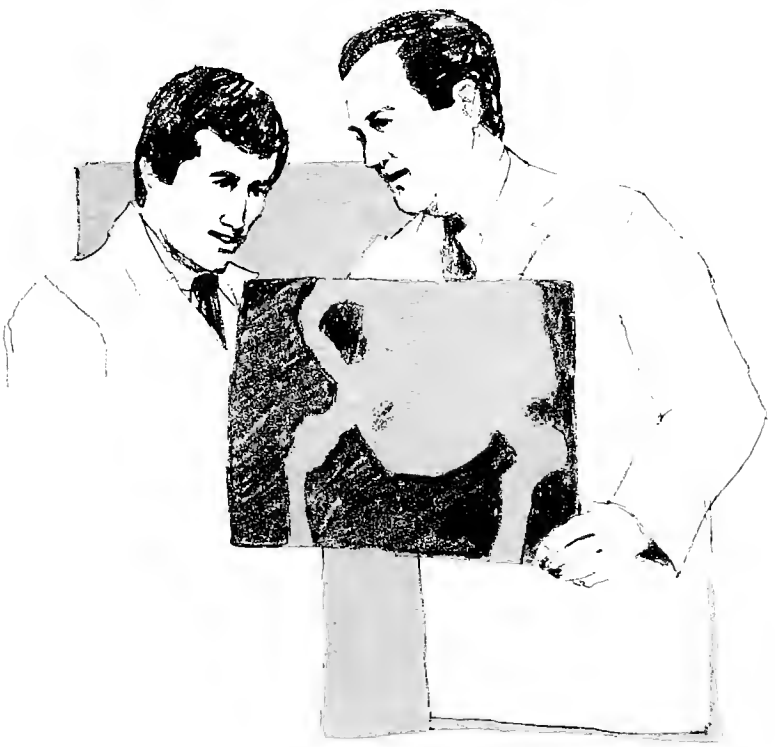

Just as preventive medicine can help you avoid disasters to your health, Disability Income Protection can help you avoid financial disasters. A long-term disability, for example, without adequate insurance protection could mean weeks or even years without an income.

For this reason alone, you cannot afford to be without the proper protection.

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hospitals with less than average operating costs and penalize those with higher costs.

* * *

James Cowan, M.D., has resigned as assistant secretary for defense for health and environment. Among those reported under consideration as his successor is Malcolm Todd, M.D., immediate past president of the AMA. Cowan, former New Jersey commissioner of health, is understood to be contemplating an entry into politics in his home state, possibly running for the GOP nomination for the Senate.

* * *

Now passed by both houses of Congress and awaiting conference, medical device legislation has made members of that industry predict a bullish future.

The legislation will add $250,000 to $700,000 in costs to products requiring premarket approval. The hottest medical device will continue to be the pacemaker. Sales are expected to increase at an average annual compound rate of 9 percent. Another big item is the CAT scanner. Manufacturers predict 3,000 placements by 1980. The use of renal dialysis is expected to triple by 1980. Catastrophic or comprehensive national health insurance will also help the industry. Makers of orthopedic and surgical appliances, clinical diagnostics, medicinals and pharmaceuticals all expect steady growth. Drug companies predict biggest growth in anti-anthritics sales.

The legislation provides three categories for devices — class I, general controls; class II, performance standards; and class III, premarket approval. The general controls give FDA authority to move against devices that are misbranded or badly made and require their registration as if they were drugs. FDA can exempt some devices from this control, such as custom devices not intended for general sale.

Class II devices would be required to meet certain manufacturing standards.

Class III involves premarket clearance for new products and essentially the same type of clearance for existing products. The House Commerce Committee report said it expected that intrauterine devices would be class III.

* * *

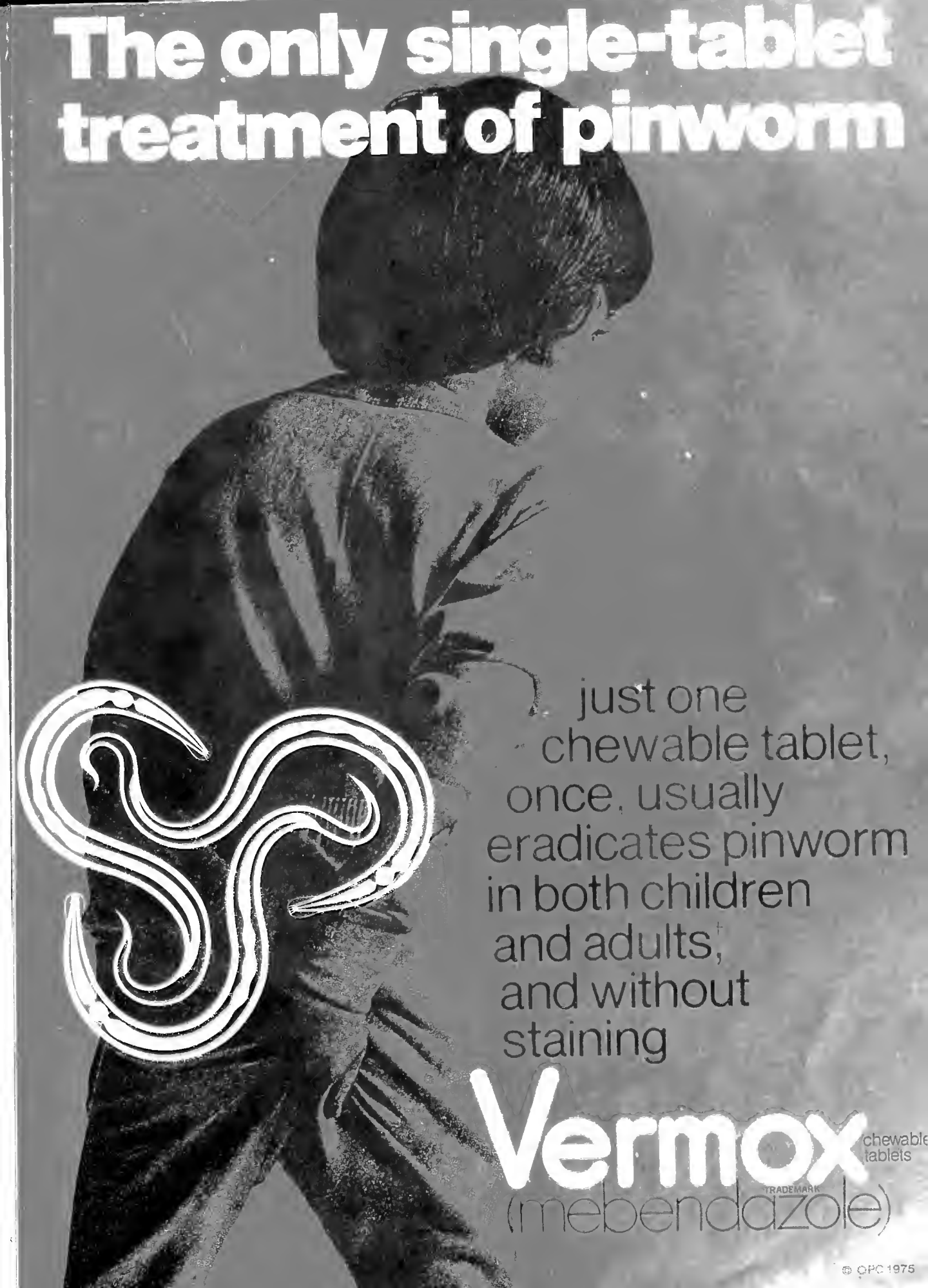
The Senate Labor and Public Welfare Committee has approved legislation subjecting clinical laboratories in both intrastate and interstate commerce to federal licensing and standards requirements.

The revision of the Clinical Laboratories Improvement Act (CLIA) would for the first time cover labs operating only within one state and give HEW a stronger role in supervising the nation's clinical laboratories.

Physicians who perform tests solely in connection with treatment of their own patients could be exempted from the law's requirements if HEW wished.

The measure provides leeway for continuation of

The only single-tablet treatment of pinworm



just one chewable tablet, once, usually eradicates pinworm in both children and adults, and without staining

Vermox chewable tablets
TRADEMARK
(mebendazole)

existing accreditation and certification programs by the Joint Commission on Accreditation of Hospitals and the College of American Pathologists (CAP). AMA and the CAP had urged Congress to allow these activities to continue.

One provision adopted by the committee would require disclosure of fees and contractual relationships between labs and physicians using their services.

* * *

The American health care system is due for tight government control because costs are becoming more than the economy can bear.

This was the grim message of speaker after speaker at a Washington conference on the economic impact of health care legislation. The meeting was sponsored by Arthur D. Little, Inc., a Cambridge, Mass., consulting and research firm.

"The cost is becoming prohibitive," declared Charles Edwards, M.D., former assistant HEW secretary for health. "The U.S. health care system is headed toward fundamental changes that are certain to occur and sooner than most expect," Edwards warned. He predicted health care will cost $135 billion next year, or $600 for every person in the country.

Declaring that this decade for physicians could be called the "showdown '70s" Malcolm C. Todd, M.D., immediate past president of the AMA, told the conference of business and health leaders that he hoped for a "proper accommodation" between the medical profession and the federal government. Unless a pluralistic system is retained, Todd warned, "federally inspired chaos" could emerge.

"There could be a vicious circle . . . with programs foundering on their own shortcomings and blunders . . . and government blaming doctors and hospitals for the failures in order to justify even more repressive programs," he said.

A study by the Arthur D. Little firm estimated that the passage of national catastrophic health insurance would add $4.5 billion to 1980 expenditures for principal health care products and services. If no new national health coverage becomes effective, spending for health care is expected to grow at an average annual rate of four percent over the next five years, or from $98.8 billion in 1975 to $112 billion in 1980, the study said.

Enactment of national comprehensive health insurance, which Little said is not regarded as very likely to happen before 1980, would increase health care spending by 12 percent, or $13.6 billion, for an annual total of $125.6 billion in five years.

Commenting on the study, Todd said "it confirms that any of the national health insurance programs before the Congress will result in greater utilization by patients and thus increased expenditures."

Lawrence Hill, executive vice president of the American Hospital Association, said the future holds "more expenditures, rising costs, concern with those expenditures, and costs leading to attempts to control by price controls and by tinkering with the delivery system."

Hill foresees a collision between rising costs and "capped" prices. Hospitals, he said, might have little option but to limit services. "Lines of doctors and patients will form and the hospital will patrol these, admitting as resources allow."

"The price-cost collision will cause some rationing which, in turn, will cause internal adjustments concerning how physicians use hospital facilities. The community relations implications in rationing are obvious, and, of course, at this point in time we simply do not know how to ration health care because we never have tried before."

Book Reviews

Books Received

Modern Home Dictionary of Medical Words, by Morris Fishbein, M.D., 267 pp, $1.95, New York: Doubleday & Company, Inc., 1976.

The New Way to Live with Diabetes, by Brian Boylan and Charles Weller, M.D., 140 pp, $2.50, New York: Doubleday & Company, Inc., 1976.

Classified Ads

Coastal N.C. — E. D. PHYSICIAN. Established primary care group of young physicians needs replacement for 5th man. $50,000 plus, excellent benefits. Needed after July 1, 1976. 186 bed hospital, new eleven bed E. D. Career emergency physician desired, others considered. Excellent outdoor recreation, N.C.'s sailing capital nearby. N.C. license required. E. Robert Nealy, M.D., Director, Emergency Department, Craven County Hospital, New Bern, N.C. 28560.

INTERNIST AND TWO FAMILY PRACTITIONERS needed. Private practice. Year-round resort community located in western N.C. Office space (Rent free for one year) available in new professional building attached to 98-bed general hospital. Contact Dr. Robert A. Chapman, Cannon Memorial Hospital, Banner Elk, N.C. 28604, Phone: 704/898-4828.

CLINIC FOR SALE OR RENT: Office space for 2 doctors, 6 beds, fully-equipped facility, 3,000 sq. ft. Roseboro, N.C. is currently without a physician. 12 miles from 150-bed hospital. Price negotiable. Write: Brewer-Starling Clinic, P.O. Box 98, Roseboro, N.C. 28382.

40 year old Certified Allergist desires group or partnership association in Eastern N.C. Will consider solo practice in an Eastern area needing Allergist. Write NCMJ #10, P.O. Box 27167, Raleigh, N.C. 27611.

OP/ER PHYSICIAN: Vacancy July 15. Ambulatory Center 24000 visits, specialty backup, fee for service with $46,000 guarantee. Pleasant associates, peaceful community near mountains, 45 minutes to two medical centers. Contact Administrator, Northern Surry Hospital, Mount Airy, N.C. 27030, 919-789-9541.

POEMS WANTED: The North Carolina Society of Poets is compiling a book of poems. If you have written a poem and would like our selection committee to consider it for publication, send your poem and a self-addressed stamped envelope to: THE NORTH CAROLINA SOCIETY OF POETS, 614 — 1st Union Building, Winston-Salem, N.C. 27101

OFFICE SPACE FOR SALE OR RENT: Ample parking, Tri-City area, Piedmont North Carolina. Multispace Medical Complex, two spaces available. Solo practice or small group. Area needs: internist, hematologist/oncologist, psychiatrist or general practice. Contact: HIGH POINT MEDICAL CENTER, INC., 919-882-1725 or 919-882-1524.

HOME-OFFICE FOR SALE OR LEASE: Greensboro, N.C. Spacious brick home. Main floor—3,000 sq. ft., 8 rooms. Second floor—2,000 sq. ft., 5 rooms including second kitchen, suitable inlaw setup. Basement—2,000 sq. ft., 8 room office with separate entrance appraised at $130,000 or lease with option to buy. Write: NCMJ-9, P.O. Box 27167, Raleigh, N.C. 27611.

EMERGENCY MEDICINE: Northeastern North Carolina; four, 12-hour evening rotations per week. Paid malpractice, vacation, professional dues. $45,000 annual remuneration. Contact Drs. Cooper or Spurgeon toll free 1-800-325-3982.

PHYSICIANS NEEDED: M.D.'s with completed internships or residencies for hospital/clinics/flight surgeon duties — worldwide placement available! Relocation fees paid, 30 days paid vacation each year. 40 hour work week. Contact Dave Powell, Navy Medical Representative, Navy Recruiting District, P.O. Box 18568, Raleigh, N.C. 27609. Call Collect: 782-2005.

Index to Advertisers

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FOR ALL THE RIGHT REASONS.

- prompt and specific action
- documented benefit-to-risk ratio
- three dosage strengths to meet most therapeutic needs

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
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The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY June 1976, Vol. 37, No. 6

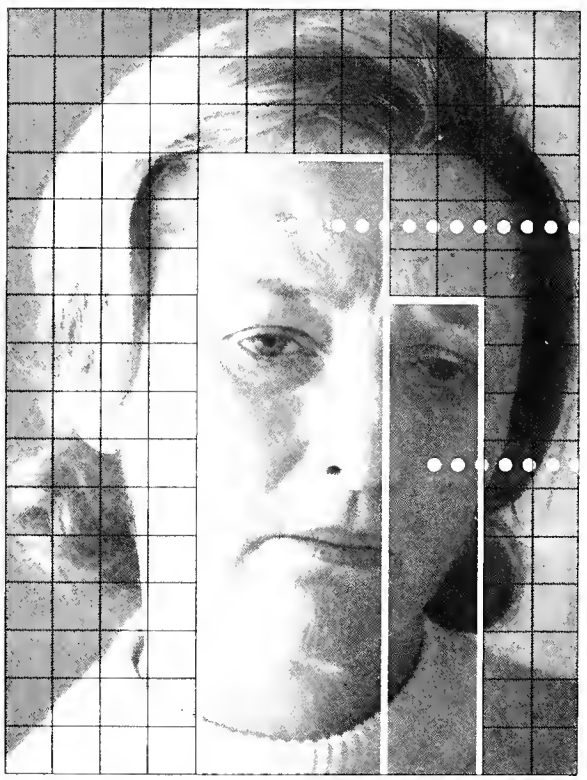
NORTH CAROLINA
Medical Journal

IN THIS ISSUE: Infant Mortality in Cleveland County: A Recent Secular Increase, Olivia Black, B.S., Jane Gordon, M.S., Wayne Lednar, Ph.D., Cecil Slome, M.D., D.P.H., Helen Balkcom, M.P.H., Laura Carillo, M.P.H., Mary Slawter, B.S.N., Sally Ann Williamson, M.P.H., Carol Cox, M.P.H., Earl Siegel, M.D., M.P.H., Don Kaiser, B.A., and Rick Steeves, M.P.A.; Local Public Health Departments and Their Directors in North Carolina and the United States, Edward F. Brooks, M.B.A., Gordon H. DeFriese, Ph.D., Sagar C. Jain, Ph.D., Florence Kavaler, M.D., and C. Arden Miller, M.D.; Cardiopulmonary Resuscitation (CPR) as Treatment of Cardiac Arrest (Second of Three Articles), James T. McRae, M.D.

1976 Committee Conclave
Sept. 22-26—Southern Pines

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

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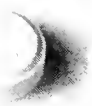

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2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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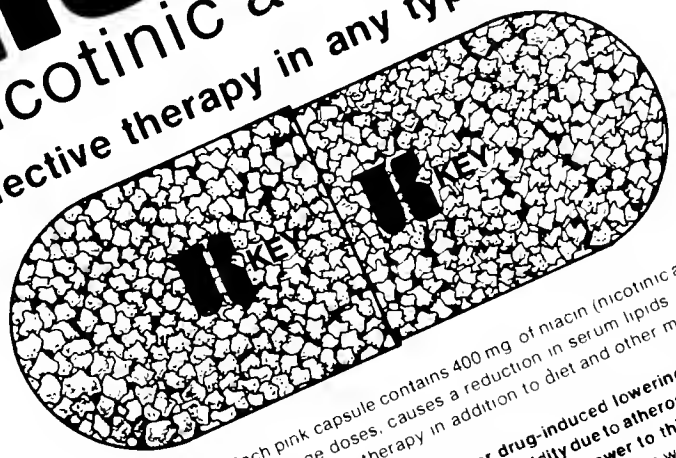

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ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown

INDICATIONS: As adjunctive therapy in addition to diet and other measures in the treatment of hypercholesterolemia and hyperbetalipoproteinemia

Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a beneficial or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams

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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina
Medical Society

June 1976, Vol. 37, No. 6

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Contents listed in *Current Contents/Clinical Practice*

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INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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	60-64*	286.50	640.00	722.00
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	40-49	76.00	176.00	212.00
	50-59	118.50	254.00	290.00
	60-64*	180.00	402.00	438.00
PLAN C $500 DEDUCTIBLE	Under 40	$ 31.50	$ 69.00	$ 91.50
	40-49	51.50	118.50	141.00
	50-59	82.50	182.50	205.00
	60-64*	138.50	308.00	330.50
	65-69**	58.00	170.00	192.50
PLAN D $1,000 DEDUCTIBLE	Under 40	$ 23.50	$ 51.50	$ 68.50
	40-49	38.50	89.00	106.00
	50-59	62.00	137.00	154.00
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40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
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How can a physician find out more about the Drug Utilization Program?
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Infant Mortality in Cleveland County: A Recent Secular Increase

Cleveland County Task Force*

IN recent years infant mortality rates in the United States have been decreasing.[1] While a similar pattern has existed in North Carolina,[2] the trend has not been consistent in the state's 100 counties. In Cleveland County, for instance, health department officials became concerned about the high rate of infant mortality and about the fact that the rates were not decreasing. Since 1970, in fact, the rates were beginning to increase.

Cleveland County has had no apparent reduction in health services and no major social or economic changes that might account for an increase in infant mortality. A review of such factors such as unemployment rates and per capita income and a cursory assessment of the facilities available to mothers and children would suggest that the county's expected infant mortality experience would be better than other counties instead of one of the worst.

Cleveland County, in the rapidly growing Piedmont plateau area west of Charlotte, is near major medical referral centers. In 1972 the population was 74,021 (78% white and 22% black.*) It is a youthful county; the median age of its population is 25.9. While predominantly rural, the county is rapidly becoming urban as textile industries move in.

Because infant mortality is commonly used as an indicator of the quality of health services in a community, a study was initiated to verify the rate and to attempt to find ways to reduce it.

METHODS

In order to address the problem, a task force was organized from members of the School of Public Health and the Cleveland County Health Department staff. Practicing physicians of the county served as consultants and the staff of the Division of Health Services of the North Carolina Department of Human Resources provided guidance and assistance.

The task force obtained relevant data from published reports of the Vital Statistics Section of the North Carolina Division of Health Services, which also provided a computerized linked birth-death file for infant deaths in Cleveland County for 1968-1972. These are the most recently available data covering complete years. Neighboring Cabarrus County was selected for comparison with Cleveland because of its similarity in population size, economic indicators and other sociodemographic characteristics. Annual perinatal, neonatal, postneonatal and infant mortality rates for whites and blacks for Cleveland County were compared with North Carolina rates and five-year rates were similarly evaluated.

In all comparisons the X^2 test of statistical significance was applied.

FINDINGS

Trends in Infant Mortality Rates

The infant mortality rate among whites in Cleveland County rose from 1970 to a point in 1972 almost twice the rate for Cabarrus County and more than 1½ times the rate for North Carolina. These differences reached statistically significant levels in 1971 and 1972. (See Table 1 and Figure 1).

For the five-year period, 1968-1972, in which the cumulated numbers are large and presumably the rates more stable, thereby allowing greater confidence in the comparisons, Cleveland County's rate was

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Reprint requests to Dr. Slome

*The published vital statistics use the nomenclature "nonwhite." In Cleveland County, the vast majority of the nonwhite population is black. Therefore, the authors have used the term "black."

TABLE I

Infant Mortality Rates per 1,000 Live Births
Cleveland County, Cabarrus County and North Carolina
Among Whites, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	24	26.3	22	21 0	1,357	20 8
1969	22	22.7	20	19 4	1,315	19.8
1970	23	22.7	17	15 8	1,340	19 2
1971	29	29 0	11	11 1**	1,911	17 7**
1972	29	31 7	15	16 1*	1,122	18 2**
5-Year Rate (1968-1972)	127	26 4	85	16.7***	6,325	19 2***

Significance (p) values, compared with Cleveland County
* $p < .05$
** $p < .01$
*** $p < .001$

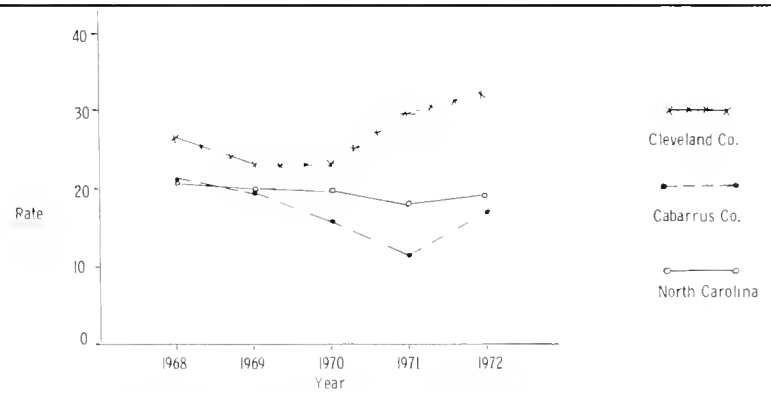

Fig. 1. Infant mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among whites, 1968-1972.

TABLE 2

Infant Mortality Rates per 1,000 Live Births
Cleveland County, Cabarrus County and North Carolina
Among Blacks, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	20	45 1	12	40 1	1,076	39 1
1969	20	48 7	9	35 4	1,014	37 1
1970	27	57.1	8	24 6**	1,031	35 8**
1971	11	27 8	8	26 1	906	32.0
1972	21	52.9	7	26 5	885	32.4**
5-Year Rate (1968-1972)	99	46.8	44	30 4*	4,912	35 3**

Significance (p) values, compared with Cleveland County
* $p < .05$
** $p < .01$

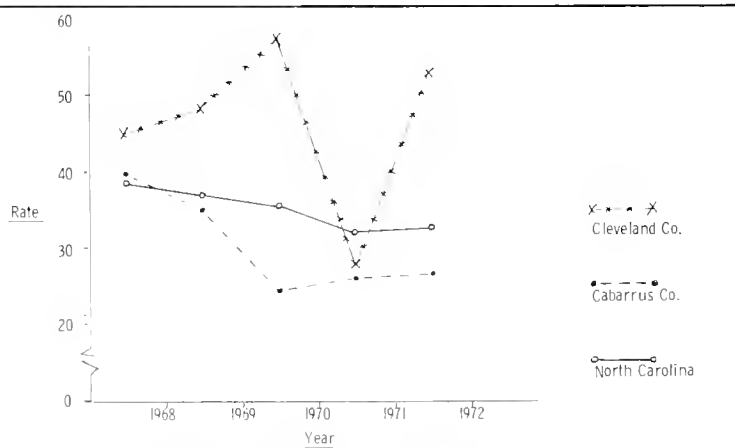

Fig. 2. Infant mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among blacks, 1968-1972.

significantly higher than that of Cabarrus and North Carolina.

A similar pattern emerges for blacks (Table 2 and Figure 2). The initial decline from 1968-1972 among whites in Cleveland County for unexplained reasons does not appear among the blacks and in 1971 there was a singularly low infant mortality rate among blacks. However, because of the overall increase in the rate among blacks in 1972, the rank ordering the three rates is the same among blacks and whites.

The Cleveland County infant mortality rate among blacks was significantly higher than Cabarrus and North Carolina in 1970 and higher than North Carolina in 1972.

Perinatal Mortality

Perinatal mortality among whites in Cleveland County increased with minor depressions in 1969 and 1972, with a five-year rate of 33.3 per 1,000 live births (Table 3 and Figure 3). Cabarrus County and North Carolina showed steady declines in the first three years and increases in 1971 and 1972. With the exception of two comparisons noted in Table 3, no significant differences emerged. However, Cleveland County's rates since 1970 have remained higher than Cabarrus County and North Carolina. For the five-year period, the Cleveland County rates were approximately 1½ times those of Cabarrus County and North Carolina.

With the exception of the very low rate in 1971, perinatal mortality rates for blacks in Cleveland County have nearly doubled in the five-year period, culminating in a high of almost 7% in 1972 (Table 4 and Figure 4). The rates in Cabarrus County, by contrast, steadily declined until 1971, then increased in 1972. Although Cabarrus displayed a much higher rate than Cleveland County in 1968, by 1970 it was almost halved, and in 1972 was 2.7% less than Cleveland's rate. In North Carolina as a whole the rate declined until 1970 and then increased. These irregularities in trends occasionally display significant differences. While the five-year rate is higher in Cleveland than Cabarrus

and North Carolina, the difference is significant only when compared to the state as a whole.

Neonatal Mortality

The neonatal mortality rates among whites in Cleveland County have remained fairly steady with a five-year rate of 19.8 per 1,000 live births (Table 5 and Figure 5). Similar patterns with minor variations are recorded for Cabarrus County and North Carolina, both of which have lower rates than Cleveland County. The differences between Cleveland and Cabarrus and between Cleveland County and North Carolina are statistically significant.

The neonatal rates for Cleveland County blacks vary considerably, although the overall trend is one of an increase (Table 6 and Figure 6) with a five-year mortality rate of 27.9 per 1,000 live births. The rates in Cabarrus County and North Carolina remain fairly constant over this period and generally lower than Cleveland County. The differences generally were not significant.

Postneonatal Mortality

The number of postneonatal deaths among whites in Cleveland County and Cabarrus County is small (Table 7 and Figure 7), so no firm conclusions should be drawn. While Cabarrus County's rates have generally declined and Cleveland County's remained constant, the rate in Cleveland in 1972 is four times that of Cabarrus. North Carolina's rates remained constant at a level between 4 and 5 per 1,000 live births, with a rate in 1972 one-half that of Cleveland County's rate. The five-year rates were significantly higher in Cleveland County than in Cabarrus and North Carolina.

Generally, the rates among blacks (Table 8 and Figure 8) were much higher than the rates for whites; the differences, however, did not reach statistical significance.

SUMMARY

Cleveland County's five-year experience was one of an increase in infant mortality rates, particularly among whites, in contrast with a de-

TABLE 3

Perinatal Mortality Rates per 1,000 Live Births
Cleveland County, Cabarrus County and North Carolina
Among Whites 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	26	28.3	33	30.9	1,911	29 0
1969	24	24 5	30	28.8	1,872	27 8
1970	33	32.2	26	23.9	950	13 5**
1971	38	37 4	19	19 1*	1,768	26 0
1972	29	31.4	25	26 5	1,648	26 4
5-Year Rate (1968-1972)	160	33 3	141	27 8	9 421	28 5

Significance (p) values, compared with Cleveland County
* $p < .01$
** $p < .001$

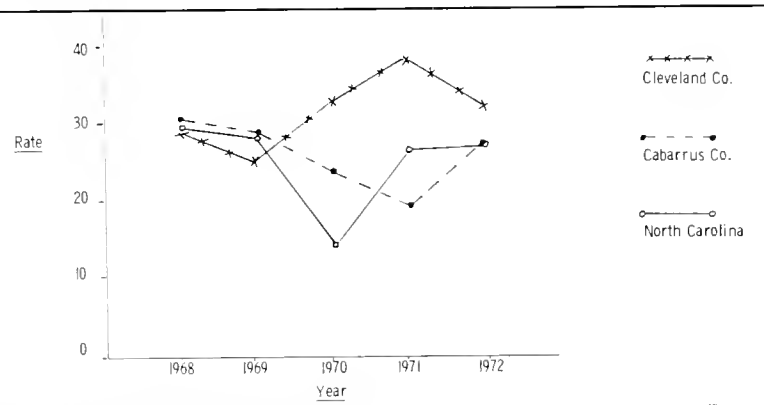

Fig. 3. Perinatal mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among whites, 1968-1972.

TABLE 4

Perinatal Mortality per 1,000 Live Births
Cleveland County, Cabarrus County and North Carolina
Among Blacks, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	17	38 2	16	51 8	1,388	49 1
1969	22	52 1	14	53 4	1,309	46 7
1970	32	66 1	12	36 1*	675	22 9***
1971	10	24 9	8	25 9	1 272	43 9*
1972	28	68 1	11	40 7	1 142	40 9**
5-Year Rate (1968-1972)	109	51 6	61	42 1	5 756	41 5*

Significance (p) values, compared with Cleveland County
* $p < .05$ ** $p < .01$ *** $p < .001$

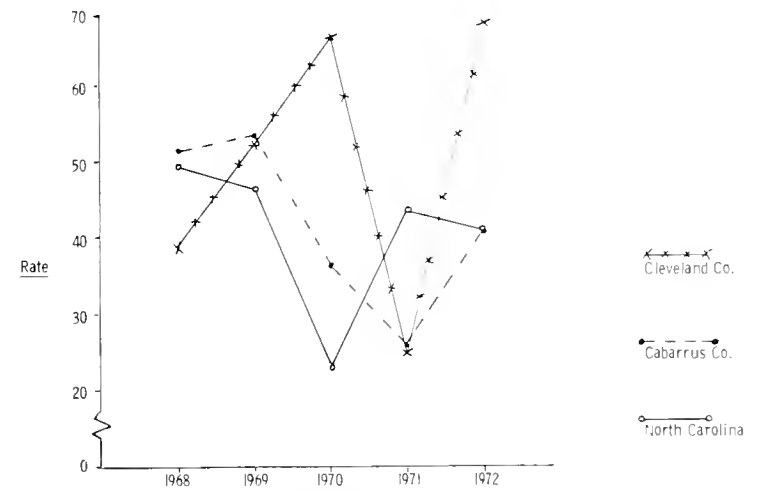

Fig. 4. Perinatal mortality per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among blacks, 1968-1972.

TABLE 5

Neonatal Mortality Rate per 1,000 Live Births Cleveland County, Cabarrus County and North Carolina Among Whites, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	18	19 7	15	14.3	1,069	16.3
1969	15	15 5	19	18.4	993	14 9
1970	19	18 8	13	12.1	1,064	15 3
1971	22	22 0	10	10.1*	931	13 9*
1972	21	22 9	13	13 9	875	14 2*
5-Year Rate (1968-1972)	95	19 8	70	14 0*	4,922	14 9**

Significance (p) values, compared with Cleveland County
* $p < .05$
** $p < .01$

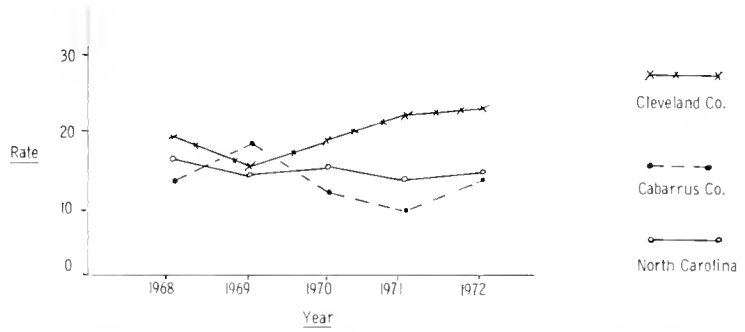

Fig. 5. Neonatal mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among whites, 1968-1972.

TABLE 6

Neonatal Mortality Rates per 1,000 Live Births Cleveland County, Cabarrus County and North Carolina Among Blacks, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	9	20 6	6	20.1	643	23.3
1969	11	26 8	6	23 6	620	22.7
1970	21	44 4	5	15 4**	695	24 1**
1971	4	10 1	5	16 3	602	21.3
1972	14	35.3	5	18.9	577	21 1*
5-Year Rate (1968-1972)	59	27 9	27	18 6	3,137	22.5

Significance (p) values, compared with Cleveland County
* $p < .05$
** $p < .01$

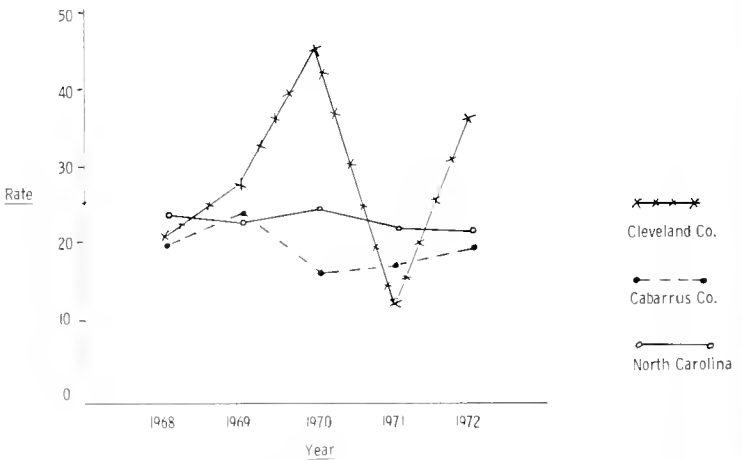

Fig. 6. Neonatal mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among blacks, 1968-1972.

TABLE 7

Postneonatal Mortality Rates per 1,000 Live Births Cleveland County, Cabarrus County and North Carolina Among Whites, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	6	6 7	7	6 8	298	4 6
1969	7	7 3	1	1 0	322	5 1
1970	4	4 0	4	3 8	276	4 0
1971	7	7 2	1	1 0*	260	3 9
1972	8	8 9	2	2 2	247	4 1**
5-Year Rate (1968-1972)	32	6 8	15	3 0*	1 403	4 3*

Significance (p) values, compared with Cleveland County
* $p < .05$
** $p < .01$

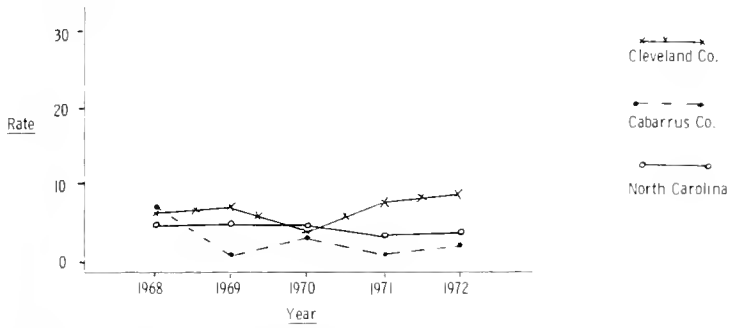

Fig. 7. Postneonatal mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among whites, 1968-1972.

TABLE 8

Postneonatal Mortality Rates* per 1,000 Live Births Cleveland County, Cabarrus County and North Carolina Among Blacks, 1968-1972

Year	Cleveland County N	Cleveland County Rate	Cabarrus County N	Cabarrus County Rate	North Carolina N	North Carolina Rate
1968	11	25.7	6	20 0	433	16 1
1969	9	22 5	3	12.1	394	14 7
1970	6	13 3	12	37.5	336	12.0
1971	7	17 9	3	11 0	303	11.0
1972	7	18.3	2	7.7	308	11.5
5-Year Rate (1968-1972)	40	19 5	26	18 3	2.084	15 3

$$\text{*Rates} = \frac{\text{Infant Deaths} - \text{Neonatal Deaths}}{\text{Live Births} - \text{Neonatal Deaths}}$$

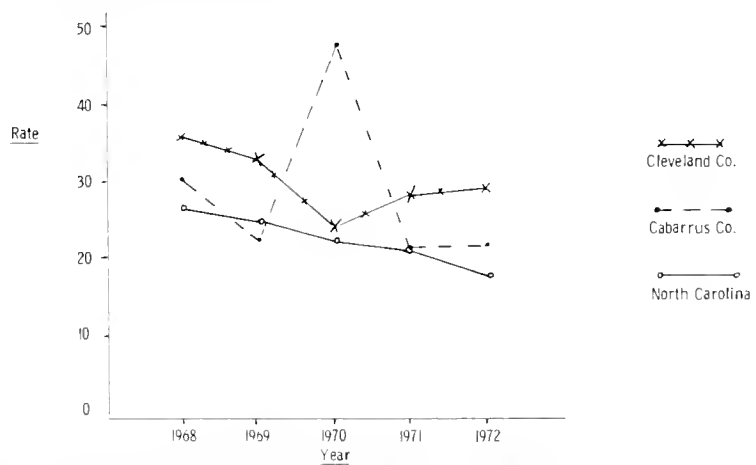

Fig. 8. Postneonatal mortality rates per 1,000 live births, Cleveland County, Cabarrus County and North Carolina among blacks, 1968-1972.

cline among comparable groups in Cabarrus County and North Carolina. The rates were consistently higher among blacks than whites, but the secular increase is not as striking among blacks as whites. The components of mortality in the first year of life reveal that the high rates were particularly noticeable in the perinatal period with a five-year perinatal mortality rate among blacks in Cleveland County of 51.6 per 1,000 live births.

Neonatal mortality in Cleveland County is consistently higher than in Cabarrus County and North Carolina. The trend, though somewhat irregular, is one of a secular increase in both ethnic groups of Cleveland County; this is in contrast to a relative decrease and stabilization of rates in Cabarrus County and North Carolina, respectively. The small number of postneonatal deaths forbid definitive conclusions, although it appears that the rates for blacks and for whites were consistently higher in Cleveland County than its neighboring county, Cabarrus, and the state as a whole.

DISCUSSION

Descriptive information about services and the characteristics of the Cleveland County population provides no explanation for the apparent secular increase in infant mortality, particularly perinatal. While these indices of child health often are thought to reflect prenatal and intrapartum care, there is no reason to believe that the quality of care has changed or deteriorated or that the proportion of high risk mothers has increased. Further, the contrasts with Cabarrus County and North Carolina refute the notion that major statewide socioeconomic upheavals could explain these increases in rates. A similar, neighboring county would have displayed a comparable experience in infant mortality. This suggests that some process of change unique to Cleveland County might be the cause. Census and other information indicate selective migration or severe deterioration of the county's economic base are unlikely to have contributed to the findings. The sharing of these trends by whites and blacks suggests that while there is still a great disparity in the rates between these two ethnic groups the phenomena have affected both groups and possibly whites to a greater extent. It may be hypothesized that the improvement in the economy of the county after its industrialization has altered social processes and values, thereby increasing those factors which adversely affect pregnancy outcome. A similar explanation was documented 40 years ago when it was observed in Glasgow, Scotland, that housing improvement led to a relative decrease in amounts spent on food and other health related expenditures with an associated increase in the infant mortality rate.[3]

There is clearly a need to examine in more detail the demographic and behavioral characteristics of mothers in the county in regard to prenatal, intrapartum and postnatal use of services and the nature of the services themselves. The Cleveland County experience may indicate that in the state, and possibly in the country as a whole, there are foci of increasing infant mortality which need careful surveillance, investigation and management if further breakthroughs are to be achieved in its reduction.

A possible explanation may be found in a recent report showing that an increasing number of obstetrical patients are receiving inadequate care in the Piedmont area of the state despite the availability of referral and teaching centers in this region and the large ratio of specialists per unit of population.[4]

Further study will explore this possible explanation and identify the characteristics of mothers and their use of health services which contribute to the deterioration in this index of health status.

ACKNOWLEDGMENTS

The Task Force acknowledges the assistance of Stephen Gehlbach and John Allen of the North Carolina Department of Human Resources and Michael Hogan of the National Institute of Environmental Health Services.

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. . . tenderness at the pit of the stomach, *on pressure*, . . . That it exists in every stage of indigestion, I venture to affirm — and I will go one step further, for I have no hesitation in averring that, if a whole regiment of soldiers were turned out, and the region of the stomach pressed with the pointed fingers, . . ., they would all wince, from the general downwards. . . . "The patient, in general, is not aware of this tenderness till it is pointed out by the physician." — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 35.

Local Public Health Departments and Their Directors in North Carolina and the United States

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REMARKABLY little is known about local departments of public health. Policymakers, planners, and other students of health services seem to pay little attention to these pervasive, multipurpose organizations that spend nearly $2 billion a year. For example, the 1976-1980 "Forward Plan for Health" issued by the U.S. Department of Health, Education and Welfare does not mention state or local public health agencies.[1] The last national registry of local health departments was compiled nearly 10 years ago. And since 1960 no organization has routinely collected and disseminated information on all health departments in the nation.

This apparent ignorance — perhaps even lack of interest — on the part of people not involved in public health prompted a cooperative effort among several faculty and departments of the University of North Carolina at Chapel Hill to help fill this information gap. Questionnaires were mailed to the directors of all the nation's 2,308 local health departments that employ at least one fulltime staff member. Of these, 1,673 (64.1%) responded. In North Carolina, questionnaires were completed by 62 (86.1%) of 77 health officers. This paper presents the results of this survey and, in particular, compares North Carolina's health departments with those in the South Atlantic Census Region (hereinafter referred to as "The Region") and the United States.*

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Health Department Services

In general, health departments in North Carolina and the other South Atlantic states provide a broader array of services than departments in the rest of the nation. Figure 1 indicates that *every* responding local public health agency in this state conducts immunization, tuberculosis control and school health programs. In North Carolina, eight of 13 selected services are offered by at least 95% of the state's health departments. In the Region, six services are provided by 95% or more of the departments. And, in the United States, only two of the most traditional public health services — immunization programs and environmental surveillance — are made available by at least 95% of the departments.

Figure 1 also illustrates that most health departments, as might be expected, provide far more preventive than curative services. Ambulatory care (except in the South Atlantic Census Region), mental health programs and institutional care are offered by relatively few local public health agencies.

There are considerable differences among health departments in North Carolina, other South Atlantic states and the rest of the country in the allocation of resources to service programs. In over half the departments in this state and in the Region, maternal and child health, family planning, environmental surveillance and immunization programs are considered "major" programmatic activities (i.e., a relatively large portion of staff time and budget are spent on these services compared to other activities). In the rest of the United States only environmental surveillance is a major program in most local public health agencies. (See Figure 2.)

In general, maternal and child health command more resources than other services in North Carolina. By this resource allocation standard, environmental surveillance is the most important "program" in the Region and, of course, in the United States. Contrasts among comparatively minor services are noticeable also. Considerably more departments in this state allocate major portions of their resources to school health and chronic health programs than do departments elsewhere. By contrast, the other South Atlantic states

*The South Atlantic Census Region includes Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia. All data presented in this article from the Region exclude North Carolina, all data from the United States exclude the Region.

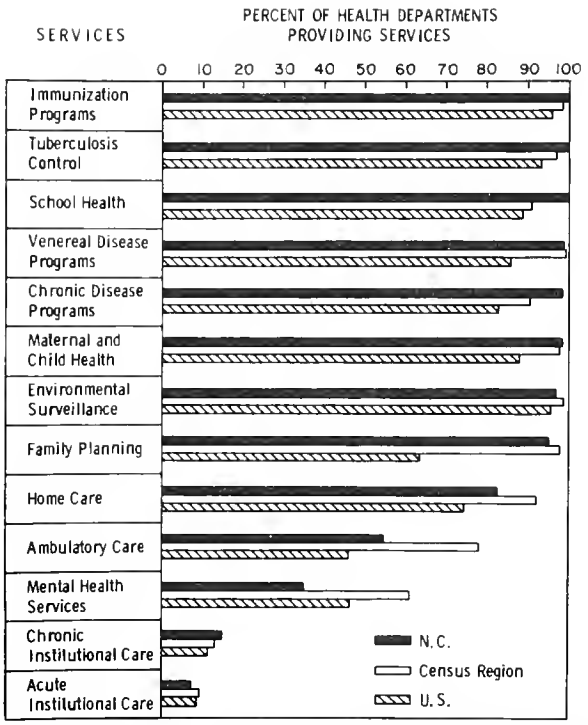

Fig. 1. Provision on selected services by local health departments in North Carolina, the other states in the South Atlantic Census Region, and the rest of the United States

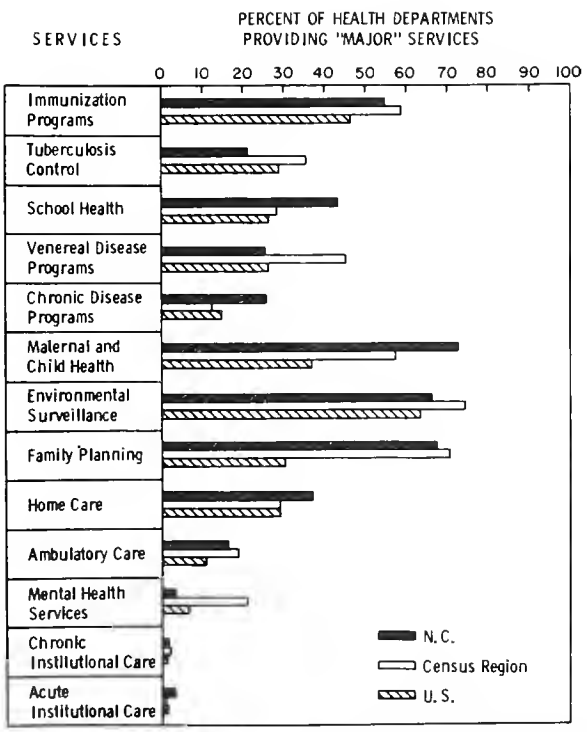

Fig. 2. Services requiring relatively large portions of staff time and budget, North Carolina, the other states in the South Atlantic Census Region, and the rest of the United States

put relatively heavy emphasis on venereal disease control and mental health.

It should be noted that "environmental surveillance" is a general heading for a wide range of public health activities. Unless the variety of functions incorporated under this heading is understood, the term "environmental surveillance" may be misleading. Health departments in some states (Alaska, Idaho, New Mexico and Pennsylvania) do no environmental surveillance. By contrast, public health agencies in other states (such as Rhode Island, South Carolina, Tennessee and Virginia) provide 10 or more distinct environmental surveillance services.[2] These range from such traditional public health functions as inspection of food processors and distributors to such relatively rare activities as vector control, solid waste control and air quality control.

Information provided by The Association of State and Territorial Health Officers indicates some variance among states in types of environmental surveillance. North Carolina's focus is on consumer protection, occupational health, public water supplies and on two, less traditional functions — solid waste and vector control. The emphases in the other South Atlantic states are in radiological health, consumer protection, sewage disposal, potable water and recreational facilities. The most common health department environmental surveillance activities in the rest of the United States are radiological health and consumer protection.[2]

By and large, health officers do not anticipate shifting priorities among programs during the next five years. Instead, they foresee expanding those services on which their departments already expend considerable effort and continuing to limit their agencies' roles in minor services. For example, most of this state's health officers expect to expand the two "major" programs in North Carolina — maternal and child health and family planning. In the rest of the nation, including the Region, environmental surveillance programs, which

TABLE 1

Change in Scope of Services Expected During the Next Five Years, North Carolina, the Other States in the South Atlantic Census Region, and the Rest of the United States

Services	Percent of Health Departments In Which Services Are Expected To Expand or Be Reduced					
	North Carolina		All Other Census Region States		United States, Excluding The Census Region	
	Expand	Reduce	Expand	Reduce	Expand	Reduce
Maternal & Child Health	90 3	0 0	67 3	4 1	61 6	4 0
Family Planning	83.9	3.2	74 1	4 1	53.5	5 0
School Health	80 6	3 2	65.3	5 4	49 6	10 7
Venereal Disease Control	79 0	1 6	63 3	2.7	60 2	4 3
Chronic Disease Control	77 4	1 6	70 7	2.7	57 4	3.8
Environmental Surveillance	75 8	3.2	72 1	2.7	67.1	2 1
Home Care	74 2	3 2	68.0	6.1	53.4	5.9
Immunization Programs	71 0	3 2	64 6	0 0	63.5	3.3
Tuberculosis Control	48 4	17.7	46.3	19 7	34 4	26 6
Ambulatory Care	43.5	3 2	68 7	2 0	39 3	4 6
Mental Health Programs	32 3	6 5	38 8	12 2	30 9	11 2
Chronic Institutional Care	16 1	9 7	11 6	13.6	11 4	10.4
Acute Institutional Care	8 1	12.9	8 8	13 6	9 7	10 6

now receive highest priority, are expected to expand in more health departments than any other program. Such services as chronic and acute institutional care and mental health programs are likely to continue to have relatively small roles in local public health agencies everywhere.

As Table 1 indicates, health officers seem quite ambitious. The expectation of expansion is many times greater than the expectation of reduction in all but three of the 13 services listed. Generally, more of North Carolina's health officers foresee expansion than do their counterparts in the other South Atlantic states who, in turn, tend to be more ambitious than health department heads in the rest of the country.

The three exceptions are chronic institutional care, acute institutional care and tuberculosis control. In the first two programs, most health officers do not foresee any change in scope, and those who do are fairly evenly divided between expansion and reduction. Acute institutional care is the only service that more health officers expect to reduce than expand. Unlike the two institutional care services, a majority (61%) of the nation's local health directors expect a change in the scope of their tuberculosis control programs. However, they are divided over whether these programs will grow or decrease. For example, over one third of the responding health officers in the United States (excluding the South Atlantic Census Region) expect to expand their tuberculosis control programs, and slightly over a fourth anticipate a reduction in these programs. This difference of opinion also exists in North Carolina and the other states in the Region, though the difference is not as pronounced.

Health Department Resources

For every dollar budgeted in North Carolina's health departments in fiscal year 1974-1975, $2.62 was budgeted in departments in the other states of the South Atlantic Census Region. The average number of employees per North Carolina public health department was 38.5, compared to 104.3 in the other states in the Region. While the financial and human resources of this state's local public health agencies are considerably less than those in nearby states, they compare more favorably with the resources of departments elsewhere in the United States. The average agency budget in the nation, excluding the South Atlantic states, is $670,300, which is only 17% more than North Carolina's average, $572,900. And the mean number of employees per department is almost identical (see Table 2).

Unfortunately, little information is available which can be used to assess the scope and quality of local public health services. However, the data illustrated in Figures 1 and 2 provide some indication that North Carolinians may be receiving more for their public health dollar. Departments in this state are roughly comparable to those in the Census Region both in terms of the range of services offered (Figure 1) and the allocation of large portions of available resources to several programs (Figure 2). Yet, North Carolina is providing this range of services and is expanding its focus beyond the traditional environmental surveillance and immunization programs to maternal and child health and family planning services with far fewer funds and staff than are available to departments in the rest of the South Atlantic region. Departments in the United States, whose resources are similar to those in this state on the average, do not generally provide as full a range of services and continue to concentrate their efforts on surveying the environment and conducting immunization programs.

The question, "Are health departments in this and other states provided enough resources to meet their objectives adequately?" remains unanswered. But the response is affirmative to the question, "Do North Carolina's health departments generally provide larger *numbers* of services with less resources than do other such agencies in the United States?"

Factors Affecting Health Departments

Local public health officers put lack of resources at the head of the list of constraints on their activities. Given that health departments in North Carolina have relatively small budgets, it is interesting that

TABLE 2

Health Department Funding and Staffing, North Carolina, the Other States in the South Atlantic Census Region, and the Rest of the United States, Fiscal Year 1974-1975

Aree	Mean Budget	Meen Number Of Employees
North Carolina	$ 572,900	38.5
South Atlantic Census Region, Excluding North Carolina	1,502,400	104 3
United States, Excluding the South Atlantic Census Region	670,300	38 4

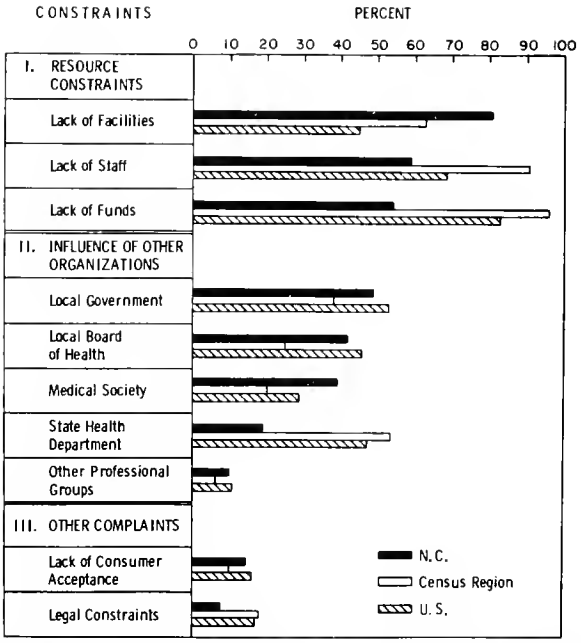

Fig. 3. Percent of health officers listing constraints on their departments as "very important," North Carolina, the other South Atlantic States, and the rest of the United States

health officers in this state find "lack of facilities" to be their most serious constraint. "Lack of staff" ranks second in North Carolina; "lack of funds" ranks third. Despite their considerably larger budgets and staffs, health officers in the other South Atlantic states consider lack of funds and staff to be their departments' most serious constraints. Inadequate funding and staffing are also the major constraints on local public health agencies elsewhere in the United States (see Figure 3).

A second group of constraints — those that originate in other agencies, such as local governments, local boards of health, medical societies and state health departments — are not considered to be as serious as inadequate resources. The two most obvious differences of opinion in this second group of constraints concern state health departments and local medical societies. More than a third of the health officers in the Region and the nation indicate that state departments of health are very important constraints. Only 14% of North Carolina's health department heads share this opinion. Yet, nearly two-thirds of the health officers in this state, the Region and the nation see state health departments and boards of health as major influences on the establishment of local department program priorities (see Table 3). It seems, then, that local department heads in North Carolina generally hold a more positive opinion of their state agency than do health officers elsewhere.*

A third level of relatively minor constraints includes "lack of consumer acceptance." Health officers everywhere think that consumers have relatively little influence on the establishment of health department program priorities. This information, also presented in Table 3, appears to contradict a 1974 statement published by the American Public Health Association concerning local health agencies:

"No longer do social and regulatory agencies and their programs function in isolation. Consumers of services are demanding a voice in planning and determining policies for the services which they utilize."[3] Furthermore, what little voice consumers have is usually expressed informally in person, over the telephone and in letters. The impact of formal groups that do or could represent consumers is minimal, according to health officers.

The data in Table 3 indicate that, as may be expected, health officers everywhere think that the most important sources of influence on local programs are within the public health hierarchy. These sources are the officers themselves, state departments and boards, and, except in the Region (excluding North Carolina), local boards of health. Such relative "outsiders" as local governments, state legislatures and consumers have relatively little influence on local department programs.

Public Health Officers

North Carolina's health officers are similar to their counterparts elsewhere in several respects. The large majority are male — more than 80% in the state, the Census Region and the country. Most serve only one health department. And most work fulltime as health officers. But there are a number of ways in which health officers differ among North Carolina, the United States, and, particularly, the South Atlantic states.

The average annual salary of fulltime officers in North Carolina is $25,000, which compares unfavor-

TABLE 3

Percent of Health Officers Perceiving Selected Persons or Groups as Sources of Influence on the Establishment of Program Priorities, North Carolina, the Other South Atlantic States, and the Rest of the United States

Sources of Influence	North Carolina	South Atlantic Census Region, Excluding N.C.	United States Excluding The South Atlantic Census Region
Health Officer	75.8%	54.5%	53.6%
State Health Dept			
State Board of Health	64.5%	65.1%	63.1%
Local Board of Health	53.2%	12.4%	48.6%
Local Government	35.5%	28.2%	35.5%
State Legislature	19.4%	26.8%	14.4%
Consumers	14.5%	18.7%	24.7%

*Even though several local health agencies have non-physician directors, the local medical profession constitutes an important influence on public health programs and their development. The data summarized in Figure 3 reflect the fact that North Carolina public health officers are considerably more responsive to the private medical community than are their colleagues elsewhere in the Region or the nation.

ably to that of fulltime health department directors in the Region, excluding North Carolina, where salaries average $32,000. However, average salaries in the nation, excluding the South Atlantic states, are considerably lower — $21,640. Part of the explanation of this differential may be that nearly every health officer (98.6%) in the South Atlantic Region, excluding North Carolina, is a physician. (Over half of these have at least one other advanced degree, such as a Master of Public Health.) In North Carolina, exactly two-thirds of the health officers have medical degrees, and in the nation, excluding the Region, only 59.1% are physicians. The likelihood that physicians command higher salaries than other health department directors who usually have bachelor's or master's degrees may be one cause of the salary differences.

Health officers' length of work experience in public health also may help explain the salary variance. Health officers in North Carolina average 15.0 years of experience; in the rest of the Region the average is 15.9 years; and in the United States, excluding the South Atlantic states, the average is 13.8 years. In general, in terms of salary, the proportion of health officers with medical degrees, and length of experience, North Carolina is statistically between its neighboring South Atlantic states and the rest of the nation. (See Table 4.)

As of 1973, North Carolina was one of only 18 states permitting non-physicians to direct local health departments.[4] It is not surprising, then, that the percentage of health officers with M.P.H., M.S.P.H., M.H.A., or similar degrees *and* without medical degrees is far greater in North Carolina (20.0%) than it is in the rest of the country (8.3%) and in the other states of the Region, where there are none.

It appears that the gap between North Carolina and the rest of the country is likely to widen with respect to the employment of M.P.H. trained, non-physician health officers, for two reasons. First, the Department of Health Administration of the School of Public Health at UNC-CH has instituted a Master of Public Health program especially designed to train non-physician heads of health departments. Because this program became operational in 1971, its full impact on the number of M.P.H. health officers has not yet occurred. Second, 31.6% of this state's health officers are at least 60 years of age as compared to 17.8% in the rest of the United States. It may well be that as North Carolina's older health officers—most of whom do not have M.P.H. degrees — retire, they will be replaced with persons who have M.P.H. degrees either alone or in combination with M.D. degrees.

TABLE 4

Comparison of Health Officers' Salaries, Medical Degrees, and Years of Experience, North Carolina, the Other States in the South Atlantic Region, and the Rest of the United States

Area	Mean Annual Salaries, Full-Time Health Officers	Percentage of All Health Officers With M.D. Degree	Mean Number of Years of Experience, All Health Officers
North Carolina	$25,000	66.7%	15.0
South Atlantic Region, Excluding North Carolina	32,220	98.6%	15.9
United States, Excluding the South Atlantic Region	21,640	59.1%	13.8

Note Non-physician health directors are permitted only in Arizona, Arkansas, Idaho, Illinois, Iowa, Maine, Massachusetts, Missouri, Montana, New Hampshire, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, South Dakota, Vermont, Wisconsin, and Wyoming [4]

While the survey data presented here do not, in themselves, indicate that there is a trend, either in North Carolina or elsewhere, toward the employment of non-physician health officers, the respondents frequently mentioned two broad ideal qualifications of department heads: "general public health ability" and "administrative ability." These skills are not usually taught in medical schools. Furthermore, 80% of the responding health officers in North Carolina and 65% of those in the nation noted that the M.P.H. (or equivalent) degree should be included in the ideal education of health department directors. It seems, then, that most local health officers think that clinical training alone is not enough.

Summary

The data presented in this paper were generated by a brief, general questionnaire. While the results help fill the aforementioned information gap, they also meet another of the survey's objectives: to identify more specific research needs within local public health departments.

Much confusion exists about the future of local health departments. Additional research is required if legislators, administrators and board of health members are to make the wisest possible decisions affecting the delivery of public health services. Among many potential avenues of study, several are most evident — assessments of the quality and scope of health department services, analyses of the economy and efficiency with which these services are delivered, studies of the internal organization of local health agencies and of the interorganizational relationships among these agencies and others both from within and outside the public health system. If the full potential benefits from these "well-distributed" health care institutions are to be realized, careful study of these topics should be undertaken.

The data from a general survey of all local health departments in the United States reveal several facts of interest and importance for North Carolina public health services. North Carolina agencies are attempting to provide a broader array of personal and environmental health services than is generally available elsewhere in the Region and nation with more limited levels of funding and staff resources. Surprisingly, North Carolina health officers think that it is not the lack of funding but the lack of facilities within which to provide these services that is the main constraint to

the performance of their work. A relatively large proportion of North Carolina health officers are not physicians, yet their local health agencies are significantly more responsive to medical society influence than are similar agencies in the Region and nation.

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Confusion of thought, unsteadiness of the mind, irritability of the temper, defect of the memory, fickleness of disposition, and many other phenomena which are little suspected of corporeal origin, shew themselves infinitely more often than pain, deafness, vertigo, defect of vision, or affections of mere sensation. The former gradually rise into gusts of passion, fits of despondency, brooding melancholy, permanent irascibility, and still higher grades of intellectual disturbance, till, as sometimes happens, the point of temporary alienation is reached, and suicide terminates the scene. Those functional disturbances of the brain, however, which are evinced in the form of mental phenomena, are very common in *morbid sensibility* of the gastric and intestinal nerves, where the usual symptoms of indigestion and hepatic derangement are almost entirely wanting. . . . —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 42-43.

Cardiopulmonary Resuscitation (CPR) as Treatment of Cardiac Arrest
II. Basic CPR

James T. McRae, M.D.

BASIC cardiopulmonary resuscitation (CPR) is done on the spot, without external aids and without waiting to move the victim to a life support unit such as a hospital emergency department.

Once a rescuer has started basic CPR, he must continue it until: (1) the victim recovers; (2) the rescuer is too exhausted to continue; (3) the rescuer is able to turn the victim over to trained personnel for further CPR; or (4) the victim is pronounced dead. The last alternative should be based on clear-cut signs of brain and cardiac death [1,2] and the decision made by a physician.

WITNESSED COLLAPSE

When the rescuer witnesses a collapse, he should immediately call for someone to assist him on the spot or to obtain an ambulance or other rescue vehicle. The rescuer should then kneel beside the victim's shoulder and check to see if he is conscious and breathing. If he is neither conscious nor breathing, the rescuer must attempt to open his airway by turning him on his back, elevating his neck and tilting his head backward to lift the tongue away from the back of his throat.* This maneuver is often all that is necessary to restart breathing. It is extremely important that the airway be kept open at all times. If the victim has vomited, his head should be turned to the side and lowered temporarily to remove the vomitus.

Next, the rescuer should feel for a carotid pulse, and if it is absent, he should deliver a precordial thump. The thump may restart a heart in standstill, or asystole; if not, the victim has not been harmed. The thump is a firm blow delivered to the midsternum with the fist from a height of eight to twelve inches. It should never be delivered from over the shoulder, as was previously taught, and it is usually not repeated. It is not recommended for infants or small children.

The rescuer should not wait to see the results of the precordial thump. If the victim does not start breathing spontaneously, the rescuer must start mouth-to-mouth resuscitation, being careful to pinch the victim's nostrils shut and to seal his open mouth over the victim's. If the victim has vomited, the rescuer may first place a handkerchief or gauze pad over the victim's mouth, or close the victim's lips and breath into his nose. If the victim is an infant or small child, the rescuer should seal both the nose and the mouth with his open mouth.

Ideally, the rescuer should breathe quickly and forcefully four times without waiting for full exhalation by the victim. These breaths should be full but not so forceful in infants and small children that they damage or rupture the lung tissue. The air expired in these breaths still contains three-fourths of the oxygen inspired (about 15% as opposed to 21% oxygen in ambient or room air) and is adequate to oxygenate the victim.[1,2]

No time should be wasted trying to remove all liquid vomitus from the victim's mouth; it is far less serious to blow some of this material into the victim's lungs than not to breathe for him at all. If the victim's chest does not rise with these breaths, the rescuer should check to see if the airway is obstructed. (See section on airway obstruction.)

After the airway opening, the precordial thump and the first four breaths, the rescuer should again check carefully for a carotid pulse, since these maneuvers are often all that are necessary to resuscitate a victim. If no pulse can be felt, the rescuer must proceed immediately with external cardiac compression.

This is done in adults by applying pressure over the lower half of the

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*If the victim appears to have injured his neck, the rescuer should, of course, maintain the head in a neutral position and displace the mandible forward (modified jaw thrust).

sternum with the heel of the hand extended at the wrist. The other hand is placed over the first hand and both elbows are kept straight. The sternum is depressed one and one-half to two inches, the force coming from the rescuer's shoulders. The victim must be on an unyielding surface. If he cannot be moved to one, that surface, a board, serving tray or bedside table, for example, must be brought to him. The heart must be squeezed between the depressed sternum and the unyielding spine; this cannot occur if the entire body sags when pressure is applied to the chest.

If the rescuer is alone, he must compress the chest at a rate of 80 per minute, stop after every 15 compressions, move to the victim's head and blow two quick, full and forceful breaths into the victim's lungs, again not waiting for full passive exhalation. Then he must quickly get back in position and continue cardiac compression. During each minute, the adult victim should receive about 60 chest compressions and eight breaths. If help has arrived, one rescuer should compress the heart at a rate of 60 per minute while the other rescuer interposes a single breath after every fifth compression, being careful not to interrupt the compression rhythm. The rescuers should exchange tasks before the one doing manual compression becomes too exhausted.

In the infant or small child, manual chest compression must be more gentle. The rescuer should use the heel of one hand in small children, the tips of the middle and index fingers in the infant. The rescuer can slip his hand under the infant's spine to provide the firm surface needed to oppose the sternal depression, or depress the sternum of a tiny infant by pressing it with his thumbs while placing his fingers against the back to provide resistance. The depression must be done in the midsternum to prevent damage to the liver and should be one-half to three-fourths inch in infants, three-fourths to one and one-half inches in small children. Cardiac compression should be done at a rate of 80 to 100 per minute; one breath should be interposed between every five compressions. Because of limitations in space, resuscitation of the infant or small child is often best done by one rescuer rather than two.

These routines allow cardiac compression to be smooth and uninterrupted. With one exception (given under advanced CPR), it should never be stopped for more than five seconds. With any pause in external compression, the mean blood pressure naturally drops to zero and cardiac output ceases. Since cardiac output is only approximately one-third normal when the best possible external cardiac compression is being done, any cessation in compression seriously jeopardizes the oxygenation of the victim's brain and other vital organs.

As soon as it is obvious that stabilization has been accomplished or that stabilization at the scene is impossible, the victim should be transported to the nearest life-support unit, such as an emergency department.

UNWITNESSED COLLAPSE

In a collapse that was not witnessed and is therefore of unknown duration, it is unwise to deliver a precordial thump. A person who has not breathed for several minutes will certainly have an anoxic as well as an acidotic myocardium, and if ventricular fibrillation is not already present, the thump may precipitate it. Basic CPR in the victim with unwitnessed collapse should start with the call for help followed by the opening of the airway, then proceed to the first four full, quick breaths, and then to a checking of the carotid pulse. The remaining steps are the same as for a witnessed collapse.

In summary, the steps of basic CPR for cardiac arrest are:

1. Call for help.
2. Check to see if victim is conscious and breathing.
3. If not, open airway by turning victim supine, elevating his neck and tilting his head back.
4. If victim does not regain consciousness and resume breathing immediately:
   (a) *Witnessed Collapse*
   —Check for carotid pulse;
   —If it is absent, administer precordial thump;
   —Start mouth-to-mouth resuscitation with four quick, full and forceful breaths;
   —Recheck carotid pulse.
   (b) *Unwitnessed Collapse*
   —Start mouth-to-mouth resuscitation with four quick, full and forceful breaths;
   —Check carotid pulse.
5. If carotid pulse is absent, start external cardiac compression.
6. Place firm support under victim's chest
   (a) (one rescuer) depress sternum 80 times a minute, stopping after every 15 compressions to blow two quick, full and forceful breaths in victim's lungs (for a child: 80 to 100 depressions per minute with one breath interposed between every five compressions.
   (b) (two rescuers) depress sternum 60 times a minute with one breath interposed every fifth compression. There should be no interruption in the cardiac compression rhythm.
7. Continue this rescue effort until:
   (a) the victim recovers,
   (b) the rescuer is exhausted and cannot continue,
   (c) the rescuer can turn the victim over to other trained personnel for basic or advanced CPR, or
   (d) the victim is pronounced dead by a physician.

AIRWAY OBSTRUCTION

In some victims the airway will remain obstructed after the head has been tilted and the neck extended. The first step to correct this would be additional efforts to eliminate the tongue as the cause of such obstruction. The rescuer should try hyperextending the head further and elevating the neck more. If these fail, the rescuer should try a modified jaw thrust, placing his index fingers behind the angles of

the mandible and forcibly displacing the mandible forward, bringing the tongue with it.

Material such as broken teeth or dentures, or vomitus containing fairly large particles of undigested food, can cause upper airway obstruction. The rescuer can usually find and remove such material by sweeping his index finger through the mouth and hypopharynx, opening the mouth if necessary with a scissors-like motion of the thumb and index finger of his other hand. This maneuver should be done quickly with the supine victim turned about 45° away from the rescuer and supported on the rescuer's thigh.

The rescuer should then make another effort to ventilate the victim. If he is still unsuccessful, he should turn the victim toward him and deliver blows to the victim's back between the scapulae, in the hope of dislodging and removing any foreign material. Another effort at ventilation should then be made. These procedures should be repeated as necessary. If they are unsuccessful, an emergency cricothyrotomy should be done to bypass the airway obstruction.This, however, is not considered basic CPR.

An exception to the above routine is when a person is eating and is suddenly unable to breathe or *speak*. This form of arrested breathing is more likely to be due to obstruction from a piece of food, usually meat, than to a heart attack. It has been referred to as a "cafe coronary," since it frequently occurs when one is dining out. The food can usually be removed with the fingers in the manner described above. If not, an effort may be made to dislodge the obstructing material by applying sudden upward pressure on the epigastrium,[3] on the theory that residual air in the lungs will "pop" the foreign body out. This maneuver can be done with the victim standing, sitting or supine. The effectiveness and safety[4] of the maneuver are under intensive investigation, and its role in basic resuscitation is still to be determined. In any case, it must not be used as a substitute for the basic CPR maneuvers outlined above. The additional time that the maneuver requires may cause a critical and dangerous delay in the initiation of artificial respiration and circulation.

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2. Goldberg AH: Cardiopulmonary arrest. N Eng J Med 290:381-385, 1974
3. Heimlich HJ: A life-saving maneuver to prevent food-choking. JAMA 234:398-401, 1975.
4. Visintine RE, Baick CH: Ruptured stomach after Heimlich maneuver. JAMA 234:415-416, 1975

. . . of all the *physical* causes of indigestion, our diet is the chief — so over this cause we fortunately have the greatest control. But sensuality and conviviality are perpetually seducing us from the paths of temperance, and seldom permit us to think of preserving health till we have lost it. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 53.

Editorials

POSITIVE IMPLICATIONS IN A NEGATIVE PHENOMENON

The Cleveland County Task Force, reporting in this issue of the *Journal*, is to be congratulated on its recognition and investigation of increasing hazard to infants at a specific point in life and in a very localized area. The absolute number of infants and the geographic area involved are small, but the group fortunately did not derive comfort from "death in small numbers." The work of the task force is analytically approached and solidly grounded in epidemiological principles. The authors' credibility is further enhanced by the simple fact that they have drawn questions rather than conclusions from their data. The questions indeed transcend the report in that they are directly applicable to the total problem of mortality in the first year of life.

While the report focuses on a negative and disturbing phenomenon, there are two positive aspects implicit in the work of the group. First, the increasing risk to infants born in Cleveland County has been addressed in the context of a wider geographic area. Second, the investigation has been effectively implemented by a multidisciplinary team.

In the first aspect the implications for regionalization of health resources in problem solving are self-evident. The report of the task force demonstrates the usefulness of focusing on a single-unit problem in the framework of its broader universe. The potential for such allocation of health resources lies in the current creation of regional Health Service Areas. The concern and controversy surrounding the development of Health Service Areas would appear to arise more from administrative detail than from basic intent. Thus the demonstration by the Cleveland County Task Force of the benefit to be gained by regional focus on health problems may allay such concern and quench controversy. The bringing together of health-care providers, health planners, elected officials and interested laity can create an effective forum for constructive interchange of ideas and approaches.

The second positive aspect of the task force report relates to the use of a multidisciplinary team. The advantage of such an approach is more apparent when we recognize the limitations of medical knowledge regarding causes of mortality. We are increasingly aware that "lifestyle" has a definite effect on morbidity and mortality. For example, the task force itself alluded to the possible effect of newly-acquired affluence on increased death rate in a population. A recent editorial[1] in this *Journal* drew inferences concerning

When pain complicates acute cystitis*

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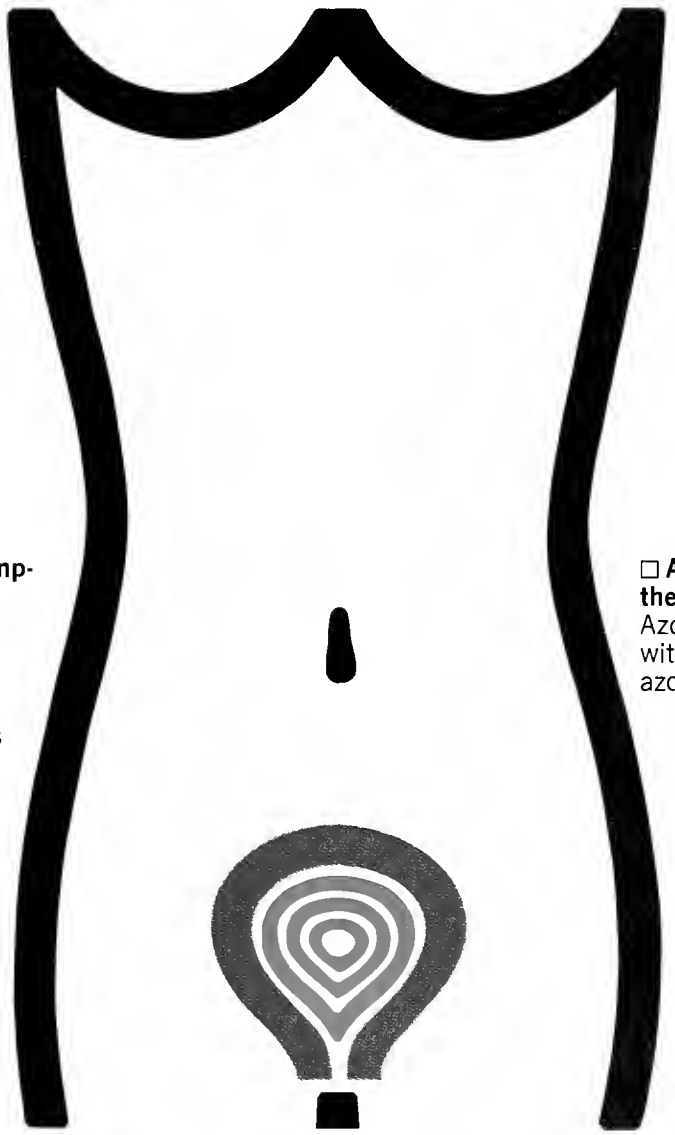

☐ **Early relief of painful symptoms** such as burning and discomfort associated with urgency and frequency.

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*nonobstructed; due to susceptible organisms

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Serum K^+ and BUN should be checked periodically. (See Warnings Section.)

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
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BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications"

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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the correlation of maternal diet pattern with prematurity. In other work[2] the relationship of stress to ensuing physical illness is postulated as a predictable equation. We do not, however, have adequate knowledge of or measures for the interplay of lifestyle and mortality. If death is the dependent variable, we are limited both in choice and measurement of the independent variables. We thus are hampered in our ability to seek out and change those facets of lifestyle which adversely affect a population. The union of medicine with the "social" disciplines could be a constructive step toward expansion of our incomplete understanding of fundamental factors promoting both health and disease.

The process of problem definition and solution should proceed more rapidly and effectively in broader geographic contexts and through multidisciplinary approaches. Certainly not all our health problems can be alleviated by simple amalgamation of analysis, planning and resources. The task force of Cleveland County, however, has pointed one direction toward which we might mesh our efforts in a nontraditional fashion. The infant mortality rate in North Carolina continues to rank high among the states. It is incumbent upon us as health professionals to join forces with our colleagues in the psychosocial disciplines, our planners, our political officials and our patients in seeking remediation for death in the first year of life. If there is an "irreducible minimum" for infant mortality, it has yet to be reached in North Carolina.

JAMES A. CHAPPELL, M.D.
Department of Community Medicine
Bowman Gray School of Medicine
Winston-Salem, N.C. 27103

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2. Dohrenwend BS. Psychomatic medicine in a changing society: some current trends in theory and research. in *Health and the Social Environment*. Insel PA, Moos, RH, Eds., Lexington Books, Lexington, Mass., 1974

PROFESSIONAL COMMON GROUND

The North Carolina Association of Professions, founded in 1962, held its annual meeting recently at the Governor's Inn in the Research Triangle. The program focused on the objectives of the association of physicians, pharmacists, professional engineers, architects, dentists and veterinarians.

A panel of deans of their representatives from the six professional schools discussed recruitment, the number and quality of prospective students and the role members of the association could assume in selecting qualified students. The panel identified as a problem the surplus of applicants to all the schools and the need for other educational avenues for the large number of students denied admission, especially those properly motivated toward the professions. Admissions data revealed increases in minority and female admissions in all the schools. Special emphasis was given to the need for support of the proposed school of veterinary medicine to relieve the mounting problems of admissions for North Carolina students to out-of-state schools.

A second panel of presidents of the member professions detailed organizational activities with particular emphasis on liability, ethics and expanding governmental controls. Dr. James Davis, president of the medical society, described the current liability crisis and reported the recommendations of the Legislative Commission. The panel revealed the concern of all the professions with matters related to liability.

A representative of the community college system reported the remarkable advance of vocational education from 11,000 students at its inception in 1957 to a present enrollment of 450,000, contributing to the establishment of more sophisticated types of industry in the state. Dr. John Caldwell, president of the newly organized Triangle University Center for Advanced Studies, revealed that the American Academy of Science had contracted for the establishment of an institution for research in the humanities in the center.

The professions are service vocations with much in common — education, ethical standards, legislative objectives and attainment of excellence. Outstanding contributions of the North Carolina Association of Professions are promotion of legislation to permit professional corporations, support for the school of veterinary medicine, community college advocacy, retirement plan study, recruitment of qualified candidates for professional employment and enhancement of the professional image.

The Association of Professions affords an opportunity for individual members to become involved in common goals and the solution of mutual problems.

J.S.R.

DIVERTICULOSIS—A SOCIAL DISEASE

Among the euphemisms of yesterday, social diseases had a special place allowing reference to venereal afflictions without saying a dirty word. Yet in that same Victorian era, a morbid preoccupation with bowel function led to colectomy for auto-intoxication, "inside" baths with frequent laxatives, and, in the case of an eminent Viennese physician, a fond name, Konrad, for his recalcitrant colon. Calomel was taken to the point of salivation and each spring brought its tonic, usually containing a potent cathartic. Hand in hand with the suppression of sex and the flagellation of the gut, and even preceding it, came the clean word campaign — a near-conspiracy to purify Shakespeare and even the Bible by excision of any words likely to weaken and corrupt the tender sensibilities of the day. Appropriately enough, such literary surgery was practiced most vigorously by a physician, Dr. Thomas Bowdler[1] (1754-1825) who retired from medicine at 31 to devote himself to the healing of a sick language and whose concern is memorialized in the verb bowdlerize defined in the Oxford English Dictionary as "to expurgate (a book or writing), by omitting or modifying words or passages considered indelicate or offensive; to castrate."

Naturally, reference to abdominal gas in thought,

word or deed would be offensive in such a milieu and suppression of flatus would be essential to maintain propriety. Now Wynne-Jones[2] has hypothesized that retention of flatus is the primary cause for sigmoid diverticular disease. If gas cannot escape, it rises so that the wall of the sigmoid colon is subjected to undue stress and gives way at weaker points because of increased intraluminal pressure. Thus, in an urban society which is obviously incensed at body odors,[3] the sigmoid pays the price and diverticulosis becomes a tribute to social consciousness and consideration as well as a convenient, if inadequate, explanation for gastrointestinal symptoms. So, welcome diverticulosis to the front ranks of social disease.

Some psychiatrists have speculated that repressed hostilities are transformed into symptoms which can only be relieved by providing less comfortable and more socially acceptable means of expression. While modern society may not be ready for the farting contests of Queen Elizabeth's time, described by Mark Twain in *1601* and recorded for posterity by Richard Dyer-Bennett, we obviously must be concerned about gas. Levitt[4] has recently ruminated about methane production in the colon of man and has observed that such natural gas if captured could satisfy about 8% of the needs for household gas in the United States. Methane production is limited to about one-third of the population whose flatus can burn with a blue flame and whose stools float because trapped gas adds buoyancy. Since methane appears in the breath as well as the feces, breath analysis could be of considerable value in studying metabolites of intestinal bacteria since their activity seems responsible for the production of methane and other volatile materials. "It's an ill wind. . . ."

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1. Perrin N. *Dr. Bowdler's Legacy*. Anchor, New York, 1971.
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3. Television commercials. Public communication.
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Committees and Organizations

North Carolina Medical Society
James E. Davis, M.D.
Resolution of Commendation*

In the Bicentennial Year of our country, we remember with gratitude that in times of great crisis, great men have come forward to lead us. The post of President of the North Carolina Medical Society is an awesome responsibility in any year.

But, in this year that began with innovations such as the regional report sessions that brought the medical society to the entire membership. . . .

A year of recurrent liability insurance crises that included transient unavailability of professional liability insurance. . . .

A year of waiting for a ruling by the United States Supreme Court. . . .

A year that witnessed the formation of our own mutual liability insurance company. . . .

A year that included a called meeting of the society House of Delegates. . . .

A year with a special legislative commission hearing and report. . . .

A year busy with efforts to obtain legislative enactment. . . .

A year truly fraught with great crises . . . and a great man did come forward to lead us. . . .

We have been blessed with the leadership of a highly competent and dedicated President who has brought us through this year with our proud profession intact, in touch and ahead. . . .

We commend you, Jim, for your signal service, for your inspiration and for your able direction. . . .

And, we commend Margaret for sharing you with us when we needed you most. . . .

Chalmers R. Carr, M.D.
Resolution of Commendation†

Whereas, the House of Delegates is the ultimate authority for actions by the North Carolina Medical Society,

Whereas, appropriate leadership in the House of Delegates is vital both to chart the course that medicine takes and also to preserve the democratic rights and privileges of each of the members of the North Carolina Medical Society,

Whereas, Chalmers R. Carr, M.D., has in an exemplary fashion served as a Speaker of the House of Delegates for six years,

THEREFORE BE IT RESOLVED that the House of Delegates

1. Commend Chalmers Carr for the excellent service he has performed.
2. Express appreciation to him for the fine work he has performed both in this and his long tenure of unselfish service to the medical profession in North Carolina.

*Adopted by the Executive Council, North Carolina Medical Society, April 17, 1976 and the House of Delegates, — May 8, 1976 on the completion by James E. Davis, M.D., of his term as State Society President.

†Passed unanimously by the House of Delegates, North Carolina Medical Society, May 8, 1976, on the completion by Chalmers R. Carr, M.D., of his term as Speaker of the House of Delegates

Bulletin Board

NEW MEMBERS
of the State Society

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Eckberg, David Edward, MD (AN), 228 Shoreline Dr., New Bern 28560
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Fernandez, Charles Raymond, MD (IM), 1350 S. Kings Dr., Charlotte 28207
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Israel, James Ray, MD (P), 2750 S. Stratford Rd., Winston-Salem 27103
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Miller, Charles Henry, MD (PMR), 1200 Blythe Blvd., Charlotte 28203
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Nashick, George Henry, MD (FP), P.O. Box 336, Bayboro 28515
Nordan, John McLean, MD (U), 208 W. Wendover Ave., Greensboro 27401
Patel, Bharat R., MD #7, Pineywood Townhouses, Southern Pines 28387
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Shea, Thomas Charles (STUDENT), 712 Basknight Lane, Chapel Hill 27514
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Wortman, William Jerome, Jr., MD, (OBG) 401 S. Sharon Amity Rd., Charlotte 28211

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore, CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

July 4-6

Sixth Annual Sports Medicine Symposium
Place: Blockade Runner Motel Hotel, Wrightsville Beach
Fee: $20; physician and spouse or guest $40
For Information: Mr. Gene L. Sauls, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

September 10-11

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society
Place: Pinehurst Hotel, Pinehurst
For Information: Mrs. John McLain, Executive Secretary, 3209 Rugby Road, Durham 27707

September 15-16

21st Annual Angus M. McBryde Perinatal Symposium
Fee: $50
Credit: 12 hours; AAFP approval requested
For Information: Lillian R. Blackmon, M.D., Box 3936, Duke University Medical Center, Durham 27710

September 16-19

Invitational Assembly for Advanced Urology: The Prostate
Place: Pinehurst Hotel & Country Club, Pinehurst
Fee: $135; registration is limited; pre-registration required
Credit: 18 hours
For Information: Ms. Virginia Jordan, Assembly Secretary, P.O. Box 3707, Duke University Medical Center, Durham 27710

September 17-18

6th Walter L. Thomas Symposium
Credit: 12 hours
For Information: William Creasman, M.D., P.O. Box 3079, Duke University Medical Center, Durham 27710

September 22-26

North Carolina Medical Society Annual Committee Conclave
Place: Mid-Pines Club, Southern Pines
Regular meetings will be scheduled for the chairman and members of almost all regular committees of the Medical Society. Committee members should plan to be present if at all possible
For Information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

September 30-October 2

Dermatology for Non-Dermatologists
Fee: $125
Credit: 17½ hours
For Information: Gerald Lazarus, M.D., Box 2987, Duke University Medical Center, Durham 27710

October 6-7

Sixteenth Annual Charlotte Postgraduate Seminar
Place: Charlotte Memorial Hospital and Medical Center Auditorium
Sponsor: Mecklenburg County Chapter — American Academy of Family Physicians
Credit: 12 hours; AAFP approved
For Information: David S. Citron, M.D., Chairman, 1012 Kings Drive, Charlotte 28283

October 29-30

Anesthesiology Fall Seminar
Place: The Sheraton Center, Charlotte
Sponsors: Department of Anesthesiology, Charlotte Memorial Hospital; Department of Anesthesiology, University of North Carolina; North Carolina Society of Anesthesiologists
Fee: Physicians $55; Nurse Anesthetists $45; Residents and Nurse Anesthetists in training $30; one day registration $30
For Information: H. A. Farrari, M.D., Chairman, Department of Anesthesiology, Charlotte Memorial Hospital, Charlotte 28234

ITEMS OF SPECIAL INTEREST

Courses In Ultrasound

A series of three 10-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: September 27-December 3, 1976, January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category 1.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem, North Carolina 27103.

October 25-29

New Concepts in General Radiology
Place: Southampton Princess Hotel, Bermuda
Fee: $250
Credit: 25 hours
Program: The scientific program will take place from 8:00 AM to 1:00 PM each day, and will be organized around a disease oriented format. Subject areas and guest faculty who will address these include: chest — Robert Heitzman, M.D., Syracuse, New York; gastro-intestinal tract — Roscoe E. Miller, M.D., Indianapolis, In.; genito-urinary — John A. Evans, M.D., New York, N.Y.; nuclear medicine — Alexander Gottschalk, M.D., New Haven, Conn.; pediatric radiology — J. Scott Dunbar, M.D., Cincinnati, Ohio; skeletal system — Elias G. Theros, M.D., Washington, D.C.
For Information: Robert McLelland, M.D., Radiology — Box 3808, Duke University Medical Center, Durham 27710

Postgraduate Education for Pediatricians and Obstetricians

The Maternal and Child Health Program of the University of California School of Public Health at Berkeley announces postgraduate programs for pediatricians and obstetricians in the field of Maternal and Child Health and Family Planning. Program areas available at the present time include nine-month programs in Maternal and Child Health, in the Health of the School-Age Children and Youth, and Day Care and the Preschool Child. Twenty-one month programs in Care of Handicapped Children and Comprehensive Health Care, and a 33 month program in Perinatology are also available. These programs all lead to the degree of Master of Public Health, and tax-exempt Fellowship support is available.

Applications are now being accepted for the group entering September, 1977. For information, write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720.

PROGRAMS IN CONTIGUOUS STATES

September 23

Diabetes 1976
Sponsors: Division of Endocrinology and Metabolism, and the Department of Continuing Education
Fee: Physicians, $30; visiting interns and residents, nurses, dietitians, and other health personnel, $10; enrollment limited to 275
Credit: 6¼ hours; AMA Category 1; AAFP approval requested
For Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, MCV Station, Richmond, Virginia 23298

The items listed in this column are for the six months immediately following the month of publication. Requests for listing should be received by WHAT? WHEN? WHERE?, P.O. Box 15249, Durham, N.C. 27704, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA
DIVISION OF HEALTH AFFAIRS

Dr. Cecil G. Sheps will step down from his post as vice chancellor for health sciences at the University of North Carolina at Chapel Hill on December 31, 1976. Dr. Sheps will return to his work as professor of social medicine in the UNC-CH School of Medicine.

The announcement was made by Chancellor Ferebee Taylor, who stated that he has created a special advisory committee to advise him with respect to filling the position of vice chancellor for health sciences effective January 1, 1977.

One of the nation's leading authorities on ways to improve delivery of health services, Dr. Sheps has served on more than 35 special national or international study groups or commissions. He presently is working on seven national assignments and two editorial boards.

For the past three years he has been chairman of the Milbank Memorial Fund Commission for the Study of Higher Education for Public Health in the United States and Great Britain. The report of that commission was published in May.

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A portrait of Myrl Ebert, former director of the Health Sciences Library at the University of North Carolina at Chapel Hill, was unveiled Saturday, March 27.

The portrait, painted by George Lynch, professor of medical illustration, Bowman Gray School of Medicine, Winston-Salem, will hang in the Health Sciences library which Miss Ebert directed from its beginning in 1952 until her retirement in December, 1975.

From the library's beginnings in a cramped room with various attics and basements for storage space to its current location in an ultramodern building with the best of facilities, it has experienced tremendous growth, and Miss Ebert watched and contributed to its growth every step of the way.

The library now includes 150,000 volumes in its three-story building in the health sciences complex, which was opened in 1970. The staff, originally five people, has expanded to include 28 regular workers and 10-12 students.

Under Miss Ebert's leadership, the Health Sciences Library, along with Duke and Bowman Gray medical libraries, has pioneered a number of cooperative ventures and innovations.

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The U.S. has got to say no to new technologies and products unless there is proof they won't pollute, Sen. Edmund Muskie (D-Maine) said during the annual Fred T. Foard Memorial Lecture at the University of North Carolina at Chapel Hill.

Although existing environmental statutes impose a greater burden on polluters today than 10 years ago, he said, there are still too many instances of potential pollution problems.

He cited the development of nuclear energy centers and the increased use of the Concord Supersonic Transport (SST) as two examples of "technological juggernauts" that are being undertaken despite the fact that they have not proven that no environmental ill effects will result.

Muskie said that the Environmental Protection Agency has identified 65 pollutants that are assumed to be ecologically dangerous, but which are regularly discharged into the nation's waters because there is not yet enough clear evidence against them to label them "toxic."

"We have the capacity to initiate a course of events, the result of which will be irreversible," Muskie said. "And we have the genius to alter or avoid that course. The question is whether we have the will and the foresight to do so."

The Foard Lecture, sponsored by the UNC-CH School of Public Health, was established in 1968 by his widow, Mrs. Elsie D. Foard, to honor the distinguished public health practitioner for many achievements during his 50-year career.

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A three-year study by the National Academy of Sciences reports that the effectiveness of chemicals to control important insect pests is declining alarmingly.

Alternative ways to control some pests may be revealed in research work being done at the University of North Carolina School of Medicine at Chapel Hill.

Dr. Henry Hsiao, assistant professor in the curriculum in biomedical engineering and mathematics, is investigating the attraction of night flying moths to light.

His study focuses on a basic problem in insect physiology — phototaxis (the movement of cells under the influence of light).

Hsiao and research assistant Robert O'Connor, a graduate student in bioengineering at UNC, are studying the behavior of the corn earworm moth in relation to light. Their research is funded by a grant from the National Science Foundation.

If they are able to learn why these insects fly to light, North Carolina farmers should be able to use the knowledge to help control these pests.

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Dr. David L. McIlwain, assistant professor of physiology at the University of North Carolina School of Medicine at Chapel Hill, has been awarded a two-year $37,711 March of Dimes research grant.

McIlwain will study the structure and metabolism of nerve cells in the spinal cord.

His goal is to identify differences in the patients' nerve cells which may underlie certain birth defects and lay groundwork for devising specific treatments or means of prevention.

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Ten to 15 per cent of all patients seen by a family doctor are there because of skin disorders.

"This means," Dr. Clayton E. Wheeler said, "that the bulk of dermatologic or skin disease is managed by the primary care physician and not by the specialist, the dermatologist."

Wheeler is professor and chairman of the department of dermatology at the University of North Carolina School of Medicine at Chapel Hill. He feels that if primary care physicians are to manage the majority of skin diseases they should be better prepared to do so.

Funding received recently by the UNC School of Medicine should help. With the aid of a two-year grant from the National Fund for Medical Education, the UNC department of dermatology will develop a program to teach dermatology to nondermatologists.

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Dr. Joel Baseman of the University of North Carolina School of Medicine at Chapel Hill will study syphilis under a recently awarded five-year grant from the National Advisory Allergy and Infectious Diseases Council, a division of the National Institutes of Health.

Baseman, a Jefferson Pilot Fellow in Academic Medicine, is examining Treponema pallidum, a spirochete that is the causative agent of syphilis.

According to Baseman, an assistant professor in the UNC department of bacteriology and immunology, research on syphilis has been hampered because the organism cannot be grown in laboratory media.

Baseman said an understanding of how the body

responds to the spirochete could lead to clarification of the disease process. "Once we define the virulence factors of the spirochete, we should be able to interrupt the host interaction process and end the disease."

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America's academic health centers should be concerned with more than teaching, patient care and biomedical research, according to the medical school dean at the University of North Carolina at Chapel Hill.

At the national convention of Alpha Epsilon Delta, premedical honor society, in Tuscaloosa, Ala., Dr. Christopher C. Fordham III said academic medical centers have an obligation to relate to "regional constituencies for education, patient care and the translation of up-to-date biomedical knowledge."

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Dr. Nortin M. Hadler of the University of North Carolina School of Medicine at Chapel Hill has been awarded an Established Investigatorship by the American Heart Association (AHA).

Hadler, an assistant professor of medicine, bacteriology and immunology, is seeking a better understanding of the causes of rheumatic fever and rheumatoid arthritis.

"We are studying the cellular mechanisms that control chronic inflammation and have the capacity to destroy normal tissue," he said. The research, he said, has direct relevance to heart disease and lung disease as well as arthritis.

Hadler will focus on defining the development of rheumatoid arthritis in rats and attempt to establish its relevance to disease in man.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

In August Duke Hospital will switch from its present Burroughs/Medi-Data system to a new computer network designed jointly by IBM and staff members at Duke.

The new network promises to be faster, easier to use, quieter and more flexible than the present system. Selection of the network, which has been named the "Duke Hospital Information System," was based on a careful review of all available hospital computer services.

Fifteen task forces, representing the major clinical and service departments, are currently working to help develop and design the new system to serve their individual needs.

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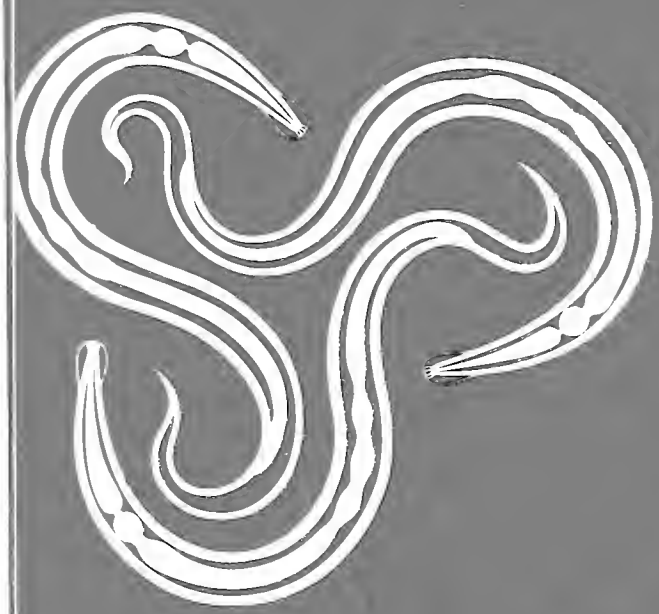
Dr. James F. Glenn, professor and chief of the Division of Urologic Surgery in the Department of Surgery, was installed as president of the southeastern

The only single-tablet treatment of pinworm



Vermox

section of the American Urological Association at the group's 40th annual meeting in Hollywood, Fla.

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Dr. William Shingleton, director of the Comprehensive Cancer Center, has been elected president of the North Carolina Chapter of the American College of Surgeons.

* * *

Dr. David C. Sabiston Jr., chairman of the Department of Surgery, served as guest lecturer at the Association of South African Surgeons biennial conference in Cape Town.

In addition, while Sabiston was in South Africa he was a visiting professor at two medical centers, the University of Stellenbosch and the University of Witwatersrand in Johannesburg.

* * *

Sophomore medical student Marion Preston has been chosen by the Henry Luce Foundation of New York as one of 15 young Americans to receive a scholarship for a year of study in the Far East.

Ms. Preston, a 1974 graduate of Yale, is the third Duke student in three years to participate in the program. With the support of the Luce Foundation, Ms. Preston will take a year's leave of absence from the medical school to study, work and travel in a program of her own design.

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Dr. Donald S. Miller, a 38-year-old leukemia specialist at the Comprehensive Cancer Center, has been appointed the center's director of cancer control. He succeeds Dr. Seigfried Heyden, former acting director, who is continuing his cancer screening and education programs.

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Dr. Charles Tanford has been chosen to be the George Eastman Visiting Professor at Oxford University in England for the 1977-78 academic year.

He is the first member of the Duke faculty to be selected for the distinguished professorship in the 46-year history of the award.

Tanford, 54, is James B. Duke Professor of Biochemistry.

With the appointment, Tanford joins a list of internationally recognized senior American scholars, including the late Felix Frankfurter, associate justice of the Supreme Court; Dr. Linus Pauling, professor of chemistry at the University of California; George F. Kennan of the Institute for Advanced Study at Princeton; and Dr. George W. Beadle, president of the University of Chicago.

The annually awarded professorship goes in alternate years to representatives of the sciences and the humanities. About half the scientists chosen have been Nobel Prize winners.

Two professors in the medical center have been appointed to James B. Duke professorships, the highest academic honor bestowed by the university.

They are Dr. Stanley H. Appel, a neurologist and biochemist, and Dr. Irwin Fridovich, a biochemist.

Appel received his bachelor's degree from Harvard University in 1954 and his medical degree from Columbia University in 1960. He has been at Duke since 1967.

Fridovich received his bachelor's degree in chemistry from the City College of New York in 1951. He earned his doctoral degree in biochemistry from Duke in 1955 and has taught in the department of biochemistry here since 1956.

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Three medical faculty members have received promotions:

Dr. D. Woodrow Benson Jr., 34, was named an assistant professor of pediatrics. He is a native of Ocala, Fla., and received his M.D. at Duke in 1972. He had been an associate in pediatrics.

Dr. James O. McNamara, 33, was named an assistant professor of medicine. He is a native of Portage, Wis., and received his M.D. in 1968 at the University of Michigan. He had been an associate in medicine.

Dr. K. Thomas Noell, 34, was named an assistant professor of radiology. He is a native of Hamburg, Germany, and received his M.D. in 1967 at the University of Rochester. He had been an associate in radiology.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Through a new outreach program developed by the Cancer Research Center at Bowman Gray, it is anticipated that about 2,500 additional cancer patients will be brought under modern chemotherapy plans.

The program will make treatment protocols available to individuals in an area stretching from Roanoke, Va., to Columbia, S.C. The collaborating team will include 22 individuals with special training in medical oncology and radiation therapy.

* * *

Research at the Bowman Gray School of Medicine has provided further evidence of the dangers of using neutral red dye and fluorescent light in treating venereal herpes infections.

The research was conducted by the Department of Microbiology and Immunology and the Department of Obstetrics and Gynecology.

Cells taken from humans were infected with herpes simplex virus-type two and were then treated with the

dye-light. The cells took on a cancerous appearance. The experiments were repeated, using cells taken from rats. After the rat cells had been infected by the herpes virus and given the dye-light treatment, they too took on a cancerous appearance. Those cells were injected into two groups of rats.

In one group of rats, there was a 100 per cent incidence of rapidly developing tumors. In the second group, there was a 55 per cent incidence of tumors.

* * *

Danny L. Watkins, a student in Bowman Gray's physician assistant program, has been elected student secretary of the American Academy of Physician's Assistants.

Watkins was elected during the fourth annual conference on New Health Practitioners in Atlanta. He also was elected to the Board of Directors of the American Academy of Physician's Assistants.

* * *

Two Bowman Gray students have been awarded scholarships to study the National Health System in England this summer.

The two are Nancy Ash, a rising sophomore, and Randy H. Butler, a rising junior.

They have received King's Fund Scholarships, which are arranged through the King Edward VIII Fund and the Duke Endowment.

Dr. Henry S. Miller Jr., professor of medicine, has been elected to a three-year term on the board of trustees of the American College of Sports Medicine. He also has been elected an alternate delegate to the American Heart Association Assembly for the annual American Heart Meeting to be held in November.

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Dr. Joseph E. Johnson III, professor and chairman of the Department of Medicine, has been elected a foreign corresponding member of the Societe Francaise De La Tuberculose et des Maladies Respiratoires (Paris).

* * *

Dr. George Podgorny, clinical assistant professor of surgery, has been appointed a member of the American Board of Emergency Medicine.

* * *

Dr. Jesse H. Meredith, professor of surgery, has been elected vice chairman of the North Carolina Trauma Committee of the American College of Surgeons.

* * *

Dr. Stephen H. Richardson, professor of microbiology and immunology, has been elected vice president of the North Carolina branch of the American Society of Microbiology.

Dr. Jimmy L. Simon, professor and chairman of the Department of Pediatrics, has been selected as a member of the National Task Force on Pediatric Education.

* * *

Dr. F. Clay Watts, research assistant of radiology, has been elected president-elect of the Southeastern Chapter of the American Association of Physicists in Medicine.

Syphilis — CDC Recommended Treatment Schedules, 1976

The following recommendations were established by the Venereal Disease Control Advisory Committee after deliberation with therapy experts.

Few data have been published on the treatment of syphilis since CDC revised these recommendations in 1968. Penicillin continues to be the drug of choice for all stages of syphilis. Every effort should be made to document penicillin allergy before choosing other antibiotics because these antibiotics have been studied less extensively than penicillin. Physicians are cautioned to use no less than the recommended dosages of antibiotics.

EARLY SYPHILIS (primary, secondary, latent syphilis of less than 1 year's duration)

(1) Benzathine penicillin G — 2.4 million units total by intramuscular injection at a single session. *Benzathine penicillin G is the drug of choice because it provides effective treatment in a single visit.* **OR**

(2) Aqueous procaine penicillin G — 4.8 million units total: 600,000 units by intramuscular injection daily for 8 days. **OR**

(3) Procaine penicillin G in oil with 2% aluminum monostearate (PAM) — 4.8 million units total by intramuscular injection: 2.4 million units at first visit, and 1.2 million units at each of 2 subsequent visits 3 days apart. *Although PAM is used in other countries, it is no longer available in the United States.*

Patients who are allergic to penicillin:

(1) Tetracycline hydrochloride* — 500 mg 4 times a day by mouth for 15 days. **OR**

(2) Erythromycin (stearate, ethylsuccinate or base) — 500 mg 4 times a day by mouth for 15 days.

These antibiotics appear to be effective but have been evaluated less extensively than penicillin.

SYPHILIS OF MORE THAN 1 YEAR'S DURATION (latent syphilis of indeterminate or more than 1 year's duration, cardiovascular, late benign, neurosyphilis)

(1) Benzathine penicillin G — 7.2 million units total: 2.4 million units by intramuscular injection weekly for 3 successive weeks. **OR**

(2) Aqueous procaine penicillin G — 9.0 million units total: 600,000 units by intramuscular injection daily for 15 days.

The optimal treatment schedules for syphilis of greater than 1 year's duration have been less well established than schedules for early syphilis. In general, syphilis of longer duration requires higher-dose therapy. Although therapy is recommended for established cardiovascular syphilis, there is little evidence that antibiotics reverse the pathology associated with this disease.

Cerebrospinal fluid (CSF) examination is mandatory in patients with suspected, symptomatic neurosyphilis. This examination is also desirable in other patients with syphilis of greater than 1 year's duration to exclude asymptomatic neurosyphilis.

Published studies show that a total dose of 6.0-9.0 million units of penicillin G results in a satisfactory clinical response in approximately 90% of patients with neurosyphilis. There is more published clinical experience with short-acting penicillin preparations than with benzathine penicillin G. Some clinicians prefer to hospitalize patients with neurosyphilis, particularly if the patient is symptomatic or has not responded to initial therapy. In these instances they treat patients with 12-24 million units of aqueous crystalline penicillin G given intravenously each day (2-4 million units every 4 hours) for 10 days.

Patients who are allergic to penicillin:

(1) Tetracycline hydrochloride — 500 mg 4 times a day by mouth for 30 days. **OR**

(2) Erythromycin (stearate, ethylsuccinate or base) — 500 mg 4 times a day by mouth for 30 days.

There are NO published clinical data which adequately document the efficacy of drugs other than penicillin for syphilis of more than 1 year's duration. Cerebrospinal fluid examinations are highly recommended before therapy with these regimens.

SYPHILIS IN PREGNANCY

Evaluation of Pregnant Women

All pregnant women should have a nontreponemal serologic test for syphilis, such as the VDRL or RPR test, at the time of the first prenatal visit. The treponemal tests such as the FTA-ABS test should not be used for routine screening. In women suspected of being at high risk for syphilis, a second nontreponemal test should be performed during the third trimester. Seroreactive patients should be expeditiously evaluated. This evaluation should include a history and physical examination, as well as a quantitative nontreponemal test and a confirmatory treponemal test.

If the FTA-ABS test is nonreactive and there is no clinical evidence of syphilis, treatment may be withheld. Both the quantitative nontreponemal test and the confirmatory test should be repeated within 4 weeks. If there is clinical or serologic evidence of syphilis or if the diagnosis of syphilis cannot be excluded with reasonable certainty, the patient should be treated as outlined below.

Patients for whom there is documentation of adequate treatment for syphilis in the past need not be retreated unless there is clinical or serologic evidence

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Reported by Venereal Disease Control Div, Bur of State Services, Center for Disease Control, Atlanta, Ga 30333

*Food and some dairy products interfere with absorption. Oral forms of tetracycline should be given 1 hour before or 2 hours after meals.

of reinfection such as darkfield-positive lesions or a 4-fold titer rise of a quantitative nontreponemal test.

A. For patients at all stages of pregnancy who are not allergic to penicillin: Penicillin in dosage schedules appropriate for the stage of syphilis as recommended for the treatment of nonpregnant patients.

B. For patients of all stages of pregnancy who are allergic to penicillin: Erythromycin (stearate, ethylsuccinate or base) in dosage schedules appropriate for the stage of syphilis, as recommended for the treatment of nonpregnant patients. Although these erythromycin schedules appear safe for mother and fetus, their efficacy is not well established. Therefore, the documentation of penicillin allergy is particularly important before treating a pregnant woman with erythromycin. *Erythromycin estolate and tetracycline are not recommended for syphilitic infections in pregnant women because of potential adverse effects on mother and fetus.*

Follow-up

Pregnant women who have been treated for syphilis should have monthly quantitative nontreponemal serologic tests for the remainder of the current pregnancy. Women who show a 4-fold rise in titer should be retreated. After delivery, follow-up is as outlined for nonpregnant patients.

CONGENITAL SYPHILIS

Congenital syphilis may occur if the mother has syphilis during pregnancy. If the mother has received adequate penicillin treatment during pregnancy, the risk to the infant is minimal. However, all infants should be examined carefully at birth and at frequent intervals thereafter until nontreponemal serologic tests are negative.

Infected infants are frequently asymptomatic at birth and may be seronegative if the maternal infection occurred late in gestation. Infants should be treated at birth if maternal treatment was inadequate, unknown, with drugs other than penicillin, or if adequate follow-up of the infant cannot be ensured.

Infants with congenital syphilis should have a CSF examination before treatment.

Infants with abnormal CSF:

(1) Aqueous crystalline penicillin G, 50,000 units/kg intramuscularly or intravenously daily in 2 divided doses for a minimum of 10 days. **OR**

(2) Aqueous procaine penicillin G, 50,000 units/kg intramuscularly daily for a minimum of 10 days.

Infants with normal CSF:

Benzathine penicillin G, 50,000 units/kg intramuscularly in a single dose. *Although benzathine penicillin has been previously recommended and widely used, published clinical data on its efficacy in congenital neurosyphilis are lacking. If neurosyphilis cannot be excluded, the procaine or aqueous penicillin regimens are recommended. Since cerebrospinal fluid concentrations of penicillin achieved after benzathine penicillin are minimal to nonexistent, these revised recommendations seem more conservative and appropriate until clinical data on the efficacy of benzathine penicillin can be accumulated. Other antibiotics are not recommended for neonatal congenital syphilis.*

Penicillin therapy for congenital syphilis after the neonatal period should be with the same dosages used for neonatal congenital syphilis. For larger children the total dose of penicillin need not exceed the dosage used in adult syphilis of more than 1 year's duration. After the neonatal period, the dosage of erythromycin and tetracycline for congenital syphilitics who are allergic to penicillin should be individualized but need not exceed dosages used in adult syphilis of more than 1 year's duration. Tetracycline should not be given to children less than 8 years of age.

FOLLOW-UP AND RETREATMENT

All patients with early syphilis and congenital syphilis should be encouraged to return for repeat quantitative nontreponemal tests 3, 6, and 12 months after treatment. Patients with syphilis of more than 1 year's duration should also have a repeat serologic test 24 months after treatment. Careful follow-up serologic testing is particularly important in patients treated with antibiotics other than penicillin. Examination of CSF should be planned as part of the last follow-up visit after treatment with alternative antibiotics.

All patients with neurosyphilis must be carefully followed with serologic testing for at least 3 years. In addition, follow-up of these patients should include clinical reevaluation at 6-month intervals and repeat CSF examinations, particularly in patients treated with alternative antibiotics.

The possibility of reinfection should always be considered when retreating patients with early syphilis. A CSF examination should be performed before retreatment unless reinfection and a diagnosis of early syphilis can be established.

Retreatment should be considered when:

(1) Clinical signs or symptoms of syphilis persist or recur;

(2) There is a sustained 4-fold increase in the titer of an nontreponemal test;

(3) An initially high-titer nontreponemal test fails to show a 4-fold decrease within a year.

Patients should be retreated with the schedules recommended for syphilis of more than 1 year's duration. In general, only 1 retreatment course is indicated because patients may maintain stable, low titers of nontreponemal tests or have irreversible anatomical damage.

EPIDEMIOLOGIC TREATMENT

Patients who have been exposed to infectious syphilis within the preceding 3 months and other patients who on epidemiologic grounds are at high risk for syphilis should be treated as for early syphilis. Every effort should be made to establish a diagnosis in these cases.

Month in Washington

Presidential candidate Jimmy Carter has abandoned his fence-straddling position on national health insurance and announced his support for a phased-in comprehensive program that sounds much like that proposed by labor leaders and Sen. Edward Kennedy (D-Mass.).

The former Georgia governor, who has been accused by his political enemies of failing to take clear-cut stands on controversial national issues, came out four-square for a broad NHI at the annual convention of the Student National Medical Association here.

With Carter's announcement, most of the viable Democratic presidential hopefuls are lined up behind federalized NHI, thus assuring that the Democratic Party plank on the issue will come out strongly for such a program.

Carter said he favored universal, mandatory coverage of comprehensive benefits financed through payroll taxes and general tax revenues. He called for strict controls and said NHI should first benefit "those who need it most . . . with the understanding that it will be a comprehensive program in the end."

The candidate also supported the controversial legislation sponsored by Sen. Herman Talmadge (D-Ga.) to "place controls on hospital costs and physician charges under Medicare and Medicaid." He seemed to endorse as well the medical manpower provisions backed by Sen. Kennedy. Declaring "the medical establishment has not responded to the shortage of primary care services and practitioners."

Carter said he supports "organized approaches to delivery of services," contending the American health care system has become "a comprehensive catastrophe."

* * *

The Federal Trade Commission has announced via press release that it is conducting an investigation to determine whether the American Medical Association may have "illegally restrained the supply of physicians and health care services."

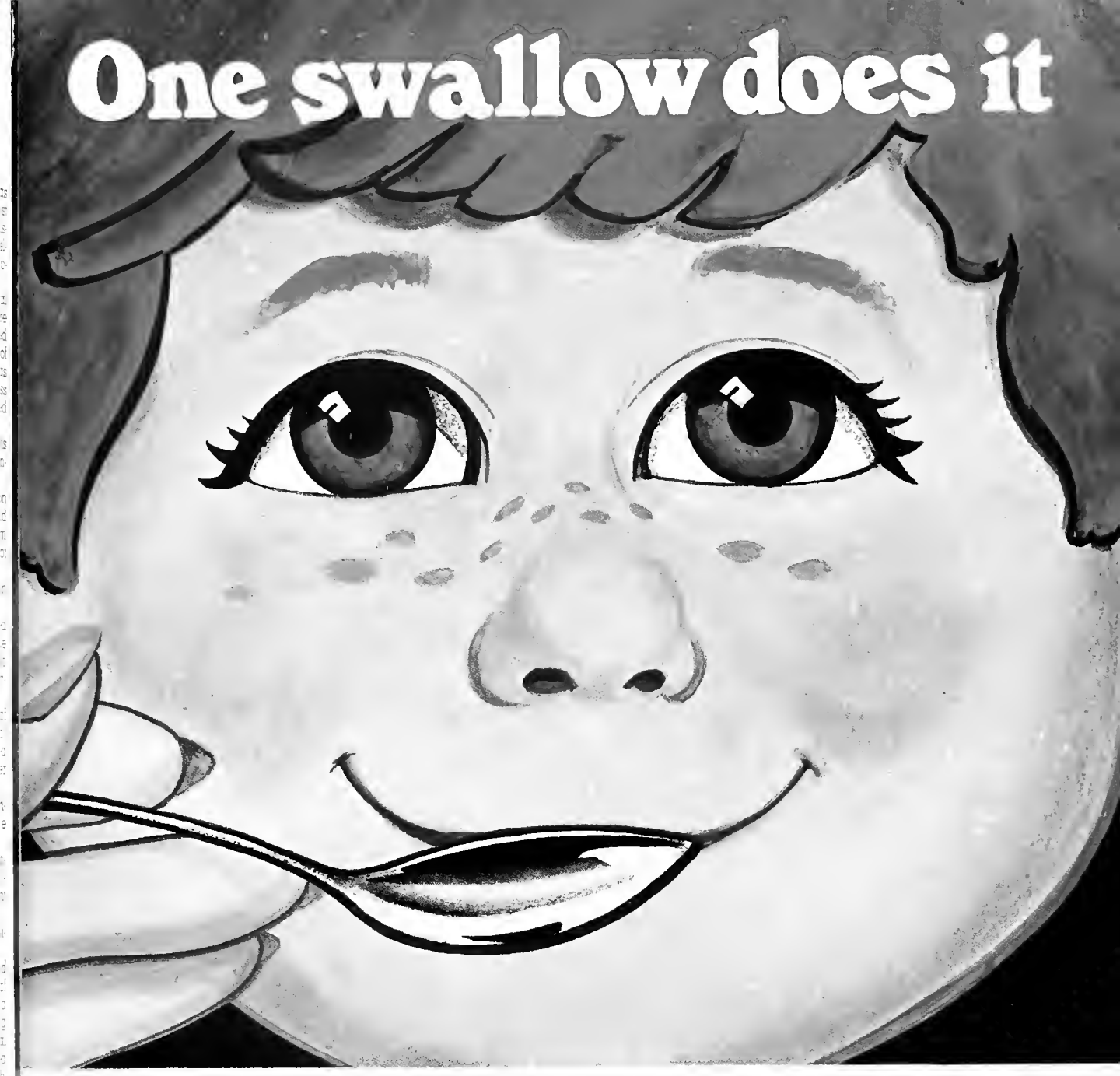
The Commission said its probe will focus on:

*accreditation of medical schools and graduate programs.

*definition of fields of practice for physicians and allied health personnel by the AMA.

*alleged limitations on forms of health care delivery "inconsistent with the fee-for-service approach."

It was the second major action against the AMA this year by the FTC which earlier had charged that the



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AMA's ethical ban on advertising by physicians violates the antitrust laws.

The FTC announcement came at a time when the Senate is about to consider controversial health manpower legislation giving the federal government power to control numbers and types of residencies in this country.

The FTC release stated that the investigation doesn't imply that violations of the law have occurred, but said the probe was part of a larger inquiry into the degree of competition in the delivery and financing of health care services.

AMA Chairman of the Board Raymond T. Holden, M.D., welcomed the airing of the issue as to whether the Association engaged in illegal restraints on the supply of physicians.

"Such a charge is hard to square with the facts," Dr. Holden said.

"The fact is there has been a tremendous growth in American medicine in the last ten years. The number of medical schools has grown by 30%, the number of physicians by 30% and the number of first year medical students by 69%.

"Ten years ago there was one doctor for every 682 Americans; today there is one M.D. for every 569 Americans.

"Latest figures from the World Health Organization show that there are more physicians per capita in the U.S. than in England, Canada, Sweden, France, or Holland.

"We have not violated the antitrust laws. We have, as a matter of record, advocated increases in the number of physicians and health personnel. We are frankly puzzled as to what precipitated the FTC investigation."

Dr. Holden added: "The FTC is spinning its wheels — it is nothing but sheer harassment — there are a bunch of nincompoops down in the government agencies who have to justify their existence."

* * *

The Presidential and Congressional elections this November could determine the future course of the American medical system, speakers told the 1976 AMA-AMPAC Public Affairs Workshop.

Some 300 people attended the meeting in Washington, D.C., sponsored by the American Medical Political Action Committee and the AMA. The theme was "Century III: The Time for Medicine to Turn Out and Turn On."

Sen. Robert Packwood (R-Ore.) told the participants that political action by physicians is a "must" because Congress next year probably will take the first step toward writing a national health insurance measure. The manner in which the first step is administered and financed probably will set the pattern for the entire NHI package when it is finally developed, the senator said.

Packwood said in his experience medical political action committees are "the most effective political organizations" he has encountered.

Raymond Holden, M.D., chairman of the AMA Board of Trustees, stressed the importance of health legislation in affecting the quality of care. Dr. Holden said that in order to achieve good legislation, good Congressmen must be elected.

James MacLaggan, M.D., chairman of the AMPAC Board of Directors, noted that membership in AMPAC has tripled during its 14 years, a period marked by massive public distrust of the political process.

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The health of American Indians and Alaska natives continues to lag some decades behind the rest of the population, the AMA has told Congress, declaring "the time is way overdue to provide proper health care for our first Americans."

Congress was urged to act swiftly on legislation aimed at upgrading health care for the Indians by Russell B. Roth, M.D., a past president of the AMA. Dr. Roth supported a measure approved by the Senate and the House Interior Committee and recommended some changes in testimony before the House Commerce Subcommittee on Health.

The work of the Indian Health Service was praised by Dr. Roth, but he said inadequate budgets have hampered the service's efforts.

"To a large extent, the increases in the budget for Indian health over the years have been little more than 'cost-of-living' increases," he said. "They have enabled the service to maintain its health care system but not to improve it. A few new facilities have been built, a few old ones modernized, but the majority can only be maintained — getting older and more outdated. The service's manpower problems have been met with patchwork or 'Band-aid' solutions — the military draft alternative, limited pay increases, and some financial grants-in-aid with service payback provisions."

The bill before the subcommittee "if enacted, fully implemented and funded, would have an immense effect on the health resources and services available to Indians and on their educational opportunities, their environment and on their future health status," said the AMA witness.

The legislation provides scholarships for Indians who wish to train for the health professions, public health education, increased patient-care funding, new and expanded health care facilities with provisions for upgrading their quality, and a special study on the alcoholism and mental health problems of Indians.

* * *

The government for the first time has agreed to reimburse hospitals for Medicare on the basis of rates set by a state regulatory commission. The Maryland Health Services Cost Review Commission, one of the most powerful such agencies in the nation, won agreement from Medicare for the commission's rates to be utilized rather than those set by Medicare.

The state agency's rates take into account bad debts

and charity costs, but keep a tight lid and review on hospital charges. Hitherto, Medicare has not allowed bad debts and charity care to be figured as reimbursable cost items for hospitals.

A Medicare official said the government believes the Maryland Commission has a rate-setting approach that encourages hospitals to be cost-conscious. The new Medicare reimbursement will not take effect for a year. Medicaid officials were reported to be considering following suit.

* * *

Tests of swine influenza vaccine are starting on humans in preparation for a Nationwide immunization campaign. First tests are slated for employees who volunteer at the Food and Drug Administration and the National Institutes of Health. Other human trials are set for the University of Rochester, Baylor College of Medicine, Ft. Ord, California, and Lawry Air Force Base, Ohio. Some 1,000 people are expected to be involved in the first phase of testing.

President Ford urged all Americans "to receive an inoculation against this form of influenza" in signing the legislation that speedily cleared Congress authorizing $135 million for the immunization.

Signing the bill in the Oval Office, the President said a similar flu killed 500,000 Americans and some 20 million persons around the world at the end of World War I.

"We will mobilize all necessary national resources to make sure we reach our goal" of total U.S. inoculation, he said.

Two sponsors of the bill, Reps. Danial Flood (D-Pa.) and Paul Rogers (D-Fla.) joined Health, Education and Welfare Secretary David Mathews at the signing ceremony.

Not resolved was the product liability issue. A spokesman for the Pharmaceutical Mnaufacturers Association said drug manufacturers are now working with the HEW Department to determine if the liability question can be handled through contracts between HEW and the individual firms.

A major purpose of the early trials is to measure human response to varying doses.

* * *

Compromise utilization review regulations meeting many of the legal objections raised by the medical profession have been issued by the Health, Education and Welfare Department.

The original regulations had been blocked successfully in a landmark court case by the American Medical Association as a violation of the rights of physicians and patients by requiring same-day review of hospital admissions and review participation by nonprofessionals of Medicare and Medicaid patients.

As drafted by HEW after consultation with AMA representatives at the suggestion of the federal courts, the new UR Regs place responsibility for adverse review decisions squarely on the shoulders of physician peers and provide for consultation with the admitting physician. In addition, the time for reviewing Medicare-Medicaid admissions was extended to three working days.

HEW proposed a screening system for hospitals under which admissions would be sorted into categories and criteria established by physicians on the hospital staff. Laymen could take part in the initial screening process but would have to refer to physicians questionable cases for further review.

The AMA had stipulated in advance that it would not necessarily be bound by the terms of the new regulations and reversed the right to pursue further court action if it felt the step was warranted. The regulations published in the *Federal Register* state that HEW Secretary David Mathews believes they "largely meet the legitimate concerns of the (American Medical) Association."

The revised Regs still provide that review be completed before elective surgery unless the procedure falls into a category not requiring review such as danger to the patient or even "pain itself." The actual determination of which procedures are elective is left to the hospital staff.

At the time of initial review a date must be set by the staff. The review procedures for continued stay would be the same as for initial admission.

HEW said the new Regs should handle the problem of small and rural hospitals where it is difficult to have available a sufficient number of physicians for review. Further, the current proposals incorporate Medicaid allowances of variances in specific cases for institutions that cannot form a review committee within the time frame.

Said HEW in describing the new Regs:

"The medical profession must be relied upon, consistent with program purposes under Medicare and Medicaid, to design and carry out the utilization review functions; this means that physicians should, in large measure, determine which categories of cases should receive in-depth review as distinguished from those for which the prescribed treatment or medical procedure can be presumed necessary without such in-depth review. It also means that a determination of non-necessity should be made only by physicians, and then only after careful consultation with the admitting physician."

* * *

The American Medical Association has told Congress that drug labeling for patients with full information about possible dangers could scare many people off the drugs.

"The patient could, out of apprehension and unnecessary fear, and without adequate background to make a valid judgment, refuse to accept the drug for his condition," said Jere W. Annis, M.D., a member of the AMA Board of Trustees. Dr. Annis told the House Commerce Health Subcommittee "in the long run more patients would suffer from adverse effects of their condition for failing to follow a prescribed regimen as established by their physicians."

The measure before Congress would give the government the authority to include in the labeling the conditions for which the drug should be used. Physicians who have found the drug useful for non-labeled conditions would hesitate to prescribe it for fear of confusing their patients or feel forced to select a less effective product in their judgment, Dr. Annis said.

Dr. Annis said the AMA "has long recognized that certain specific information directed to the patient and appearing on the drug container label is invaluable." In certain circumstances, such as with oral contraceptives, expanded patient information is desirable, the Florida physician noted.

Dr. Annis also testified that no useful purpose would be served by creating the Food and Drug Administration as an independent agency with the Health, Education and Welfare Department, as another section of the bill provides.

* * *

President Ford has asked Congress to pass a tough narcotics law to imprison hard drug dealers.

In a special message to Congress, Ford said some 5,000 young Americans die of drug abuse each year.

He said drug users commit about half the robberies, burglaries and other property crimes in America annually.

"It's a good message and hopefully it will produce some action," Ford told Attorney General Edward Levi and HEW Secretary David Mathews who witnessed the signing. The bill would allow federal judges to deny bail in some narcotics cases — including those where a defendant already has been convicted of trafficking in hard drugs, was free on parole, or was a non-resident alien.

In his message, Ford told Congress that he has endorsed Mexican President Luis Echeverria's proposals for establishing mechanisms for formal exchange of information and ideas at high levels of government to curb the illegal flow of drugs into the United States from South of the Border.

* * *

The Food and Drug Administration has been defeated by Congress in its 14-year effort to put tighter controls on sales of extra strong vitamin and mineral supplements. Under legislation approved and sent to the White House, the FDA specifically was prohibited from classifying as drugs those mineral and vitamin preparations that exceed the level of potency determined to be nutritionally rational or useful.

The "health foods" industry and the health foods advocates fought the FDA at every turn, mustering a vehement grass-roots movement against vitamin-mineral regulations that had an obvious impact on Congress. There was no adverse vote or voice raised against the unusual provision — part of a measure authorizing appropriations for the National Heart and Lung Institute.

* * *

The starting date of the government's Maximum Allowable Cost (MAC) drug purchase program has been delayed until August 26, a four-months postponement.

Health, Education and Welfare Department officials said the delay was to permit states more time to prepare for the program. Two months ago, HEW Secretary F. David Mathews rejected a Pharmaceutical Manufacturers Association request to postpone the program.

Meanwhile, attorneys for the American Medical Association and HEW were preparing final briefs in the AMA's lawsuit against the MAC regulations.

U.S. District Court Judge Prentice H. Marshall is debating motions for summary judgment — requests to decide the issue without a trial — and last briefs were due April 26.

The AMA filed suit against HEW last summer to stop implementation of the MAC program. The AMA contends the regulations violate patients' right to seek the best medical care, and that HEW exceeded its statutory authority in issuing the regulations.

The MAC rules would require physicians to prescribe the lowest-cost generic form available of certain drugs for Medicare and Medicaid patients.

* * *

Procedures for choosing statewide Professional Standards Review Organization (PSRO) areas in states where two or more areas have previously been specified but where there is not yet any designated PSRO have been set forth by HEW.

Under the proposal, HEW will poll all doctors of medicine and doctors of osteopathy practicing within the state. Should more than fifty % of the doctors in each PSRO area who respond support a change to a single statewide area designation, the department will establish the entire state as a single PSRO area.

The proposed regulations include the methods for giving notice of the poll, how the poll will be conducted and the votes tabulated, and the grounds and procedures for conducting a recount.

The HEW action came about as a result of the Medicare-Medicaid amendments law signed by President Ford early this year. The PSRO provision, sponsored by Sen. Lloyd Bentsen (D-Tex.), was urged by AMA. According to HEW, Texas, Louisiana and possibly some other states could be affected by the option for choosing a single, statewide PSRO.

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Book Reviews

Books Received

The Carbo-Calorie Diet Cookbook. By Donald S. Mart, 185 pp., New York; Doubleday & Company, Inc., 1976. $1.95.

The Healer's Art. A New Approach to the Doctor-Patient Relationship. By Eric J. Cassell, M.D., 240 pp., Philadelphia and New York: J. B. Lippincott Company, 1976. $8.95.

In Memoriam

Jack Pierce Mercer, M.D.

Dr. Jack Pierce Mercer died February 20, 1976, of injuries received in an automobile accident.

Dr. Mercer was born April 10, 1925, in Columbus, Ohio. He received his early education in Tiffin, Ohio, and his undergraduate education at Ohio State University and Western Reserve University where he received his M.D. degree in 1948. Dr. Mercer served his residency training in obstetrics and gynecology at Toledo Hospital, Toledo, Ohio, from 1948-1952. He was in the Army Medical Corps from 1952 to 1954 and was awarded the Bronze Star.

In 1954, Dr. Mercer entered the private practice of obstetrics and gynecology in Lorain, Ohio, where he remained until 1971 when he came to the University of North Carolina School of Medicine as assistant professor of obstetrics and gynecology. He was appointed associate professor in 1974. During 1974, Dr. Mercer was visiting professor of obstetrics and gynecology to the University of the West Indies, Kingston, Jamaica.

Dr. Jack Mercer was a warm and personable man, greatly admired and respected by both his colleagues and students as a superb clinician and teacher. Although he was interested in all phases of obstetrics and gynecology, one of his particular concerns was continuing education in this specialty. His leadership in this field was widely felt among medical students, residents, nurse practitioners, nurse midwives and physicians, participating in continuing education throughout the state. It is significant that Dr. Mercer was on his way to Rocky Mount to conduct teaching rounds when his fatal accident occurred.

Dr. Mercer was co-author of many scientific articles and a member of numerous professional organizations. He was a diplomate of the American Board of Obstetrics and Gynecology, a member of the American College of Surgeons, a fellow of the American College of Obstetricians and Gynecology and a member of the North Carolina Obstetrical-Gynecological Society, American Association of Gynecological Laparoscopists, American Institute of Ultrasound in Medicine, Piedmont Obstetrics and Gynecology Society, Robert A. Ross Obstetrics and Gynecology Society, American Medical Association, Durham-Orange County Medical Society and the North Carolina Medical Society.

Dr. Mercer is survived by his wife, Carolyn Johnson Mercer, four children, Mrs. Thomas Colantuono, Jane Mercer, Lynn Mercer and Jack Mercer; his mother, Mrs. L. V. Mercer, and his sister, Mrs. James Donham.

DURHAM-ORANGE COUNTY MEDICAL SOCIETY

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PHYSICIANS NEEDED: M.D.'s having completed or near completion of internships or residencies for hospital/clinics/flight surgeon duties. Choice of duty station. $30,000-40,000 starting salary, travel and relocation expenses paid, 30 days paid vacation annually, duty rotation allows excellent family life. Contact LT. Ron Hewett, Navy Physician Programs, Navy Recruiting District, P.O. Box 18568, Raleigh, N.C. 27609 or call collect (919) 872-2547.

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OP/ER PHYSICIAN: Vacancy July 15, Ambulatory Center 24000 visits, specialty backup, fee for service with $46,000 guarantee, requires N.C. license. Pleasant associates, peaceful community near mountains, 45 minutes to two medical centers. Contact Administrator, Northern Hospital, Mount Airy, N.C. 27030, (919) 789-9541.

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Coastal N.C.—E. D. PHYSICIAN. Established primary care group of young physicians needs replacement for 5th man. $50,000 plus, excellent benefits. Needed after July 1, 1976, 186 bed hospital, new eleven bed E. D. Career emergency physician desired, others considered. Excellent outdoor recreation, N.C.'s sailing capital nearby. N.C. license required. E. Robert Nealy, M.D., Director, Emergency Department, Craven County Hospital, New Bern, N.C. 28560.

INTERNIST AND TWO FAMILY PRACTITIONERS needed. Private practice. Year-round resort community located in western N.C. Office space (Rent free for one year) available in new professional building attached to 98-bed general hospital. Contact Dr. Robert A. Chapman, Cannon Memorial Hospital, Banner Elk, N.C. 28604, Phone: 704/898-4828.

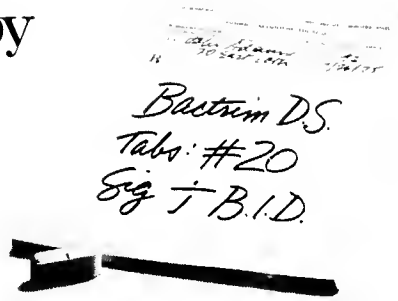
40 year old Certified Allergist desires group or partnership association in Eastern N.C. Will consider solo practice in an Eastern area needing Allergist. Write NCMJ #10, P.O. Box 27167, Raleigh, N.C. 27611.

POEMS WANTED: The North Carolina Society of Poets is compiling a book of poems. If you have written a poem and would like our selection committee to consider it for publication, send your poem and a self-addressed stamped envelope to: THE NORTH CAROLINA SOCIETY OF POETS, 614 — 1st Union Building, Winston-Salem, N.C. 27101.

EMERGENCY MEDICINE: Northeastern North Carolina; four, 12-hour evening rotations per week. Paid malpractice, vacation, professional dues. $45,000 annual remuneration. Contact Drs. Cooper or Spurgeon toll free 1-800-325-3982.

Index to Advertisers

10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (*e.g.*, vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)
Double Strength tablets
Just 1 tablet B.I.D.

Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

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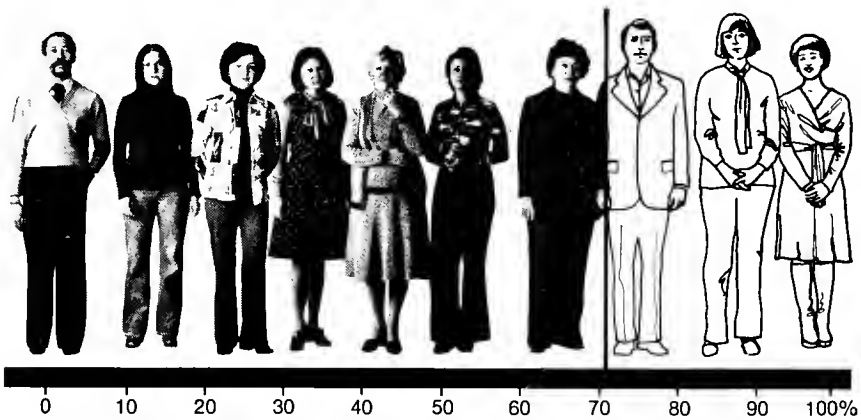
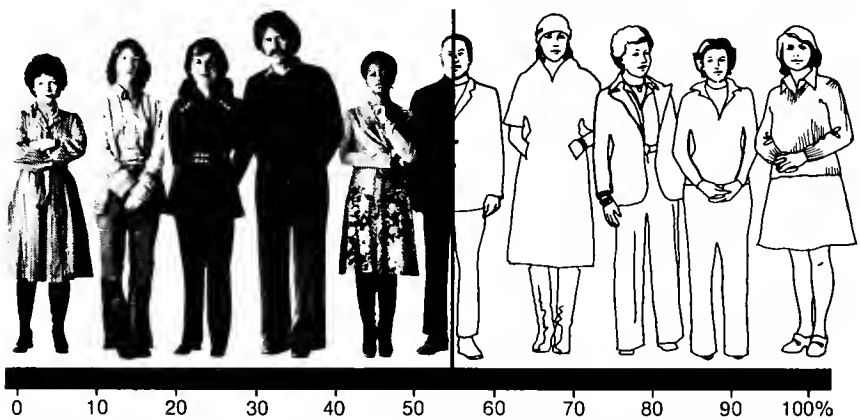
In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Please see summary of product information on preceding page.

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The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY July 1976, Vol. 37, No. 7

NORTH CAROLINA
Medical Journal

IN THIS ISSUE: Should the Aneurysm of the Abdominal Aorta be Operated Upon?, George Johnson, Jr., M.D., and Noel B. McDevitt, M.D.; Facet Rhizotomy: Another Armamentarium for Treatment of Low Backache, Timir Banerjee, M.D., M.S., and H. H. Pittman, M.D.; Broncholithiasis—A Case Report, Lewis H. Stocks, M.D., Ph.D., W. Benson McCutcheon, M.D., and Richard Black, M.D.; Cardiopulmonary Resuscitation (CPR) as Treatment of Cardiac Arrest (Last of Three Articles), James T. McRae, M.D.

1976 Committee Conclave
Sept. 22-26—Southern Pines

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

Both often

- Predominant psychoneurotic anxiety
- Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

Valium®
(diazepam) Ⓡ IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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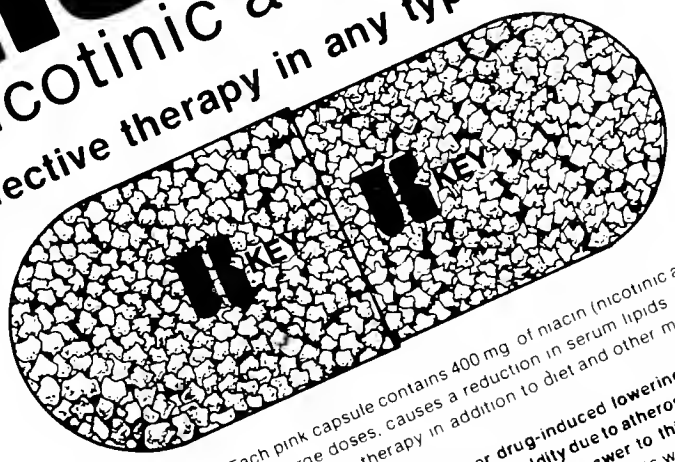

DESCRIPTION: Each pink capsule contains 400 mg. of niacin (nicotinic acid) in a special pelletized formulation for prolonged release

ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown

INDICATIONS: As adjunctive therapy in addition to diet and other measures in the treatment of hypercholesterolemia and hyperbetalipoproteinemia

Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a beneficial or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams.

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Published Monthly as the Official Organ of
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Medical Society

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July 1976, Vol. 37, No. 7

Contents listed in *Current Contents/Clinical Practice*

"Health care costs rising? That's no news to me. At Burroughs Wellcome Company, we manufacture medicines, and we feel the effect of spiralling health care costs just like everyone else. Anyone who does something to contain those costs is taking on a big job.

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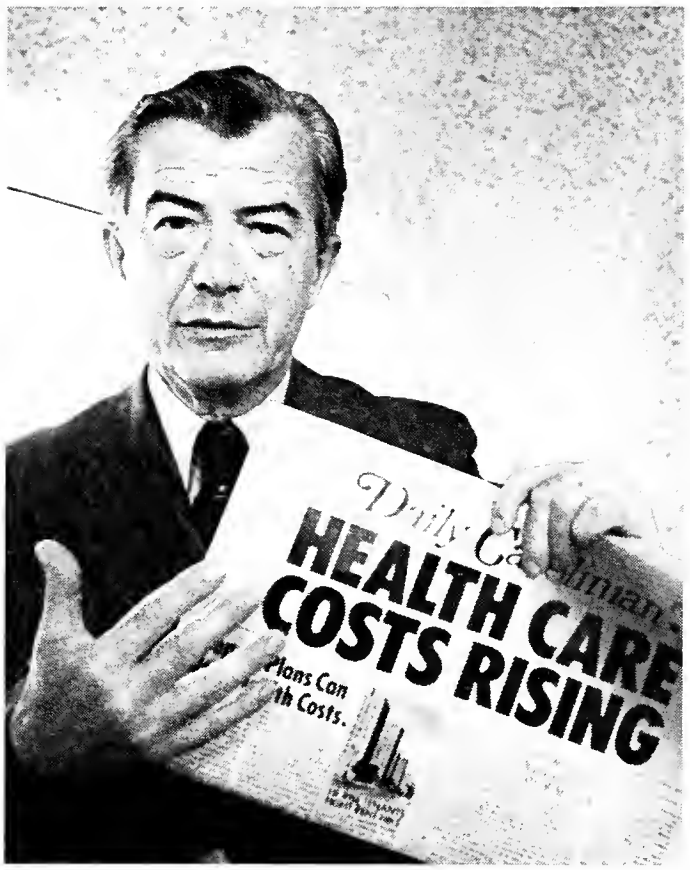
"They're also paying three outpatient claims for every inpatient claim...another way of saving expensive hospital beds for people who really need them.

"All these things help now and for the future. And before you know it, the future will be today. I say, good going, Blue Cross and Blue Shield. You've got my dollar—I'm glad you're spending it wisely."



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†Because Vermox has not been extensively studied in children under 2 years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

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TRADEMARK

(mebendazole)

DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. An insignificant amount of mebendazole is absorbed from the gastrointestinal tract. Most of this is excreted in the urine within three days either as metabolites or unchanged drug.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.

Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below.

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates mean (range)	68% (61-75%)	98% (91-100%)	96% –	95% (90-100%)
egg reduction mean (range)	93% (70-99%)	99.7% (99.5-100%)	99.9% –	– –

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY*. VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE. The drug has not been extensively studied in children under two years, therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered orally, morning and evening, on three consecutive days.

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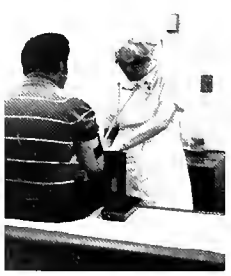

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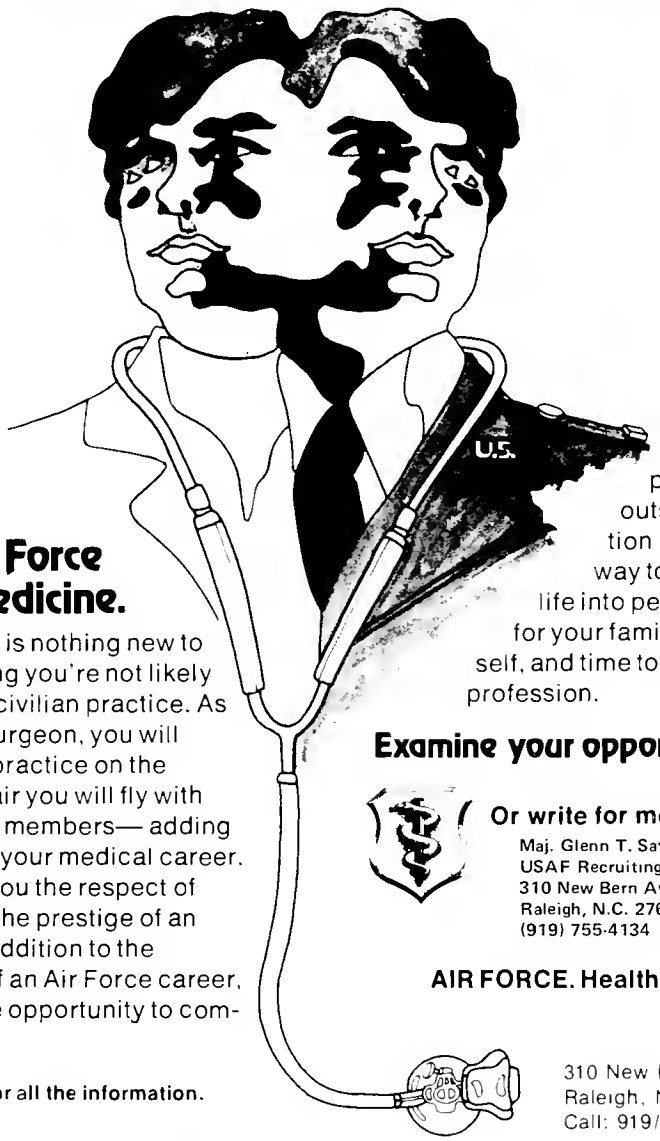

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Towards Wholeness

Just what is North Carolina Drug Utilization Review all about?

Drug Utilization Review is part of the Medicaid drug program in your state. The goal is to assist in the delivery of rational drug therapy for Medicaid patients and reduce the over all cost of the Medicaid drug program.

How can Drug Utilization Review do that?
It is done by reviewing Medicaid drug use and sharing the results of the review with those doctors and pharmacists involved in treating the patient. When a Medicaid prescription claim is processed, a computer records who received the drug, who prescribed it, who dispensed it, and what kind of drug it was. Once a month, the computer compares the drug use records of each patient with several criteria, such as kinds of drugs used, amounts purchased, number of doctors visited, and so on.

When a patient's drug use goes beyond any of the criteria, the computer prints a report for review by the Drug Utilization Review Committee.

Just who is the Drug Utilization Review committee?
It is a group of fellow health care professionals—physicians and pharmacists from your area. Committee members are selected from nominations made by your local medical and pharmaceutical associations. Each member serves for 1 to 3 years. You may be invited to serve on the committee at some time.

What does the Drug Utilization Review committee do?
The committee reviews patient drug histories showing drug use patterns which exceed criteria set for the program. If the questionable pattern appears to be minor or temporary, the committee may decide to take no further action.

If the situation is more serious, the committee will write to the doctors and pharmacists involved to advise them of the potential problem. For example, the records might show that a patient is going to several doctors to get prescriptions for the same drug. The committee would advise each of the doctors of this practice. In another case, the committee might recommend that a doctor prescribe maintenance drugs in larger, more economical quantities, if the patient's condition warrants it.

Are you trying to tell me how to treat my patients?
Not at all. Your patients' treatment is in your hands, where it belongs. All Drug Utilization Review does is give you information about your patients' drug use that hasn't been available before. The committee can't dictate the kind of drug therapy you use, and wouldn't want to if it could.

What do I have to do if I get a letter about a patient?
The committee will ask you to review your records to see if the situation described in their letter is with your knowledge and conforms with your diagnosis and treatment. If so, please advise the committee of your diagnosis and treatment plan so they'll know that the drug use is appropriate and won't send additional letters in the future.

If the situation is not called for by your treatment plan, the committee asks that you review the situation and make those changes you feel are necessary. In all cases, they try to make it as easy as possible for you to respond to the committee and use the information provided.

How can a physician find out more about the Drug Utilization Program?
A pamphlet which explains the Drug Utilization Review program in detail is available or a visit to your office by a staff member can be arranged upon request. A speaker or a color/sound film can also be provided for local medical societies or other groups interested in further information about the program. Your peers who are members of local peer review committees will be glad to explain the program personally or answer any questions. If you will write or call PAID Prescriptions, any information requested will be provided including the names of committee members in your local area.

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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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30-34	29	58	87	116	145	30-34	12
35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
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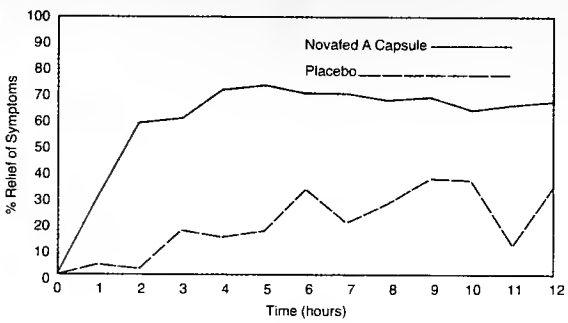
Prompt onset of effect is followed by full 12-hour relief.

(Please refer to the following page for bioavailability studies and prescribing information.)

Patients with severe pollen allergies were tested during hay fever season in a countryside environment and asked to rate severity of five different symptoms on a scale of 1 to 4.

Clinical Study: Degree of Relief from Itchy Eyes and Nose and Throat, Watery Eyes, Runny Nose*



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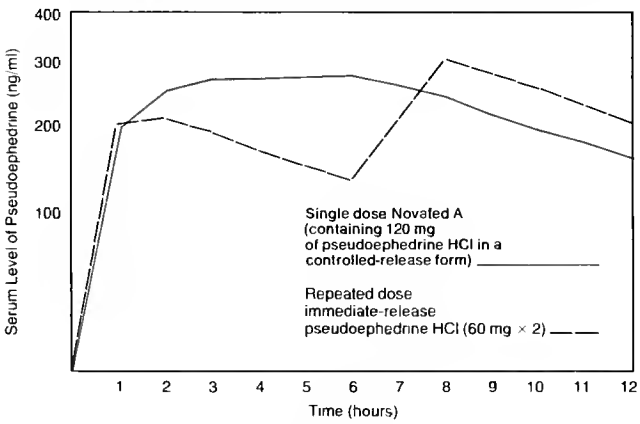
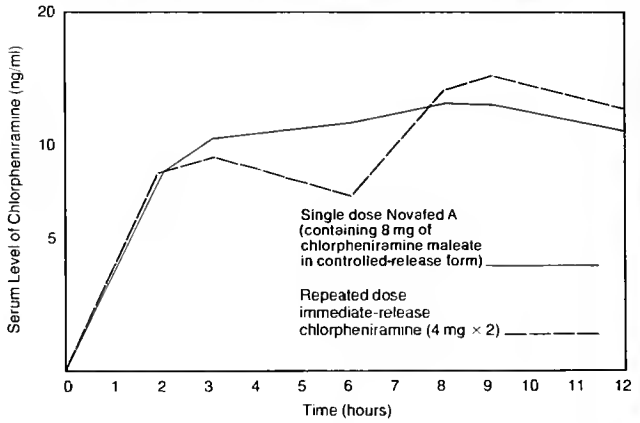
The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Following Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NOVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NOVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NOVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NOVAFED A may be given concurrently, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAO inhibitors.

Children under 12: NOVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Do not exceed recommended dosage.

Use in Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use in Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIONS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

ADVERSE REACTIONS: Hyperreactive individuals may display ephedrine-like reactions such as tachycardia, palpitations, headache, dizziness, or nausea. Patients sensitive to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with certain untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory difficulty, dysuria, insomnia, hallucinations, convulsions, CNS depression, arrhythmias, and cardiovascular collapse with hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIONS: MAO inhibitors and beta adrenergic blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects of methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcohol, tricyclic antidepressants, barbiturates and other central nervous system depressants may have an additive effect.

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: NOVAFED A is supplied in red and orange colored hard gelatin capsules, monogrammed with the Dow diamond followed by the number 109, in bottles of 100.

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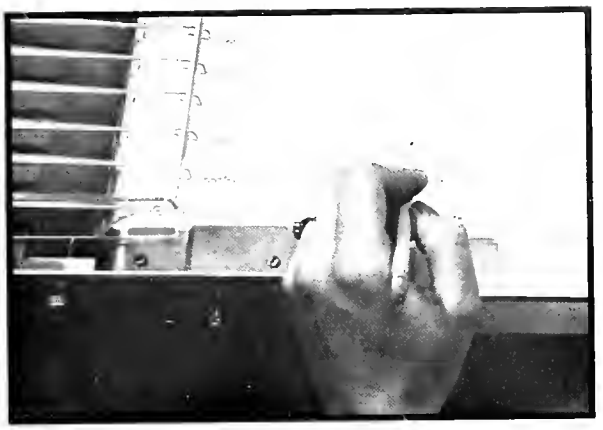

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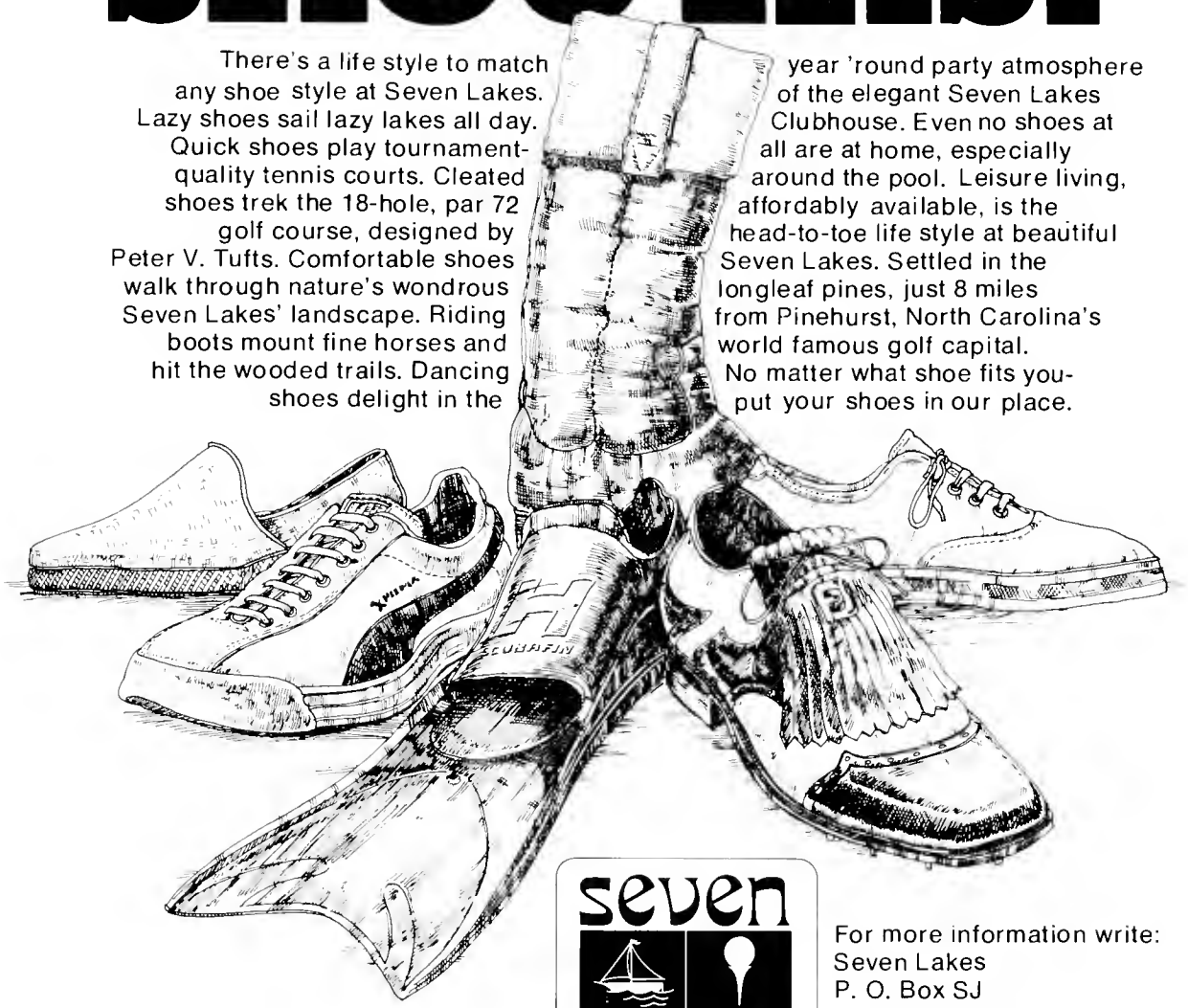

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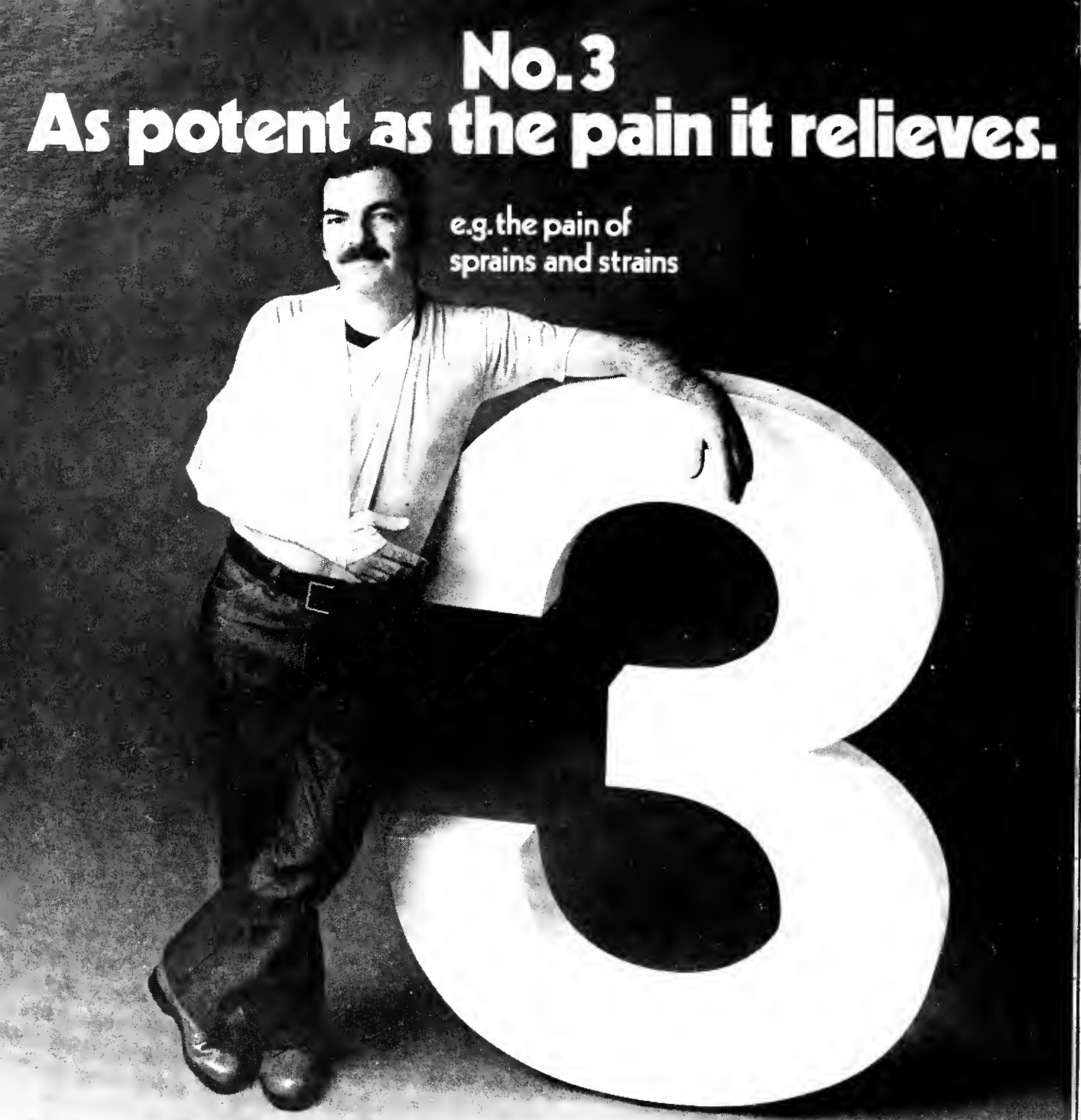

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Should the Aneurysm of the Abdominal Aorta Be Operated Upon?

George Johnson, Jr., M.D.,* and Noel B. McDevitt, M.D.

IN North Carolina, at least 225 patients with abdominal aortic aneurysms are operated upon each year. Each operation costs about $5,000 in hospital and physicians' expenses.** Thus, well over $1 million a year is spent for patients with abdominal aortic aneurysms. Since most of these patients are elderly and since unruptured abdominal aortic aneurysms are usually painless, we may ask if this expenditure of money is worthwhile for a patient who has a limited life expectancy.

In an attempt to help physicians answer this question, this paper reviews data on North Carolinians operated upon for abdominal aortic aneurysms at North Carolina Memorial Hospital (NCMH).

METHOD

The record of each patient who had a resection of an abdominal aortic aneurysm at North Carolina Memorial Hospital was reviewed. The 143 who survived the operation were chosen for study (119 white males, 15 white females, 7 black males and 2 black females). For the purpose of this study, no distinction was made whether the patient had a ruptured aneurysm (and thus an emergency operation) or an elective resection. Followup was performed by review of the patient's record, correspondence or telephone conversation with the physician or the family. The only appraisal made was whether the patient was alive or dead. The data were then analyzed by the life table analysis method. Four patients lost to followup were withdrawn.

The latest data available (1973) from the Metropolitan Life Insurance Company were used for expected survival for the total United States. The data were then corrected for sex of the patients in the NCMH series. No correction was made for race of the patient; however, only 14 black patients were operated upon during the period of time surveyed.

The first analysis compares the longevity of all the patients in the NCMH series to the total population data. To determine the influence of the age at risk, patients older than 65 and then older than 70 were compared to the normal survivorship for these ages.

RESULTS

Two hundred and twenty-two charts were reviewed. One hundred and thirty-three patients had elective or urgent repairs of intact aneurysms. Eighty-nine patients had ruptured aneurysms with 56, or 63%, dying during the operation. Mortality after the aneurysm had ruptured improved very little during this period of observation (1952-1974). Of the first 100 patients, only 47 had elective operations; in the last 100, 76 had elective operations. These figures emphasize the increase in the number of elective operations for aneurysms. During the past 12 months, 47 aneurysms have been repaired at NCMH, an average of one a week. In the last 78 elective operations for aneurysms, there have been no deaths.

The five-year survival as appraised by the life table analysis method for the 143 patients who survived the operation was 65% (Table I). This compares to the predicted 83% survival for the total population of this age group.

To learn whether a large number of younger patients might have contributed heavily to this series, we analyzed all patients aged 65 or more and compared them to the expected survival of the total population. The average age of this group was 72 years, and the five-year survival as calculated by the life table analysis was 62% (Table II) compared to the total population expected survival of 78%.

Department of Surgery, Division of General Surgery (Vascular, Trauma, Transplanation), University of North Carolina at Chapel Hill, Division of Health Affairs, Chapel Hill, North Carolina 27514

*Roscoe B. G. Cowper Distinguished Professor of Surgery

**Data obtained from North Carolina Blue Cross-Blue Shield and Pilot Life Insurance Company

TABLE I

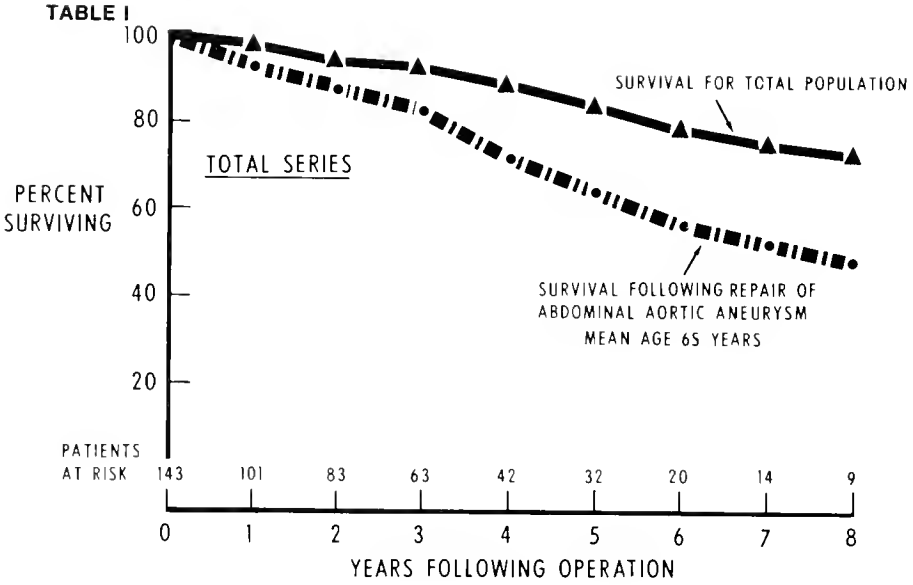


TABLE II

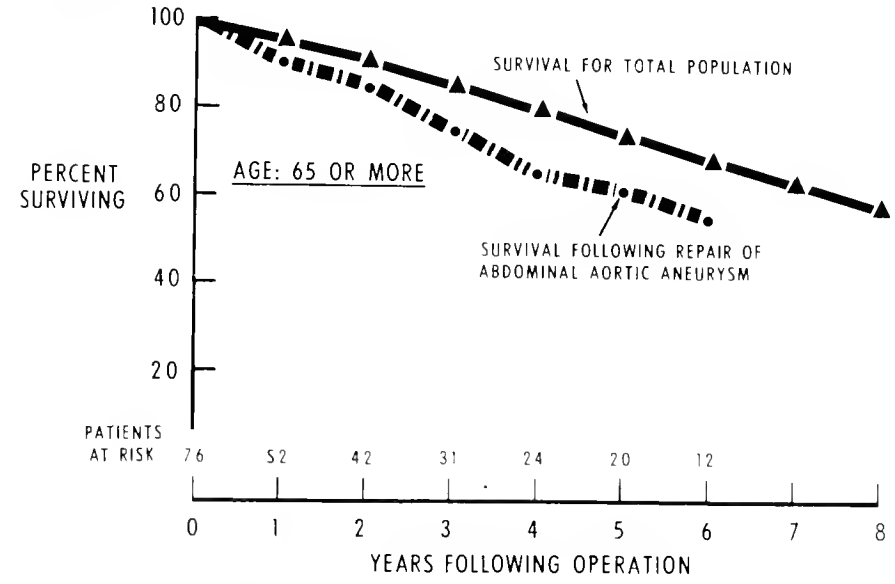
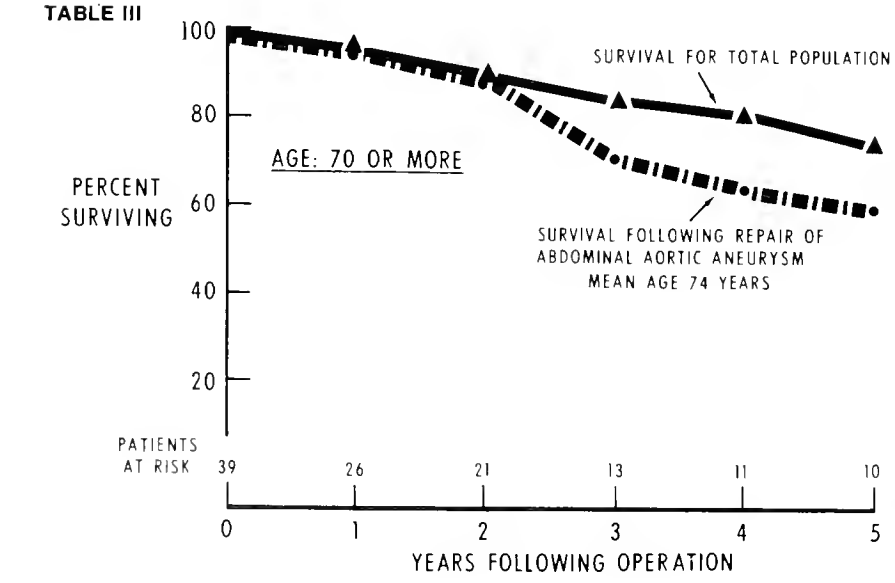


TABLE III



The patients 70 or older at the time of operation had an average age of 75. Although the number available for study at five years is small, the survival calculated by the life table analysis was 59% compared to the expected survival of 69% for this age group (Table III).

DISCUSSION

Patients operated upon for vascular disease cannot be expected to have the same survival as the normal population. DeWeese and Rob[1] reported in 1971 that 48% of the patients on whom they had performed autogenous venous bypass grafts were dead in five years. Baker and Munns[2] recently reported an overall five-year survival of 38% in 206 patients over 70 following elective aneurysmectomy. Life expectancy decreased in those individuals affected by atherosclerosis, cerebral vascular disease, cardiac disease, hypertension, renal disease and distal peripheral vascular disease. It was concluded that high-risk or elderly patients with aneurysms less than 7.5 centimeters should be observed.

Baker and Roberts[3] reported on 240 operations for unruptured abdominal aortic aneurysms. Excluding postoperative mortality, the five-year survival in this group was 54%. Comparing these results to those of Schatz[4] and Szilagyi[5] on unoperated patients, a distinctly increased survivorship was demonstrated in those undergoing operation. Both Schatz and Szilagyi had reported an approximate 20% five-year survival for the unoperated patient with an abdominal aortic aneurysm compared to an expected 80% survival for the comparable total population. Baker felt that the data to date support the position that all aneurysms should be operated upon unless it seems likely that the patient's life expectancy is significantly compromised by other processes.

The patient with an abdominal aortic aneurysm usually has multiple vessel disease, most frequently due to arteriosclerosis involving coronary, cerebral and renal arteries. The expected longevity, therefore, is not equal to that of a

peer group. At the end of eight years, approximately half of the patients who survive the operation should still be living. If we include the current 5%[6] reported mortality for the elective operation, this is two-thirds the survival expected of the control group.

Although the data are limited, it is of interest that patients 65 and older and 70 and older had what appeared to be survival equal to that of the total series. Thus, age alone should not be a factor in patient selection.

CONCLUSIONS

The longevity following survival from operation for an abdominal aortic aneurysm at the North Carolina Memorial Hospital was 65% at five years and 47% at eight years. Comparable figures for the total population corrected for age and sex are 83% and 71%, respectively.

Although the people of the state of North Carolina are spending in excess of $1 million a year for operations on abdominal aortic aneurysms, over 200 patients are being given a 50% chance to extend their lives for another eight years. Operative correction of abdominal aortic aneurysms usually allows these patients to return to their preoperative activity. Thus, it would seem that the temporal and financial expenditure needed to operate on these patients is justifiable unless it is judged that the patient will die within 12 to 18 months from other causes.

References

1. DeWeese JA, Rob CG: Autogenous venous bypass grafts five years later. Ann Surg 174:346, 1971.
2. Baker WH, Munns JR: Aneurysmectomy in the aged. Arch Surg 110:513, 1975.
3. Baker AG, Roberts B: Long-term survival following abdominal aortic aneurysmectomy. JAMA 212:445, 1970.
4. Schatz IJ, Fairbain JF, Juergens JL: Abdominal aortic aneurysms: a reappraisal. Circulation 26:200, 1962.
5. Szilagyi DE, Smith RF, DeRusso FJ, et al: Contribution of abdominal aortic aneurysmectomy to prolongation of life. Ann Surg 164:678, 1966.
6. Hicks GL, Eastland MW, DeWeese JA, May AG, Rob CG: Survival improvement following aortic aneurysm resection. Ann Surg 181:863, 1975.

It is, however, far more frequently by the *quantity* of our food that the stomach is irritated and its nerves rendered morbidly sensible, than by the quality. In respect to this last, the vegetable world (however lauded by hermits and philosophers) is infinitely more prolific of irritation than the animal kingdom. Farinaceous food, however (as gruel, sago, arrow-root, for example), is an exception. Perhaps, of all species of food, this is the least irritating, and where a high degree of morbid sensibility prevails, it is often the only thing that can be borne.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 53.

Facet Rhizotomy

Another Armamentarium for Treatment of Low Backache

Timir Banerjee, M.D., M.S., and H. H. Pittman, M.D.

INTRODUCTION

LOW back pain is a common problem seen by general practitioners, orthopedists and neurosurgeons. It is often insidious in onset and punctuated by periods of discomfort.

The patient may have a spasm of paravertebral muscles, a scoliosis and flattening of lumbar curve without leg pain. On the other hand, severe nerve root irritation due to extruded disc fragment may present a similar clinical picture along with radicular pain. Diffuse continuous pain in the low lumbar region without true radiculopathy is difficult to treat.

Facet osteoarthritis or facet sclerosis may be a factor responsible for the pain. Often when patients continue to experience low back and extremity pain after a technically satisfactory operation, the residual pain may be secondary to degenerative changes in the facet. However, the possibilities of a recurrent disc extrusion at the same level or disc protrusion at another level and arachnoiditis should be considered.[1] Operative intervention when pain is the only symptom is often fraught with failures. Failure of conservative therapy is usually followed by myelography and often surgery is performed in the face of minimal myelographic defect. This report describes preliminary results with facet rhizotomy to relieve back and leg pain.

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University of North Carolina
School of Medicine
Chapel Hill, North Carolina 27514

Reprint requests to Dr. Banerjee

INDICATIONS

Although exact indications are yet to be determined, we have used the criteria described in Table 1.

It has been our practice to exclude patients with abnormal personality traits seen from MMPI and/or by psychiatric interview. We have not done myelography prior to facet rhizotomy. We do not consider the absence of the ankle jerk to be a significant neurological deficit if there are reasons to believe that this could be an old radiculopathy with residual damage.

ANATOMICAL AND RADIOLOGICAL CORRELATION

The exact source of pain in low back syndrome is not clearly understood. In general, sinuvertebral nerves and posterior primary divisions of lumbar nerve roots supply the pain-sensitive structures around the spine. Both contain sympathetic and sensory fibers. Many of the fibers are myelinated — the smaller ones probably pain fibers; the larger ones, proprioceptive fibers.[2] The endings of the sinuvertebral nerve, when stimulated by noxious agents, not only evoke deep local pain but produce reflex muscle spasm, the severity of which depends on the intensity of the stimulus. Macnab[3] found that balloon pressure on lumbar nerve roots in human beings rarely caused pain, only paresthesias and reduction in strength and sensation. However, inflamed and swollen nerve roots cause pain. The characteristic radiographic features of degenerative disease are narrowing of the intervertebral space, formation of osteophytes along the margins of the vertebra above and below the intervertebral disc and sclerosis and condensation of the subchondral bone of the two opposing vertebral bodies. In the terminal stage of disc degeneration settling, sclerosis, osteophytes and often irregularity of facet joint is seen. However, in our experience, facet sclerosis may be the only significant radiological finding associated with back pain in certain patients. These degenerative changes in the facet may result in stimulation or irritation of the articular nerve of Luschka. Since these unmyelinated fibers are branches of the primary posterior rami, the referred pain would be

similar to direct nerve root compression or stimulation. Fox and Rizzoli[4] have recently confirmed that the posterior ramus of the lumbar nerve root passes inferiorly and dorsally between the facet joint and the transverse process and sends branches to the facet joint.

METHOD AND CLINICAL MATERIAL

Shealy's enthusiastic approach has incited interest in facet rhizotomy among many neurosurgeons. Our approach is similar to the technique described by Shealy.[5] The procedure is carried out with the patient lying prone. Xylocaine ½% is injected intradermally at the puncture sites after fluoroscopic determination of the affected facet joints. Long spinal needles with two mm. and five mm. non-insulated tips are introduced directly to touch the most medial aspect of the intertransverse ligament.* The needle position is confirmed by fluoroscopy and by the resistance felt at the intertransverse ligament. The proximity of the electrode tip to the spinal nerve root is determined by employing continuous pulses of 1 msec. duration at 25 cps and 50 cps. When the appropriate area is reached immediately adjacent to the facet, stimulation at 1-2 volt characteristically produces paresthesia or pain in the back and ipsilateral gluteal area. When it produces severe dermatomal pain and/or radicular pain up to the ankle the electrode is slightly withdrawn because it is too close to the spinal root. The description of the pain experienced by the patient during stimulation is helpful before making a lesion. It is usually interpreted as being similar to the original pain. The needle position is confirmed again by fluoroscopy and often by taking an oblique film raising the ipsilateral side from the table. (Fig. 1.) The radiofrequency generator is activated after the needle is confirmed to be in the desired position. (Fig. 2.) The lesion temperature as monitored by a thermister probe is raised to 75° C. and maintained for 60 seconds. The lesion is repeated for another 60-90 seconds and the patient is checked in between.

After the lesions are made the sites are again stimulated at 1-2 volts. The usual response is "like a vibration" or "feels funny but does not hurt."

The procedure is repeated at other affected levels. The skin temperature and resistance are measured at the operated dermatomal distribution. The patient is allowed to walk after 2 to 3 hours and is discharged the next day.

*Radionics, Inc.

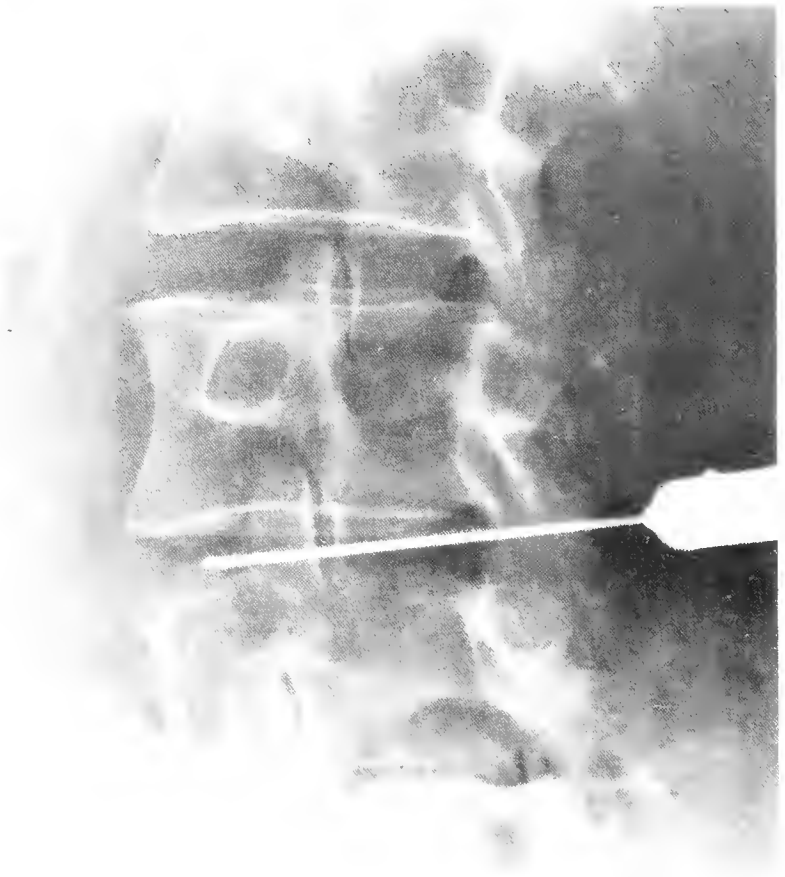

Fig. 1. Oblique film shows the position of the needle prior to making the lesion.

CASE SELECTION

We have carried out this procedure in 25 patients who reported experiencing back and leg pain from six months to 10 years. All have been followed for at least six months — some as long as 15 months.

All were selected according to the criteria in Table 1.

RESULTS

Results were determined by questioning the patients and periodic examinations in the clinic. Those who live a considerable distance from our clinic were asked to write letters detailing their drug intake, daily activity, the amount of time that they are free of pain and severity of pain (percentage) in relation to the pain level before the procedure.

We classified our results in three groups:

Excellent—No drug intake
Normal activity
Free from any pain most of the day
0-10%

Good— May require occasional salicylates
Almost normal activity
Free from any severe pain most of the day
10%-30%

Failures— Patient still has pain during major part of the day
Requires analgesics every day
Unable to carry out daily chores without analgesics
30%-100%

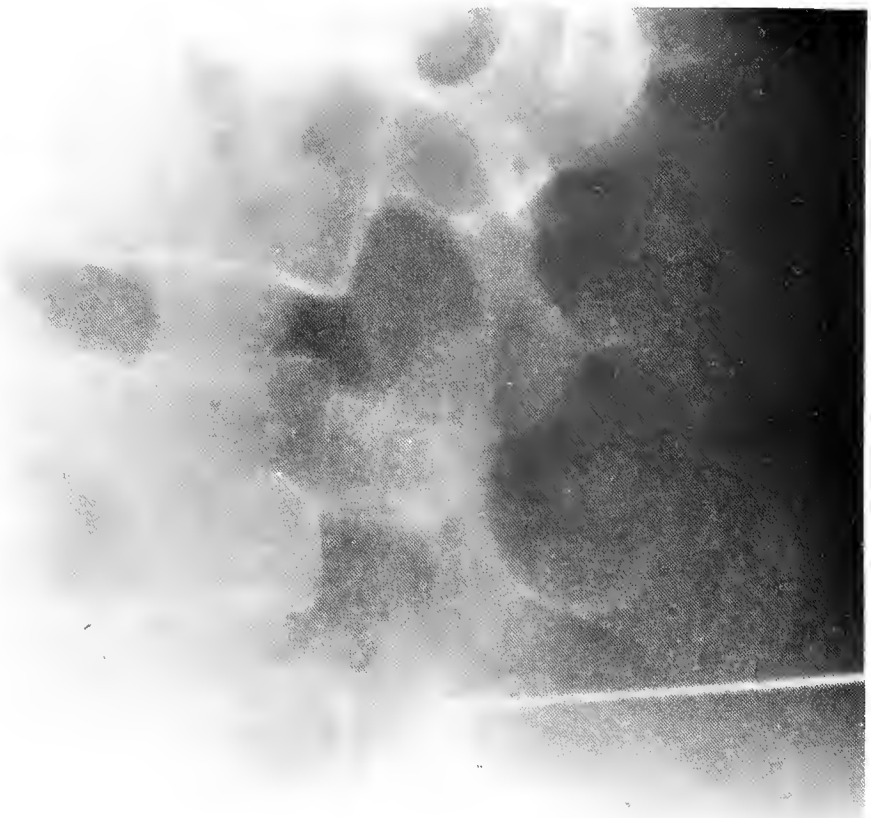

Fig. 2. Lateral x-ray of lumbosacral spine shows the position of the needle before making the lesion.

Fig. 3. Myelogram shows a large central extradural defect.

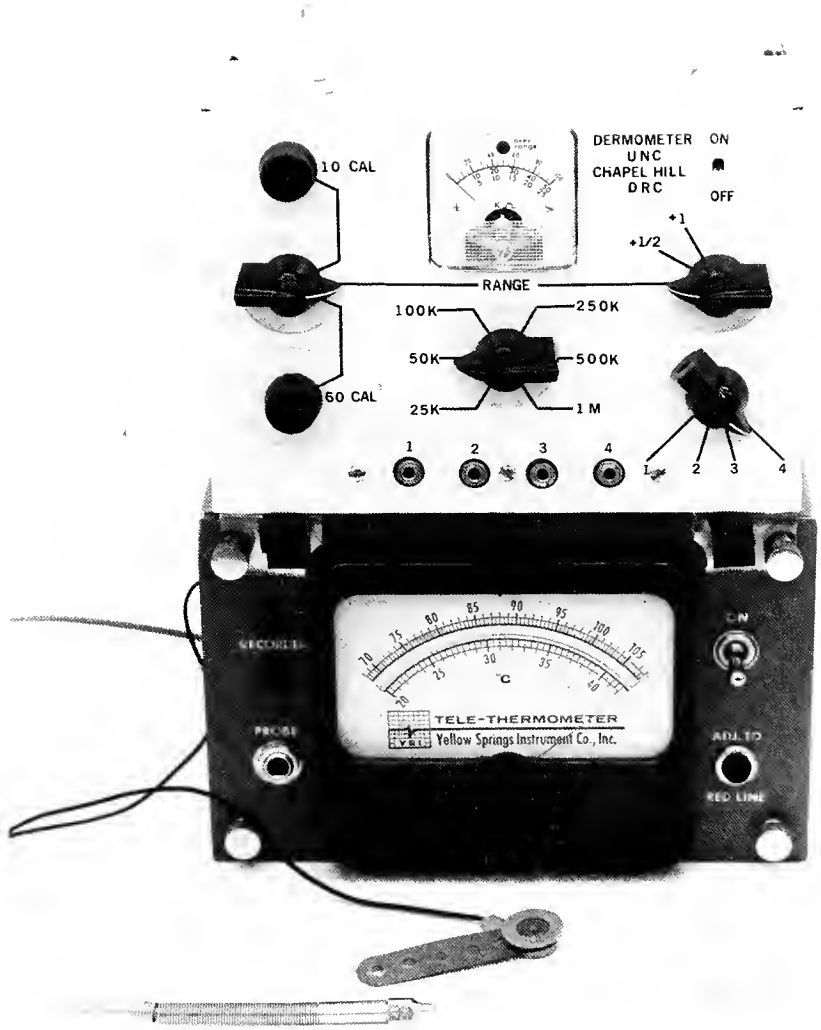

Fig. 4. The apparatus used to measure temperature and resistance.

TABLE 1

1 Persistent back pain without any neurological deficit
2 Radiological evidence of degenerative changes in facet joints associated with pain in one leg or both legs without any neurological deficit
3 Post-discectomy patient with recurrent pain without evidence of new radiculopathy

Our results are summarized in Table 2.

Case 1, our first patient, is an obese woman who had had two laminectomies within the last four years for disc disease. Excessive enthusiasm for this procedure might have biased the criteria for patient selection. She eventually developed hemihypesthesia and hypalgesia, including her tongue. She was relieved of her "constant agony" for only 24 hours.

Case 24 was a failure who improved after removal of the L4-L5 disc. In this case, despite the large myelographic defect (Fig. 3), we felt that facet rhizotomy would provide him with relief. It seems that the facet joint, in spite of severe sclerosis, was not the major source of pain. It is interesting that the back pain and left thigh pain of the patient reported by Fox and Rizzoli[4] was relieved after facet rhizotomy in spite of an L5 disc protrusion causing root deformity. However, the patient required discectomy for relief of calf pain.

DISCUSSION

In 1971, Rees[6] reported more than 2,000 operations of severing the nerve supplying the facet joint by using a long scalpel blade. He stated that 88% get instant relief and it is rare to find anybody who does not get relief. However, there has been some disparity of opinion as to the exact lesion made by Rees. Shealy's suggestion of radiofrequency lesion with needle placement under fluoroscopic control is more sophisticated and avoids the possible complication of developing a hematoma. We have not had any complications so far.

It seems that facet rhizotomy may have a diagnostic value as to the source of pain. Moreover, if it does not alleviate the pain and the patient's symptoms persist or change, the subsequent course of action is not altered. We believe that this procedure has merit in spite of a recent controlled double blind study of osteoarthritis patients showing the control group to have had as much short-term relief as the group treated with acupuncture.[7] The reduction of drug intake and the ability to carry out normal activity in greater comfort over a period of more than six months is not likely due to placebo effect.

The majority of our patients described a pattern of pain:

1. Usually constant ache
2. Not necessarily aggravated by coughing and sneezing
3. Location in the posterolateral aspect of the thigh
4. Weather sensitivity
5. Often reaching to the knees, rarely to the ankle
6. Standing more comfortable than sitting
7. Not responsive to ordinary analgesics

We have been measuring skin temperature and resistance before and after a facet rhizotomy. There are suggestions that the effect may be related to partial autonomic interruption. That is, however, not definitive and is still under investigation (Fig. 4). Our series, while not large, appears encouraging. Whether percutaneous facet rhizotomy for relief of low back and leg pain will be clinically valuable on a long-term basis is obviously not certain.

TABLE 2

Patient	Area of Pain	Diagnosis	Previous Operations	Duration of Follow-Up	Results	Subsequant Treatment for Failures
1	Back and both glutei	S/P Lumbar discectomy•arachnoiditis	X2	1 year	Failure	TCES and behavior modification
2	Back and right gluteal area and posterior thigh up to knee	Facet sclerosis with minimal changes in disc space	0	1 year	Excellent	
3	Back and both gluteal areas	S/P lumbar discectomy facet sclerosis	X2	14 months	Excellent	
4	Back pain	Degenerative arthritis	0	1 year	Good	
5	Back and both legs up to knee	S/P lumbar discectomy degenerative arthritis	X1	15 months	Excellent	
6	Back pain	Degenerative arthritis	0	6 months	Good	
7	Back pain	Facet sclerosis	0	6 months	Good	
8	Back and posterolateral aspect left thigh	Facet sclerosis	0	7 months	Good	
9	Back pain	Degenerative disc disease	0	8 months	Excellent	
10	Back and posterior thigh up to knee	Degenerative disc disease	0	6 months	Good	
11	Back, posterior thigh up to knee	Degenerative disc disease	0	9 months	Excellent	
12	Back and posterior thigh up to knee	Facet sclerosis	0	6 months	Excellent	
13	Back and posterior thigh up to knee	Facet sclerosis	0	6 months	Excellent	
14	Back and right leg up to foot	S/P discectomy degenerative arthritis	X2	7 months	Failure	TCES
15	Back pain	Degenerative arthritis	0	9 months	Good	
16	Back pain	Degenerative arthritis	0	9 months	Excellent	
17	Back and right leg pain to back of ankle	S/P laminectomy facet sclerosis	X1	10 months	Good	
18	Back and both glutei	S/P Laminectomy	X1	1 year	Good	
19	Back pain	Degenerative disc disease	0	1 year	Excellent	
20	Back and right hip pain	Degenerative disc disease	X1	10 months	Excellent	
21	Back and both hips	Acromegaly S/P discectomy	X1	6 months	Failure	Foraminotomy with good relief
22	Back and left thigh pain	Facet sclerosis	0	1 year	Excellent	
23	Back and posterolateral aspect right leg	Facet sclerosis and degenerative changes	0	9 months	Excellent	
24	Back and posterior aspect Rt thigh up to knee	L4-L5 disc	0	6 months	Failure	L4-L5 discectomy with good relief
25	Back pain	Degenerative arthritis with large transverse process L5	0	6 months	Good	

SUMMARY

Thermocoagulation of the nerve to the facet joint may be another valuable addition in the management of patients with low backache. It is simple, free of complications and often effective and gratifying to the patient as well as the physician.

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In respect to drink, water is the only fluid which does not possess irritating, or, at least, stimulating qualities — and in proportion as we rise on the scale of potation, from table-beer to ardent spirits, in the same ratio, we *educate* the stomach and bowels for that state of unnatural sensibility, which, in civilized life, will sooner or later supervene. Moderation in wine or dilute spirit and water would, however, seldom be productive of mischief, if they were not accompanied by other causes, moral or physical. There is infinitely more mischief done by too much food than by too much drink. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 53-54.

Broncholithiasis — A Case Report

Lewis H. Stocks, M.D., Ph.D., W. Benson McCutcheon, M.D., and Richard Black, M.D.

BRONCHOLITHS are an uncommon finding in most patients with pulmonary disease.[1,2] Broncholithiasis refers to pulmonary calcification, most often a calcified concretion in the tracheobronchial tree. Its pathogenesis may be (1) calcification of tracheobronchial cartilage and subsequent sequestration (2) secondary calcification of an exogenous foreign body, or (3) most commonly, migration and erosion of calcified material from hilar and paratracheal nodes into the tracheobronchial tree.

This report serves to remind those who treat pulmonary diseases that broncholiths are sometimes responsible for persistent and recurring pulmonary symptoms and occasionally result in serious illness and death.[3-5]

CASE REPORT: D.K., a 75-year-old woman, was admitted to Watts Hospital with a 10-month history of persistent cough and increasing sputum production. Repeated chest x-rays demonstrated atelectasis in the right lower lobe. There was no exposure to tuberculosis, and she had not smoked cigarettes in 10 years. Skin tests and cultures were negative. The physical examination was normal except for wheezes at the right base. Tomography demonstrated calcified hilar nodes associated with a broncholith (Fig. 1). The broncholith was extracted successfully at bronchoscopy. Because it was adherent to a small polyp posteriorly, the broncholith probably gained access to the tracheobronchial tree by eroding through the membranous por-

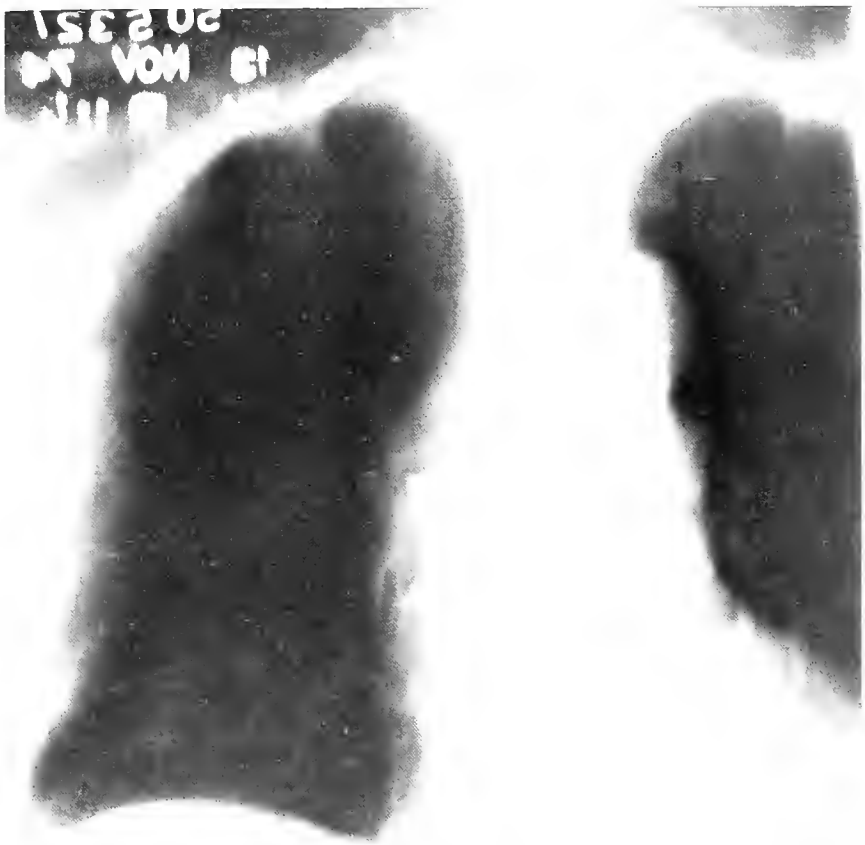

Fig. 1. Calcified hilar nodes.

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tion of the bronchus intermedius.

By 1946, Zahn[6] was able to find 71 cases in the literature. Schmidt[8] reviewed the literature in 1950 and reported an additional 41 cases at the Mayo Clinic.

There is no well defined association of broncholithiasis with any specific bronchopulmonary disease.[7] The incidence of broncholiths associated with tuberculosis is about 1 in 4,000. Most chemical analyses show the composition to be calcium phosphate and carbonate. Broncholiths often look like a miniature staghorn calculus of the kidney.[8] Except for two reports, broncholithiasis is not known to be associated with silicosis.[2,9,10] The most common etiology is felt to be the result of calcification of tracheobronchial lymph nodes secondary to a previous pulmonary infection and subsequent erosion into the bronchial lumen.

The predominant symptom is a cough frequently accompanied by hemoptysis and thoracic pain.[8] Diagnostic physical findings are rare. A helpful diagnostic roentgenologic finding is the presence of a dense area of calcium at the apex of a triangular portion of collapsed lung.

Bronchoscopy is usually necessary for removal. Occasionally, however, a patient may spontaneously cough the broncholith into the upper airway. Two recognized complications associated with bronchoscopic removal are hemorrhage and pneumothorax on the involved side.[1] Only rarely should pulmonary resection be necessary for successful removal of broncholiths.[11]

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The *physical* causes, then, of morbid sensibility of the nerves of the digestive organs are — atmospheric impressions on the external surface of the body — cutaneous disorders and their sudden retropulsion — disordered functions and diseased structure in other parts of the body, as in the brain, liver, &c. acting through the medium of sympathy on the organs of digestion — food and drink in too large a *quantity*, or of too stimulating or indigestible a *quality* — acrid substances, as drastic purgatives, &c. taken into the stomach, or generated in the alimentary apparatus — sedentary habits. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 54.

Cardiopulmonary Resuscitation (CPR) as Treatment of Cardiac Arrest

III. Advanced CPR

(Last of three articles)

James T. McRae, M.D.*

WITH rare exceptions, all cardiac arrest victims who have been given basic CPR should, after stabilization or because stabilization is impossible, be transferred to the nearest life-support unit. This may be a mobile unit brought to the scene of the collapse or the emergency department or coronary intensive care unit of a hospital. Basic CPR must be continued as needed while the transfer is being made.

The initial approach in advanced CPR is likely to be the same whether the arrest is respiratory or cardiac. Therefore, one need not waste time attempting to determine the cause of the arrest. That can be done later. Some physicians listen to the victim's heart or look at his eyegrounds when his only hope for survival is vigorous treatment for cardiopulmonary arrest.

Advanced CPR consists of the following features: (1) Use of special equipment for both artificial ventilation and artificial circulation; (2) Administration of oxygen to combat anaerobic metabolism and resultant metabolic acidosis; (3) Cardiac monitoring for recognition and treatment of dysrhythmias that frequently cause or accompany arrest; (4) Electrical defibrillation if ventricular fibrillation is present; (5) Establishment of an intravenous route for the administration of fluids and certain drugs. The essentials of basic CPR, i.e., mouth-to-mouth resuscitation and manual chest compression, *must be continued without lengthy interruption* while these more sophisticated aids are being set up.

USE OF ADJUNCTIVE EQUIPMENT

Establishment of Mechanical Ventilation

Mechanical ventilation with high levels of oxygen should replace expired-air ventilation as soon as possible. This is best accomplished with an endotracheal tube, cuffed for adults and uncuffed for infants and small children. It should be inserted by a skilled person and should require stopping cardiac compression for not more than 15 to 20 seconds, the only exception to the rule of not stopping for more than five seconds.

If endotracheal intubation is not possible, use of an esophageal obturator airway is acceptable in adult patients who are comatose. The main advantages of this airway are: (1) It can be inserted without the vocal cords being visualized, and (2) it allows the use of mouth-to-tube as well as bag-valve-tube ventilation. The esophageal ballon, located below the level of the carina, effectively prevents gastric distention and regurgitation. However, because regurgitation almost routinely follows removal of this tube, special precautions must be taken to prevent aspiration at that time. If possible, the tube should be left in place until the patient is conscious, breathing and has adequate reflexes. Otherwise, a cuffed endotracheal tube should be inserted before the esophageal obturator tube is removed.

A bag-valve-mask unit can be used quite effectively if the person using it has experience with patients or has trained on a manikin, preferably a Recording Resuscianne.™ A minimal tidal volume of 800 cc should be provided for the patient, and this amount is impossible to estimate and even to provide unless one has learned best how to produce pressure on the bag. A side connection or a reservoir for oxygen is highly desirable with a bag-valve-mask unit, since room air has only 21 percent oxygen and 50 to 100 percent oxygen is needed.

Cardiac Monitoring

The physician in charge of advanced CPR should be able to recognize arrhythmias and institute

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treatment promptly. This is made easier by the use of combination paddles which, when placed on the chest, immediately transmit the cardiac rhythm to a monitor and are used for defibrillation as well. The paddles should be placed over saline-soaked gauze pads, which provide better contact than electrode paste, one paddle just to the right of the sternum just below the clavicle and the other just to the left of the cardiac apex or left nipple.[1] If the transmitted rhythm proves to be ventricular fibrillation, the machine should be charged promptly, the manual compression stopped and the heart defibrillated at the setting of 400 joules or watt-seconds. Starting at lower settings is a waste of time in adults; much lower settings are, of course, mandatory in infants and small children.

After the few seconds required for defibrillation, cardiac compression must be resumed immediately without waiting to see if the defibrillation restores a normal rhythm. The effect on the heart's electrical system can be observed on the monitor while manual compression is being done. After a few minutes, manual compression can be stopped long enough to determine whether the defibrillation was successful and a carotid pulse has returned, but, again, if it is still needed, it should not be stopped for more than five seconds.

In adults who are pulseless and unconscious (but never in children or in adults with hypoxic arrest as from an overdose), "blind" (unmonitored) defibrillation is justified when combination paddles are not available. There is no evidence that defibrillation harms the patient with ventricular asystole, and it is the only effective treatment for ventricular fibrillation. The sooner it is done the better the chance of successful resuscitation.

Other types of dysrhythmias that should be immediately recognized on the monitor are cardiac standstill or ventricular asystole, bradycardia (rate of less than 60 per minute), premature ventricular contractions, ventricular tachycardia, atrioventricular blocks of all degrees, atrial flutter and atrial fibrillation. Also, the difference between supraventricular and ventricular tachycardia must be recognized, if possible, since the treatment for the two is not the same.

One cannot use the monitor to determine when to discontinue compression, because electromechanical dissociation may be present and electromechanical dissociation is characterized by fairly normal-appearing electrocardiographic complexes even when there is little or no effective pulse. It is for this reason that the carotid pulse must be palpated, and the diagnosis of a return to adequate heart beat based on that palpation.

Temporary control of cardiac rate and rhythm with a transvenous pacemaker is another adjunctive measure in advanced CPR. It can be used to treat profound sinus bradycardia as well as complete heart block.

DRUG THERAPY

Drug therapy is the essence of advanced CPR. All drugs should be given intravenously with the exception, of course, of oxygen. Intracardiac injection is not recommended unless it is impossible to get an intravenous line open early in the resuscitation effort.

In the 1974 Standards for Cardiopulmonary Resuscitation and Emergency Cardiac Care,[2]* drugs used most often were divided into: *essential drugs*, including oxygen, sodium bicarbonate, epinephrine, atropine sulfate, lidocaine, morphine sulfate, and calcium chloride; and *useful* (that is, not absolutely required) *drugs*, including vasoactive drugs (levarterenol or metaraminol), isoproterenol, propranolol, diuretics and corticosteroids. More recently, dopamine has been recommended as a useful drug.[3] Unless otherwise specified, the dosages given in the remainder of this section are for adults. Adult and pediatric doses are summarized in Table 1.

Essential Drugs

Oxygen heads the list of drugs, since it protects the brain and other organs from irreversible damage. Its administration was discussed under the section on Establishment of Mechanical Ventilation. The concentration should be as high as possible until resuscitation is complete or until arterial blood gases and pH indicate that it may safely be reduced.

Sodium bicarbonate is used to correct the metabolic acidosis that invariably develops under conditions of oxygen deprivation. The initial dose should be 1 mEq/kg which, for an adult, usually means one or two ampules or prefilled syringes containing 44.6 or 50 mEq each. This dose can be repeated. Thereafter, one-half the initial dose can be administered at 10-minute intervals until resuscitation is complete or until arterial blood gases and pH are satisfactory. It is best to avoid mixing sodium bicarbonate with epinephrine, but the two may be given in rapid succession.

Epinephrine should always be administered early in cardiac arrest, since it helps to correct both asystole and ventricular fibrillation. It can even be used to restore myocardial contractility in electromechanical dissociation, making it the most versatile drug available for the treatment of these three major types of cardiac arrest. It should be given as an initial dose of 5 ml of a 1:10,000 solution, that dose to be repeated at five-minute intervals during the resuscitation effort. An alternate route is directly into the tracheobronchial tree via an endotracheal tube, the dose then being 1 to 2 mg of epinephrine in 10 ml of sterile distilled water.

Atropine sulfate is indicated mainly in sinus bradycardia, especially that associated with myocardial infarction or that complicated by hypotension and premature ventricular contractions. It improves cardiac output by increasing heart rate. The initial dose is 0.5 mg given slowly as a bolus, with repeated doses to be given at five-minute intervals until the ventricular rate reaches 60 or more beats per minute. However, the total dose should not exceed 2 mg except in patients with third degree atrioventricular block when larger doses may be

*Available from local American Heart Association offices.

given with careful monitoring.

Lidocaine is indispensable in most attempts at cardiac resuscitation, although it is of no value in the patient with asystole. It may prevent ventricular fibrillation in the presence of frequent or multifocal premature ventricular contractions. It can often be used to control ventricular tachycardia, but electrical cardioversion is preferable if the patient also has hypotension. The initial dose of lidocaine is 1 mg per kg administered slowly as a bolus. The drug may be given a second time as a bolus at the same dosage if necessary. Either way, it should then be continued as an infusion of 1 to 3 mg per minute (1 to 3 ml of a solution containing 500 mg in a 500-ml solution of 5% dextrose in water) until the cardiac rhythm is satisfactory. If fluid restriction is desirable, 2,000 mg of lidocaine may be added to a 500-ml solution of 5% dextrose in water, and the infusion rate kept at 1 to 3 mg per minute. Never should it be given at a rate faster than 4 mg per minute; it may cause convulsions.

Calcium can often make the difference between success and failure in resuscitating a patient with electromechanical dissociation or ventricular asystole. It is also helpful in ventricular fibrillation because it increases myocardial contractility and prolongs systole. Calcium for intravenous use is available in several forms: calcium chloride, calcium gluconate and calcium gluceptate; I prefer to use calcium gluceptate, giving it slowly in a dose of 5 ml or 4.5 mEq. Calcium in any form should always be given with caution, especially to fully digitalized patients, and it should never be mixed with sodium bicarbonate before it is given.

Morphine sulfate is the narcotic of choice for relief of pain in patients with suspected myocardial infarction. The drug is prepared by diluting 1 ml (15 mg) to 5 ml (3 mg/ml) with distilled water. Then 1 to 1.5 ml (3 to 4.5 mg) of the solution should be given as an initial dose and repeated as necessary. Doses no larger than necessary should be given since the drug causes respiratory depression.

Useful Drugs

Vasoactive drugs such as levarterenol and metaraminol are helpful during CPR where the blood pressure tends to be dangerously low with associated inadequate coronary, cerebral and renal blood flow. I prefer to use metaraminol, since it can be given intravenously as a bolus in a dose of 2 to 5 mg and then continued as a drip. Both drugs have a positive inotropic effect on the myocardium.

Propranolol is valuable in patients whose hearts repeatedly revert to ventricular tachycardia or fibrillation after a more stable rhythm has been established. Lidocaine should be administered first to such patients but must be followed promptly by propranolol administered in a 1-mg initial dose if the rhythm remains grossly abnormal. A total dose of 3 mg of propranolol may be given with careful monitoring.

Isoproterenol is a useful drug when atropine fails to increase heart rate in patients with profound sinus bradycardia. It should be given as a

TABLE 1
Drugs Commonly Used in Advanced CPR

Drug	Recommended Intrevenous Dosege: Adult	Infants and Children	Comment
Essential			
Sodium bicarbonate	1 mEq/kg initially (and as second dose) 0.5 mEq/kg at 10-min. intervals thereafter as needed	0.9 mEq/kg diluted 1:1 with sterile water Dose can be repeated after pH obtained and base deficit calculated	Do not mix with epinephrine, but the two can be given in rapid succession Do not mix with calcium gluconate, calcium chloride, or calcium gluceptate
Epinephrine	5 ml of 1:10,000 solution Dose to be repeated at 5-min intervals as needed	1 to 5 ml of 1:10,000 solution Dose to be repeated at 5-min intervals as needed	
Atropine	0.5-mg bolus given slowly Dose to be repeated at 5-min intervals up to total dose of 2 mg	0.01 mg/kg	Total dose in adults can equal 3 mg if necessary when third degree atrioventricular block is present
Lidocaine	1-mg/kg bolus given slowly Dose can be repeated Dose then continued as i.v. drip (1-3 ml/min of solution containing 500 mg in 500-ml solution of 5% dextrose in water)	Infants: 0.5 mg/kg Children: 5 mg and repeat as necessary Dose then to be continued as i.v. drip (100 mg in 500-ml solution of 5% dextrose in water)	In adults, infusion rate should never be more than 4 mg/min because of the risk of convulsions In infants and children, rate should never exceed 100 mg/hr
Calcium chloride 10%	2.5 to 5 ml (3.4 to 6.8 mEq) Dose may be repeated at intervals of 10 min	Maximum dose of 1 ml/5 kg	
Calcium gluconate 10%	10 ml (4.8 mEq) Dose may be repeated at intervals of 10 min	Maximum dose of 2 ml/5 kg	Calcium salts should never be mixed with sodium bicarbonate
Calcium gluceptate	5 ml (4.5 mEq) given slowly Dose may be repeated at intervals of 10 min	Maximum dose of 0.5 ml/5 kg	Must be given with caution in digitalized patients
Morphine sulfate	1 to 1.5 ml (3 to 4.5 mg) of 3 mg/ml distilled water solution Dose to be repeated every 5-30 min. as needed		
Useful			
Metaraminol	2- to 5-mg bolus given slowly Dose to be continued as drip	25 mg/100 ml solution of 5% dextrose in water as drip as necessary	
Propranolol	1-mg dose Dose to be repeated as needed up to 3 mg total dose with careful monitoring		Lidocaine should be given first to these patients; propranolol is given only if lidocaine fails to establish a more stable cardiac rhythm
Isoproterenol	1- to 10-ml/min infusion of 1-mg solution in 500-ml solution of 5% glucose in water Dose to be repeated as necessary to maintain heart rate above 60	1 mg/500-ml solution of 5% dextrose in water as i.v. drip; titrate to desired effect	
Dopamine	2- to 20-μg/kg/min in 5% dextrose in water Dose to be continued as necessary to maintain adequate cardiac output		

1- to 10-ml per minute infusion of 1 mg in a 500-ml solution of 5% glucose in water. The dose should be titrated to maintain a heart rate of approximately 60 beats per minute.

Corticosteroids and *diuretics* may be useful in specific situations such as shock lung, aspiration, or pulmonary edema, and during post-resuscitation.

Dopamine is capable of increasing cardiac output and mean arterial pressure and is especially valuable in treating cardiogenic shock. It is usually given by drip in a solution of 5% dextrose in water at the rate of 2 to 20 micrograms per kg per minute. This should be titrated to obtain the desired effect.

Drug Combinations

The following clinical situations may be treated successfully in adults by specific combinations of these therapeutic agents given in the order listed.

(1) Premature ventricular contractions (PVCs), frequent or multifocal, in the presence of chest pain:
Lidocaine, 50- to 100-mg bolus, which may be repeated once if necessary.
Lidocaine infusion, 500 mg in a 500-ml solution of 5% dextrose in water, titrated to control the PVCs but not to be given more rapidly than 3 to 4 mg per minute.

(2) Profound sinus bradycardia:
Atropine sulfate, 0.5 mg as a bolus, the dose to be repeated if needed at five-minute intervals up to a maximum dose of 2 mg.
If this fails, isoproterenol, 1 to 10 ml per minute of solution of 1 mg in 500-ml solution of 5% glucose in water, titrated.
Temporary transvenous pacemaker should be considered if this fails to restore adequate circulation.

(3) Complete heart block:
Atropine sulfate, 0.5 to 1 mg as bolus, to be repeated once or twice if necessary, up to a maximum dose of 3 mg, under careful monitoring.
When the complete heart block is accompanied by profound bradycardia and the above treatment fails, try isoproterenol infusion — 1 mg in 500-ml solution of 5% dextrose in water, titrated to 2 to 20 μg per minute.
If this fails, consider temporary transvenous pacemaker.

(4) Electromechanical dissociation:
Epinephrine, 5 ml of 1:10,000 solution, repeated every five minutes as necessary.
Calcium gluceptate, 5 ml (4.5 mEq).
Sodium bicarbonate intravenously, 50 to 100 mEq, (1 mEq/kg) followed if necessary by a second dose given five to ten minutes later, and then one-half dose given every ten minutes if needed.

(5) Asystole:
Same as for electromechanical dissociation.

(6) Ventricular tachycardia (with hypotension):
Synchronized cardioversion, beginning with 50 joules and increasing the energy as necessary.
Lidocaine, 75-mg bolus, followed by infusion of 500 mg in 500-ml solution of 5% dextrose in water.

(7) Ventricular fibrillation:
Defibrillation at maximum setting of 400 joules.
Sodium bicarbonate intravenously 50 to 100 mEq (1 mEq/kg) followed if necessary by a second dose given five to ten minutes later, and then by one-half dose given every ten minutes if needed.
Epinephrine, 5 ml of 1:10,000 solution; repeat every five minutes as necessary.
Lidocaine, 50- to 100-mg bolus, followed by second identical dose if necessary, followed by titrated infusion of 500 mg in 500-ml solution of 5% dextrose in water.

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In this country, where man's relations with the world around him are multiplied beyond all example in any other country, in consequence of the intensity of interest attached to politics, religion, commerce, literature, and the arts — where the temporal concerns of an immense proportion of the population are in a state of perpetual vacillation; where spiritual affairs excite great anxiety in the minds of many; and, where speculative risks are daily run by all classes, from the disposers of empires in Leadenhall Street, down to the potatoe-merchant of Covent Garden, it is really astonishing to observe the deleterious influence of these mental perturbations on the functions of the digestive organs and nervous system generally. The operation of *physical* causes, numerous as these are, dwindles into complete insignificance, when compared with that of anxiety or tribulation of mind. These causes very often escape the investigation of the physician, unless he is very much on his guard. The patient is prodigal of description, as far as regards his corporeal feelings — and he is often very candid as to the *physical* causes which may be enquired after by the practitioner; but he seldom reveals (for obvious reasons) the real origin of the evil, when it is of a moral nature, unless it be accidentally drawn from him by cross-questioning. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 55.

Editorials

SUGGESTIONS FOR AUTHORS

The NORTH CAROLINA MEDICAL JOURNAL welcomes original contributions to its scientific pages, expecting only that they be under review solely by this JOURNAL at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this JOURNAL.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The NORTH CAROLINA MEDICAL JOURNAL follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere. Costs in excess of $15.00 for illustrations are borne by the author. Costs for setting of tables are also borne by the author as are charges for art work which might be needed for proper printing of figures.

5. Style

The style followed by this JOURNAL will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. Talbot, M.D., director. All manuscripts are subject to editorial revision for such matters as spelling, grammar, and the like.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the NORTH CAROLINA MEDICAL JOURNAL.

HOW ROUTINE A URINALYSIS

Homer Smith, in his classic *De Urina*,[1] has provided an entertaining and penetrating study of urine through the centuries so that his successors in analysis can only hope humbly to add an occasional apt observation. If Smith's life demonstrated anything, and it demonstrated many, the most important was that there is no such thing as a routine urinalysis. Perhaps because it must be the oldest of medical laboratory procedures, it has suffered from familiarity and ease of specimen collection. If it were introduced for the first time today, we would certainly soon require a well-trained corps of urine gazers who could tell us much more than the medieval uroscopist, who arrived at diagnosis and prognosis by ritualistic viewing of urine decanted into a flask specially designed for the procedure and, perhaps, more than we would know what to do with today. As it is, urinalysis is perfunctory, often postponed and occasionally subjected only to a sink test; little wonder an Army pathologist could describe an ideal medical corpsman as one who could do urinalyses well all day long and enjoy it.

By now, urinalysis has become more ritual than examination for the reasons for ritual are lost in the past but the procedure remains. For example, Levin, in his recent interesting but glaring look at modern medicine,[2] thinks a physician should do a urinalysis because it is basic to good medical care. Yet the urinalysis he describes is almost worthless and it is the same procedure done in most hospitals and doctors' offices in the United States. Of what value is a random specific gravity? Without water-loading, dehydration or vasopressin administration, how is the capacity of the kidneys for the concentration and dilution of urine to be assessed from such casual practice? Without serial measurements during acid or bicarbonate loading, how can a determination of urine pH be really helpful? Of what use is a positive test for glucosuria without measurement of the blood sugar? Why report a 2+ proteinuria when quantification of protein excretion may be essential for adequate evaluation of the patient? Certainly, sediment examination is essential but an early morning specimen is preferable if erythrocytes and red blood cell casts are sought and a cover slip preparation of uncentrifuged urine may tell more about bacteriuria than a centrifuged specimen. And, what of the gram stain, unmentioned by Levin and not done ordinarily even though white blood cells be present in the urine in clumps or casts?

Urine with its noble history deserves better. Even

now, we learn more about the wondrous fluid. For instance, not everyone who eats asparagus excretes urine with that strong, characteristic odor. White[3] has recently shown that those who do, excrete S-methyl thioesters. Although unusual sulfur-containing compounds are present in asparagus, neither produces such an odor when ingested by positive excretors, so the metabolic pathways involved are still unknown.

Perhaps if we changed our routine in urinalysis and made it more questioning and less ritualistic, we might find it more helpful and a more discriminating tool.

References

1. Smith HW: *De Urina*. Kaiser Foundation Medical Bulletin 6:1, 1958.
2. Levin A: *Talk Back to Your Doctor*. Doubleday, New York, 1975.
3. White RH: Occurrence of S-methyl thioesters in urine of humans after they have eaten asparagus. Science 189:810, 1975.

Bulletin Board

NEW MEMBERS
of the State Society

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Winslow, James Elbert, Jr., MD (FP), 609 Williams Rd., Roxboro 27573
Wolff, Alcuin Donald, MD (RT) (RENEWAL), Cleveland Co. Hospital, Shelby 28150

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

August 28-29

Dermatology for the Non-Dermatologist
Place: Grove Park Inn, Asheville
Fee: $50
Credit: 7 hours; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

September 10-11

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society
Place: Pinehurst Hotel, Pinehurst
For Information: Mrs. John McLain, Executive Secretary, 3209 Rugby Road, Durham 27707

September 15-16

21st Annual Angus M. McBryde Perinatal Symposium
Fee: $50
Credit: 12 hours; AAFP approval requested
For Information: Lillian R. Blackmon, M.D., Box 3936, Duke University Medical Center, Durham 27710

September 16-18

Selected Topics in Internal Medicine
Fee: $125
Credit: 15 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

September 16-19

Invitational Assembly for Advanced Urology: The Prostate
Place: Pinehurst Hotel & Country Club, Pinehurst
Fee: $135; registration is limited; pre-registration required
Credit: 18 hours
For Information: Ms. Virginia Jordan, Assembly Secretary, P.O. Box 3707, Duke University Medical Center, Durham 27710

September 17-18

6th Walter L. Thomas Symposium
Credit: 12 hours
For Information: William Creasman, M.D., P.O. Box 3079, Duke University Medical Center, Durham 27710

September 22-26

North Carolina Medical Society Annual Committee Conclave
Place: Mid-Pines Club, Southern Pines
Regular meetings will be scheduled for the chairman and members of almost all regular committees of the Medical Society. Committee members should plan to be present if at all possible
For Information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

September 30-October 2

Dermatology for Non-Dermatologists
Fee: $125
Credit: 17½ hours
For Information: Gerald Lazarus, M.D., Box 2987, Duke University Medical Center, Durham 27710

October 1-2

Clinical Urology
Fee: $75
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 6-7

Sixteenth Annual Charlotte Postgraduate Seminar
Place: Charlotte Memorial Hospital and Medical Center Auditorium
Sponsor: Mecklenburg County Chapter — American Academy of Family Physicians
Credit: 12 hours, AAFP approved
For Information: David S. Citron, M.D., Chairman, 1012 Kings Drive, Charlotte 28283

October 8

Diabetes Symposium
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

October 22

Forsyth County Heart Association meeting
For Information: Division of Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 29-30

Alumni Meeting Scientific Session
Credit: 5 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 29-30

Anesthesiology Fall Seminar — "Safe Anesthesia"
Place: The Sheraton Center, Charlotte
Sponsors: Department of Anesthesiology, Charlotte Memorial Hospital; Department of Anesthesiology, North Carolina Memorial Hospital, Chapel Hill; North Carolina Society of Anesthesiologists
Fee: Physicians $55; Nurse Anesthetists $45; Residents and Nurse Anesthetists in training $30; registration for one day only, $30
Credit: 10 hours; AMA Category 1
For Information: H. A. Ferrari, M.D., Chairman, Department of Anesthesiology, Charlotte Memorial Hospital, Charlotte 28234

October 30-31

Dermatology for the Non-Dermatologist
Place: Blockade Runner, Wrightsville Beach
Fee: $50
Credit: 7 hours; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

October 31-November 2

North Carolina—South Carolina Society of Ophthalmology and Otolaryngology meeting
Place: Pinehurst Hotel and Country Club, Pinehurst
For Information: William M. Satterwhite, M.D., Secretary-Treasurer, 1420 Plaza Drive, Winston-Salem 27103

November 5

Third Annual Arthritis Symposium: Therapy of the Rheumatic Diseases
Fee: $35
Credit: 7 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

December 3-4

Second Annual Family Medicine Workshop
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 12, 1977

First District Medical Society Postgraduate Course in Medicine (the first of six weekly sessions)
Sponsors: First District Medical Society and the Office of Continuing Education, UNC School of Medicine
Fee: To be determined
Credit: 12 hours
For Information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932

January 21-22

Current Surgical Problems
Fee: $100
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

ITEMS OF SPECIAL INTEREST

August 2-6

Fourth Annual Beach Workshop
Place: The Internationale Motel, North Myrtle Beach (Ocean Drive), South Carolina

Sponsors: Bowman Gray School of Medicine, Duke University School of Medicine, UNC School of Medicine, and the Medical University of South Carolina
Fee: $125
Credit: 20 hours; AMA Category I; AAFP approved
For Information: Ms. Sally Gulley, Division of Continuing Education, Bowman Gray School of Medicine, 300 South Hawthorne Road, Winston-Salem, N.C. 27103

October 25-29

New Concepts in General Radiology
Place: Southampton Princess Hotel, Bermuda
Fee: $250
Credit: 25 hours
Program: The scientific program will take place from 8:00 A.M. to 1:00 P.M. each day, and will be organized around a disease oriented format. Subject areas and guest faculty who will address these include: chest — Robert Heitzman, M.D., Syracuse, New York; gastro-intestinal tract — Roscoe E. Miller, M.D., Indianapolis, In.; genito-urinary — John A. Evans, M.D., New York, N.Y.; nuclear medicine — Alexander Gottschalk, M.D., New Haven, Conn.; pediatric radiology — J. Scott Dunbar, M.D., Cincinnati, Ohio; skeletal system — Elias G. Theros, M.D., Washington, D.C.
For Information: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham 27710

January 2-15, 1977

Second Medical Refresher Cruise Seminar—(Yucatan Peninsula, Coast of Guatemala — Colombia, Montego Bay)
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
Fee: Tuition $200; other fees dependent upon accommodations
Credit: 21½ hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

Courses In Ultrasound

A series of three 10-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: September 27-December 3, 1976, January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category 1.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem, North Carolina 27103.

Postgraduate Education for Pediatricians and Obstetricians

The Maternal and Child Health Program of the University of California School of Public Health at Berkeley announces postgraduate programs for pediatricians and obstetricians in the field of Maternal and Child Health and Family Planning. Program areas available at the present time include nine-month programs in maternal and child health, in the health of the school-age children and youth, and day care and the preschool child. Twenty-one month programs in care of handicapped children and comprehensive health care, and a 33-month program in Perinatology are also available. These programs all lead to the degree of Master of Public Health, and tax-exempt Fellowship support is available.

Applications are being accepted now for the group entering September 1977. For information write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720.

PROGRAMS IN CONTIGUOUS STATES

September 3

Fourth Annual Cardiac Rehabilitation Workshop
For Information: Dr. Gerald F. Fletcher, Georgia Baptist Medical Center, 300 Boulevard NE, Atlanta, Georgia 30312

September 23

Diabetes 1976
Sponsors: Division of Endocrinology and Metabolism, and the Department of Continuing Education
Fee: Physicians, $30; visiting interns and residents, nurses, dietitians, and other health personnel, $10; enrollment limited to 275
Credit: 6¼ hours; AMA Category 1; AAFP approval requested
For Information: Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, MCV Station, Richmond, Virginia 23298

October 24-28

Annual Meeting, American College of Chest Physicians
Place: Atlanta, Georgia
For Information: American College of Chest Physicians, 911 Busse Highway, Park Ridge, Illinois 60068

The items listed in this column are for the six months immediately following the month of publication. Requests for listing should be received by WHAT? WHEN? WHERE?, P.O. Box 27167, Raleigh, N.C. 27611, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

News Notes from the— DUKE UNIVERSITY MEDICAL CENTER

Two Duke faculty members have been chosen as Macy Faculty Award Scholars for the academic year 1976-77.

Dr. David J. Lang, professor of pediatrics, and Dr. Lorne M. Mendell, associate professor of physiology and pharmacology, are among the 32 recipients selected from medical schools and schools of public health in the United States and Canada.

Both Lang and Mendell will go to London — Lang to Guy's Hospital and The Hospital for Sick Children, and Mendell to the University College of London.

During his year, Lang will be researching problems related to congenital virus infections and their potential for transmission through sexual contact. Mendell will be working on experiments dealing with the neuroplasticity of connections in the spinal cord.

* * *

Duke's 1976 "Golden Apple Awards," presented by the medical students to faculty members for outstanding teaching, have gone to Dr. William Hylander, associate professor of anthropology and anatomy, in the basic sciences category; to Dr. Adhemar W. Renuart, associate professor of pediatrics (now in private practice), in the clinical sciences category; and Dr. S. Mitchell Freedman, third-year neurology resident, in the house staff teaching category.

* * *

The Eaton Corporation has pledged $35,000 toward the Duke Hospital North project. The gift was made through Eaton's General Products Division's Air Controls Plant in Roxboro.

* * *

The Seeley G. Mudd Building, the new medical center library and communications center, was dedicated over commencement weekend. The principal

speaker was Dr. Lewis Thomas, president of Memorial Sloan Kettering Cancer Center.

The new $5.3 million building has nearly five times the usable space that existed in the previous medical library quarters in the Davison Building.

* * *

Dr. M. Bruce Shields, assistant professor of ophthalmology and chief of the Duke Glaucoma Service, was guest speaker at the annual meeting of the North Carolina Association of Workers for the Blind in Raleigh. He was co-moderator of the Harvard Glaucoma Research Symposium in Boston later in May.

* * *

Dr. Shirley K. Osterhout, assistant professor of pediatrics, and Dr. Adhemar W. Renuart, associate professor of pediatrics, have been elected fellows of the American Academy of Pediatrics, the Pan-American association of physicians certified in the care of infants, children and adolescents. It has approximately 18,000 members.

* * *

Dr. William J. (Terry) Kane, assistant professor of community health sciences, and director of the Family Medicine Program, has been elected secretary-treasurer of the Society of Teachers of Family Medicine.

* * *

Dr. E. Harvey Estes, chairman of the Department of Community Health Sciences, has been elected president-elect of the North Carolina Medical Society.

He was chosen by the House of Delegates at a meeting in Pinehurst May 6 and will begin his term as president in 1977.

* * *

Dr. Eugene A. Stead Jr., professor of medicine, was on a National Institutes of Health program in Bethesda, Md., on the bicentennial of U.S. medicine. He appeared with the director of NIH to discuss papers on metabolism and endocrinology and the heart and lungs.

* * *

Two medical students have been selected to receive $500 Wilburt C. Davison Scholarships for study abroad this year.

They are Richard Alan Schatz, a third-year student from Setauket, N.Y., and Jodelle Groeneveld, a second-year student from Owosso, Mich. Both will study cardiology in England and will observe the primary health care system.

* * *

Anyone in North Carolina can get answers to questions about cancer by dialing a toll-free number to Duke.

Answering questions from 9 a.m. to 4:30 p.m. weekdays are members and trained volunteers of the new Cancer Information Service, located at the Comprehensive Cancer Center here.

The number is 1-800-672-0943. (In Durham, Butner and Creedmoor, 286-2266) Callers in some areas of the state will use an "access code" other than "1." Local operators can provide the local code.

A project of the Cancer Center and the Cancer Society, the telephone service is part of a nationwide cancer information network funded by the National Cancer Institute.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Four members of the faculty of the Bowman Gray School of Medicine have been promoted to the rank of professor.

They are Dr. James A. Chappell, community medicine; Dr. William M. McKinney, neurology; Dr. Richard W. St. Clair, pathology; and Dr. B. Moseley Waite, biochemistry.

Dr. Katherine H. Anderson, who retired March 31 as associate professor of pediatrics and community medicine, has been named professor emerita of community medicine.

They were among 19 members of the fulltime faculty receiving promotions effective July 1.

Receiving promotions to associate professor were Dr. Ralph W. Barnes, neurology (research); Dr. Carol D. Cunningham, biochemistry; Dr. Jerome J. Cunningham, radiology; Dr. Robert A. Diseker, community medicine; Dr. Robert L. Gibson, anesthesia; Dr. Lloyd H. Harrison, urology; Dr. Arnold S. Kreger, microbiology; Dr. George D. Rovere, orthopedics; and Dr. Henry C. Turner, anesthesia.

Receiving promotions to assistant professor were Dr. Marshall Ball, radiology; Dr. M. Gene Bond, comparative medicine; Dr. John C. Mueller, medicine; Dr. Abdel-Moshen Nomeir, neurology and medicine; and Dr. J. Michael Sterchi, surgery.

Members of the parttime faculty receiving promotions were Dr. Robert W. Gibson Jr., clinical assistant professor of psychiatry, and Dr. Walter Roufail, clinical assistant professor of medicine.

* * *

Dr. Jimmy L. Simon, professor and chairman of the Department of Pediatrics, received the Award for Teaching Excellence during the medical school's annual awards ceremony.

The recipient of the award is selected by a committee of students, faculty and administration at Bowman Gray.

In addition, the senior medical class dedicated its yearbook, "The Gray Matter," to Dr. Simon.

Four faculty members were recipients of Clinical Faculty Teaching Citations. They were Dr. Paul B. Comer, assistant professor of anesthesia; Dr. John H. Edmonds, professor of medicine; Dr. Robert L. Gibson, assistant professor of anesthesia; and Dr. John F. Hennessy, assistant professor of medicine.

Dr. N. Sheldon Skinner Jr., professor of physiology and medicine, received the Basic Science Teaching Award.

Drs. Christopher J. Dressel and John E. Guicheteau, residents in medicine, were presented the House Officer Teaching Awards.

Student award winners were Alan M. Berg, Faculty Award; Joel L. Edwards, Robert P. Vidinghoff Memorial Award and the senior Reynolds Scholar Award; Stephen H. Cruikshank, Obstetrics/Gynecology Merit Award; Jon S. Abramson, Pediatric Merit Award; Michael R. O'Neill, Annie J. Covington Memorial Award; Frederick C. Beyer III, C. B. Deane Memorial Award; George P. Lupton, Upjohn Achievement Award; Eugene H. Paschold, Welch-Kempton Myasthenia Gravis Research Award; and Danial P. Krowchuck, Sandoz Award.

The Z. Smith Reynolds Foundation has awarded the Bowman Gray School of Medicine a $180,000 grant to be used for student support and faculty development.

The one-year grant is part of a continuing program initiated four years ago to provide scholarships and programmatic support for outstanding students from disadvantaged backgrounds and to attract medical educators to the faculty.

The need for faculty development was stimulated by an expansion of the medical center's patient care and medical education programs. The completion of the Reynolds Tower resulted in a 44% increase in the number of patient beds at Baptist Hospital.

Also, since 1972, when the program for student support and faculty development was begun, the size of the medical student body has increased from 304 to 392 students.

The program is an outgrowth of the Reynolds Foundation Medical Scholarship program which, since 1958, provided support for outstanding North Carolina students enrolled at the medical school.

* * *

Dr. Martin I. Resnick, instructor in urology at Bowman Gray, has been awarded a two-year research

fellowship by the American Urological Association.

He was one of four recipients of the AUA research fellowships presented this year. He will use the $30,000 award to further his research on changes in the prostate relating to age and cancer.

The award was presented during the AUA's annual meeting, where Dr. Resnick presented a paper entitled "Recent Advances in Ultrasonography of the Bladder and Prostate." His exhibit on ultrasonography of the bladder and prostate took the second-place prize during the meeting.

* * *

Timothy G. Lane of Ft. Lauderdale, Fla., has become the first Bowman Gray student to simultaneously receive two doctorate degrees from Wake Forest University.

He received the M.D. degree and Ph.D. degree in physiology through a combined degree program at the medical school. The degrees were conferred during commencement exercises on the Wake Forest campus.

The combined M.D.-Ph.D. degree program was begun in 1972 at Bowman Gray for exceptional students who have a strong interest in research and academic medicine. There are only 53 schools in the nation offering combined degree programs.

* * *

Dr. Frederick W. Glass, assistant professor of surgery, has been elected chairman of the newly created Section on Emergency Medicine of the North Carolina Medical Society.

* * *

Dr. David L. Kelly Jr., associate professor of neurosurgery, has been elected president of the North Carolina Neurosurgical Society.

* * *

Dr. Ross L. McLean, professor of medicine, has been elected president of the Northwestern Lung Association.

* * *

Dr. Joyce Reynolds, clinical instructor in surgery, has been elected secretary of the newly created Section on Emergency Medicine of the North Carolina Medical Society.

* * *

Dr. Hal T. Wilson, associate professor of community medicine, has been appointed to the Special Committee for Performance Examinations by the National Commission for Certification of Physician Assistants.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA
DIVISION OF HEALTH AFFAIRS

Two staff members of the Frank Porter Graham Child Development Center (FPG) at the University of North Carolina at Chapel Hill have been cited by national organizations for contributions to their field.

Dr. James J. Gallagher, FPG director, has been selected as the recipient of the 1976 Education Award of the American Association on Mental Deficiency (AAMD). He was recognized for a lifetime of work with exceptional children.

Gallagher is a Kenan Professor of Education and former head of the U.S. Bureau of Education for the Handicapped in the U.S. Department of Health, Education, and Welfare.

Dr. Ronald Wiegerink has been selected as one of the "Outstanding Young Men in America" by the U.S. Junior Chamber of Commerce. Wiegerink was chosen for national leadership in the area of developmental disabilities.

* * *

The Health Services Research Center of the University of North Carolina has received a five-year grant totaling $1.2 million from the U.S. Department of Health, Education, and Welfare.

Dr. Gordon DeFriese, director of the UNC Health Services Research Center (HSRC), said the research plan submitted by the HSRC was prepared by 27 health researchers and educators from the fields of medicine, economics, public health, pharmacy, city and regional planning, dentistry and business administration.

The newly funded research will focus on the uses and quality of information for decision-making in the health care field, both at the patient care level and at the organizational level.

* * *

A total of 123 students at the University of North Carolina School of Medicine at Chapel Hill received the doctor of medicine (M.D.) degree in commencement exercises here Sunday, May 9.

Dr. Christopher C. Fordham, dean of the School of Medicine, presided over the program honoring the 1976 M.D. degree candidates. Delivering the keynote address was Dr. William E. Bakewell, UNC-CH professor of psychiatry and chairman of the medical school's admissions committee.

* * *

Dr. Benson R. Wilcox, professor of surgery at the University of North Carolina School of Medicine at Chapel Hill, has been elected secretary-treasurer of the Thoracic Surgery Directors' Association.

The Thoracic Surgery Directors' Association is an

organization of over 100 individuals in the U.S. and Canada in charge of residency training programs dealing with the surgery of heart, lung and esophageal disease.

Dr. Wilcox, who is also chief of the division of cardiothoracic surgery at N.C. Memorial Hospital, will serve a three-year term.

* * *

Arlene S. Bierman of Flushing, N.Y., Scott Allen Boone of Charlotte and Peter Tomaz Remec of Williamstown, Mass., have received 1976 Morehead Fellowships in medicine at the University of North Carolina at Chapel Hill.

The three will enroll in the UNC-CH School of Medicine in the fall.

The fellowships are valued at $3,000 a year plus tuition and fees to cover expenses during four years of study here.

* * *

Dr. Gordon F. Murray, professor of cardiothoracic surgery at the School of Medicine, recently was elected to membership of the American Association for Thoracic Surgery.

* * *

Dr. Walter Reece Berryhill and Dr. Lucy Shield Morgan received honorary doctor of science degrees from the university during graduation exercises May 9.

Dr. Berryhill, dean emeritus of the UNC Medical School and Sarah Graham Kenan Professor of Medicine Emeritus, is credited with setting the stage for and building a four-year medical school in Chapel Hill. After retiring as dean, Dr. Berryhill became the first director of the medical school's division of education and research in community medical care, a program recognized as one of the most effective in the nation.

Dr. Morgan, professor emeritus and former chairman of the department of health education in the UNC School of Public Health, is a world leader in her field. She is known among her students and colleagues in many nations as "an innovative teacher, a tireless promoter of public health and health education, and an unswerving advocate of consumer participation in community health." She is probably best known for breaking down racial barriers in health education during the 1940s when she independently established a public health curriculum at North Carolina College in Durham (now North Carolina Central University). The majority of the black public health educators now serving in key positions around the country were prepared in this program created and fostered by Morgan.

* * *

Faculty and alumni of the university have chosen five for its Distinguished Service awards: Dr. Rachel D. Davis, a Kinston physician who is active in the American Cancer Society; Dr. Laurence E. Earley,

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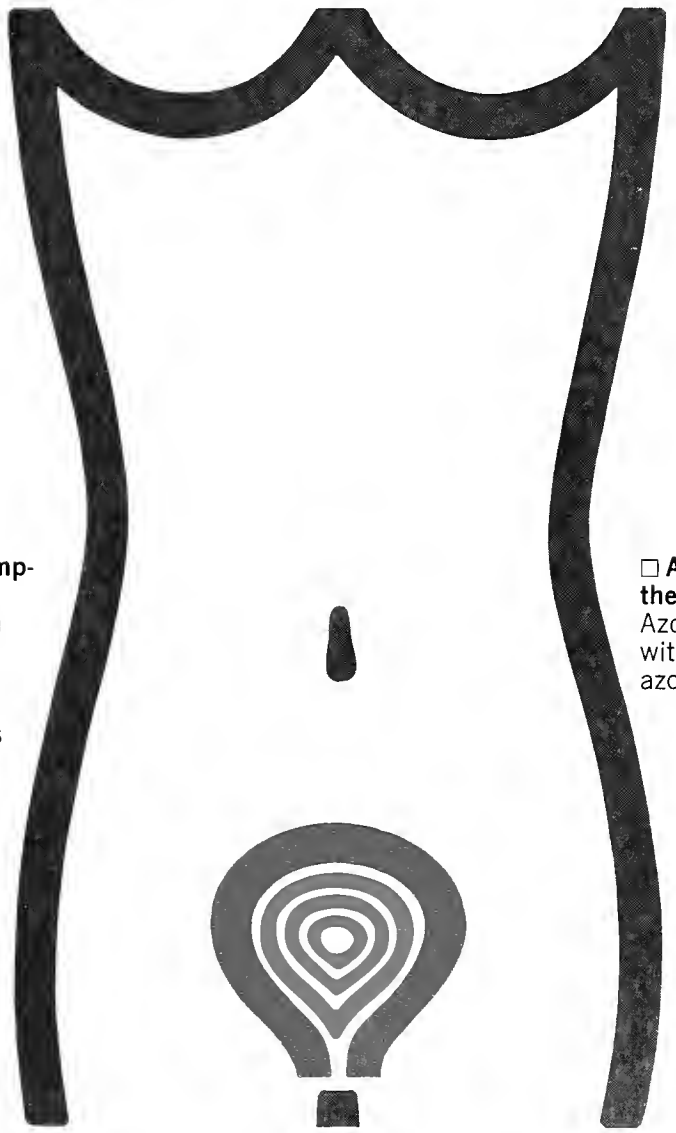

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Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* Warning
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension.* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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▪ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo.*

▪ **Dosage for Vertigo***—The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg /kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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professor and chairman of the department of medicine at the University of Texas Health Service Center at San Antonio; Dr. George C. Ham, a Chapel Hill physician and former chairman of the department of psychiatry at UNC-CH; Frank H. Kenan of Durham, president of Kenan Oil Company and chairman of the board of Kenan Transport Company; and Dr. Kerr L. White, professor and former chairman of medical care and hospitals in the School of Hygiene and Public Health at Johns Hopkins University in Baltimore.

* * *

Faculty Promotions

New professors are: John Savory, departments of medicine, pathology and biochemistry and nutrition; Alton L. Steiner, departments of pharmacology and medicine; and Joseph F. Patterson Jr., department of anesthesiology.

New associate professors are: Dennis R. Barry, hospital administration; Joel B. Baseman, bacteriology and immunology; Betty E. Cogswell, department of family medicine; Nadia N. Anderson, department of pathology (July 1, 1977); Albert M. Collier and Charles R. Morris (July 1, 1977), department of pediatrics; David J. Delany, department of radiology; Ernest N. Kraybill, departments of pediatrics and obstetrics and gynecology; Barney F. Leveau, division of physical therapy, department of medical allied health professions; Jan M. McDonagh, departments of pathology and biochemistry and nutrition (July 1, 1977).

Also, John E. Newbold, department of bacteriology and immunology; Charles S. Newmark, department of psychiatry (Jan. 11, 1977); Peter Petrusz, department of anatomy; Gilbert F. Rieman, department of obstetrics and gynecology; James N. Weakly, department of physiology.

Ivor Caro, department of dermatology, is a new assistant professor.

* * *

New Appointments

Robert F. Burgin, assistant professor in the department of hospital administration of the school of medicine, is administrative director of N.C. Memorial Hospital. Prior to coming here, he was chief of operations, associate administrator at Eugene Talmadge Memorial Hospital and assistant professor at the Medical College of Georgia. He received his B.A. from Miami University of Ohio and his M.H.A. from the University of Michigan.

Larry R. Churchill, assistant professor in the department of family medicine, received his B.A. at Southwestern at Memphis, his M.Div. from Duke Divinity School and his Ph.D. from Duke. Since 1974 he has been visiting project director at the UNC School of Medicine.

Milan J. Hazucha, assistant professor, department of medicine, has been teaching at McGill University since 1969. Born in Czechoslovakia and a Canadian citizen, Hazucha received his M.D. from Comenius' University in Czechoslovakia and his Ph.D. from McGill.

James R. O'Rourke, Jr., assistant professor, department of medicine, has been an associate physician in the department of community health sciences at Duke University Medical Center since 1972. He also has held a clinical assistant professorship at the UNC-CH School of Medicine. He received his M.D. from the University of Kentucky College of Medicine.

Gerry S. Oxford, assistant professor, department of physiology, has been a postdoctoral fellow in neuroscience at Duke for the past two years. Born in Burlington, he received his B.S. from Elon College and his Ph.D. from Emory University.

* * *

Leave of Absence

Dr. Margaret L. Moore, professor in the division of physical therapy, department of medical allied health professions, is on leave July 1-Dec. 31 to become more current in her knowledge of the subjects she teaches including electrotherapy, curriculum, allied health, administration and education.

* * *

Resignations

Neil A. Hoffman, assistant professor, department of pathology, resigned in March to accept a position as Tulsa Regional Medical Examiner for the State of Oklahoma.

Barrett R. Cooper, assistant professor, departments of pharmacology and psychiatry, resigned to accept a position at Burroughs-Wellcome.

Eva B. Heriza, assistant professor, division of physical therapy, department of medical allied health professions, resigned to move to Kansas.

* * *

Faculty, house staff and students were among those honored at the annual Student/Faculty Day.

The faculty winners and their awards: Dr. James H. Scatliff, Professor of the Year; Dr. J. Logan Irvin, Basic Science Teaching Award; Dr. Edith K. MacRae, Central Carolina Bank Excellence in Teaching Award; Dr. Paul D. Ruff, Henry C. Fordham Award; Dr. Robert C. Hartmann, Jr., Outstanding Intern Award; and Dr. Harold Pollard, III, Jack P. Mercer Award.

Second-year student Betty Jean Hall of Winston-Salem won the William deB. MacNider Award; third-year student James Benford Hardin of Pembroke won the Frank Lee Dameron Award.

* * *

An eminent New England physician said "the University of North Carolina at Chapel Hill has been remarkably successful in fusing its academic health resources with its health service responsibilities throughout the state."

Dr. Samuel Proger spoke at a special faculty seminar in the History of Medicine Room of the Health

Sciences Library. He is physician-in-chief emeritus of the Tufts-New England Medical Center.

"We are now seeing a national trend toward achieving a better balance between science and service," he said.

Dr. Proger cited UNC-CH and its medical school as outstanding examples in the national movement.

"Your university has created an admirable balance between the interests of the university health science center and the health service of the state, between service-based science and science-based service," he said.

Dr. Proger was one of seven members of this special commission authorized by the N.C. General Assembly in 1945 to study the need for and location of a four-year medical school at the University of North Carolina.

* * *

More than $1 million has been collected for the N.C. Jaycee Burn Center by the Jaycees and the Medical Foundation of N.C., it was announced recently.

Both Emory Hunt of the Medical Foundation and John Strickland of the Jaycees made reports at the annual meeting of the medical group in Chapel Hill. The burn center will be part of the N.C. Memorial Hospital complex.

Dr. Christopher C. Fordham, III, dean of the UNC Medical School, emphasized to the foundation the need for two more medical school buildings — a building to house the Cancer Research Center and a family and community health sciences building.

* * *

The Co-Founders' Club of the University of North Carolina at Chapel Hill School of Medicine elected Louis C. Stephens of Greensboro president for the coming year. Stephens is president of Pilot Life Insurance Co.

* * *

Dr. Edward J. Kuenzler, professor of environmental biology at the University of North Carolina at Chapel Hill, has won the Newton Underwood Award.

The award, first presented in 1974, is given to a faculty member in the department of environmental sciences and engineering at the School of Public Health chosen by the students as an example of the principles, judgment and integrity that Dr. Underwood brought to the classroom. Dr. Underwood was professor of radiological hygiene in the department from 1963 until his death in 1973.

The award is offered annually but is given only if there is a candidate who exemplifies the standards set by Dr. Underwood. Kuenzler is the second recipient of the honor.

Kuenzler, a member of the UNC-CH faculty since 1965, also is associated with the curriculum in marine sciences and the curriculum in ecology. His recent teaching interests center on phytoplankton ecology, oceanography and the ecology of wetlands.

Dr. Berton H. Kaplan and Dr. John C. Cassel, epidemiology professors in the School of Public Health, have edited the first series of a volume, "Family and Health: An Epidemiological Approach."

The book contains four studies that explore the relationship between the health status and social structure and function of families. It supports the idea that diseases and disorders are more likely to occur in family members who are not protected from stress by family and social conditions.

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Dr. Michol Ibrahim, acting chairman of the department of epidemiology of the School of Public Health, will serve a two-year term as editorial board chairman of the American Journal of Public Health.

* * *

Sen. Edmund Muskie (D-Maine) and National Academy of Sciences (NAS) president Philip Handler were the featured speakers during the Alumni Conference of the School of Public Health Alumni in March.

Muskie presented the eighth annual Fred T. Foard Memorial Lecture. He focused on current environmental issues and their impact on health.

Handler opened the 1976 alumni program with an address on the problems of man's survival in relation to health. Handler, who has been NAS president since 1965, is on leave from Duke University where he is James B. Duke professor of biochemistry.

* * *

Three alumni of the School of Public Health won awards for their achievements in the public health field.

The school's first Distinguished Service Awards went to Dr. Elizabeth McMahan, dean of the School of Graduate Studies at East Tennessee State University, and Mabel Johansson, nursing director for Palm Beach (Fla.) County Health Department.

Russell Richardson, assistant professor at Emory University, won the Sidney S. Chipman Award given annually to the most outstanding alumnus of the UNC-CH department of maternal and child health.

The Distinguished Service Award was established this year by the School of Public Health Alumni Association to "recognize the achievements of alumni in the field of public health as well as their civic, political and other contributions to the community."

AMERICAN COLLEGE OF PHYSICIANS

Five North Carolina physicians were elected fellows of the American College of Physicians at a recent meeting of the college's board of regents in Philadelphia.

They are Dr. Elms L. Allen, Dr. Stephen C. Lowder and Dr. Robert A. Turner of Winston-Salem; Dr. Harold R. Roberts of Chapel Hill; and Dr. Charles E. Mayes of Charlotte.

The 33,000-member society is dedicated to upgrad-

ing medical care, teaching and research through stringent membership requirements and programs of continuing education.

AMERICAN SOCIETY OF INTERNAL MEDICINE

Dr. Thomas Reginald Harris of Shelby has been elected a trustee of the American Society of Internal Medicine.

He has also been chairman of the society's institutional relationship committee, which developed guidelines, "Delineation of Hospital Medical Staff Privileges," and a model contract for electrocardiogram interpretations.

Dr. Harris is director of the pulmonary function laboratory, medical director of the respiratory therapy department and chairman of the department of medicine at Cleveland Memorial Hospital. He is also assistant professor of medicine at Duke, vice president of the Metrolina Medical Peer Review Foundation, president of the Regional Health Council of Eastern Appalachia and president of the Western North Carolina Health Systems Agency. He is an immediate past vice president of the North Carolina Medical Society.

TRAINING IN NORTH CAROLINA FOR FAMILY PRACTICE

The following summary was inadvertently omitted when the **Journal** published in April Dr. William B. Herring's article, "Training in North Carolina for Family Practice."

SUMMARY

Of the 22 physicians who have completed training in the six approved family practice residency programs in North Carolina, 18 are practicing in North Carolina, nine in communities of less than 1,500 people. These programs have attracted well-prepared graduates of out-of-state as well as our own medical schools and may increase by nearly 50% the number of physicians in residency training in the state. This promises to improve both number and distribution of primary care physicians within a few years. By 1990 over 700 physicians should have completed their training in these residencies, and most will probably be practicing here. Preliminary cost analyses indicate that expenditures incurred are acceptable given the improvement in medical care anticipated. The state should consider increasing its support of family practice residencies because benefits are not only local. The Area Health Education Center (AHEC) program might well be expanded for this purpose.

Month in Washington

The Administration has submitted an "encouraging report" to Congress on the Professional Standards Review Organizations (PSRO) program, but confessed at the same time that lawmakers should not expect too much in the way of cost savings.

Louis Hellman, MD, head of the Health Services Administration, told the House Ways and Means Oversight Subcommittee that "important progress has been made." He said in the 203 designated PSRO areas there are 65 conditional organizations performing review and another 55 in the planning stage. By the end of the fiscal year, 120 conditional PSRO's will be in operation reviewing some 3 million hospital admissions, he said. More than 106,000 physicians are now members of organized PSRO's according to the Health, Education and Welfare Department official.

Dr. Hellman said the primary purpose of the PSRO program is quality assurance and that cost-effectiveness was a secondary objective. "The quality assurance activities of PSRO's may increase the utilization of some services while decreasing that of others," he testified as — "a word of caution on expectations of a PSRO's ability to control expenditures."

At the same time, however, the Subcommittee received other information from HEW suggesting substantial economy benefits from PSRO's. In response to a subcommittee questionnaire, HEW said in some areas the average savings has been on a one-to-four (cost to savings) ratio.

Subcommittee Chairman Charles A. Vanik (D-Ohio) said "we would like to discover whether the Congressional expectation that PSRO's will hold down costs is reasonable, since improved quality of care is often incompatible with lower costs. If the Congressional goal of holding down costs through PSRO's is not reasonable, then we must give renewed attention to finding other types of cost controls."

* * *

Legislation requiring the government to give affected parties more rights to challenge and make recommendations on proposed federal regulations has been endorsed by the American Medical Association.

Specifically backed were bills introduced in the House by Rep. Thomas Kindness (R-Ohio) and in the Senate by Sen. Charles Mathias (R-Md.) providing remedial changes in the Administrative Procedures Act aimed at opening up regulatory procedures to assure that the government doesn't overstep Congressional intent or ignore it.

Raymond T. Holden, MD, Chairman of the AMA's Board of Trustees, told the Senate Judiciary Subcommittee that such legislation "is a welcome move toward rectifying the many abuses which have arisen in the rule making process of administrative agencies."

This seems to have been especially true in the health agencies, according to Dr. Holden, who said that health regulations often have resulted in programs "unrecognizable in the original law."

At the same time, the AMA official said legislation to require complicated governmental review of regulations could "create a mechanism which could strangle the good intentions of remedial legislation."

* * *

The Senate has passed 64-11 a bill broadening federal authority over clinical laboratories to include those engaged in intrastate operations and giving the government firmer standards control.

Under the legislation, HEW theoretically could apply the controls to individual physicians' offices. The pertinent provision states that the HEW Secretary "may exempt" such offices. As a condition of such exemption, physicians who use their offices as labs as an adjunct for treating their own patients would have to describe the qualifications of non-physician personnel who do lab work, how much they do, and the score each shows in any proficiency testing.

Sen. Carl Curtis (R-Neb.) complained that "here the government is reaching down to the country physician's office. . . . I say that we are removing from people the medical services that our society now provides by giving the federal government jurisdiction over them."

The bill, which now goes to the House where similar legislation is before the House Health Subcommittee provides:

- Federal licensing of all clinical laboratories. HEW would set standards and enforce them itself or delegate enforcement to states having statutory programs meeting federal criteria. Private nonprofit accrediting groups could be used to help enforce standards if they meet federal requirements but no exemption from licensure to privately accredited laboratories is provided.
- An advisory council with membership set at 12 persons, to include representatives of nationally recognized laboratory-accreditating

bodies, directors of state laboratory-licensing programs, members of the public, and not more than three persons who are owners, operators, or directors of laboratories.

- **HEW is authorized to waive for 2 years personnel standards for laboratory technicians employed in hospitals with fewer than 100 beds if located in a rural area.
- **An office of clinical laboratories to administer one set of uniform standards.
- **HEW may issue no license unless it has received from the applying laboratory "an accurate, itemized schedule of all current rates charged by the applicant for those laboratory services . . . and such other information as may be necessary, including full disclosures of any current contractural relationships, written or oral, between the applicant and physician respecting such services."
- **Laboratories found to be engaging in illegal financial abuses would be subject to revocation of licenses.

* * *

A Rand Corporation study says the amount people would have to pay in taxes under the disparate national health insurance (NHI) proposals before Congress wouldn't vary much and suggested this opens the door to compromise.

The study, financed in part by the government, was written by Bridger M. Mitchell, senior Rand economist, and William B. Schwartz, MD, a Rand consultant and Chairman of the Department of Medicine, School of Medicine, Tufts University.

The report said that the Administration's CHIP approach in its 1975 NHI bill provides a "surprisingly small" saving to middle and upper income taxpayers over the 1975 compromise Kennedy-Mills plan, although both provide essentially the same services.

The old Nixon Administration bill and the defunct Kennedy-Mills bill each would require total tax revenues of some $45 billion to fund the health care of people under 65. The Rand team said the labor-supported Kennedy-Corman proposal would require $68 billion, and the Long-Ribicoff bill, $16 billion.

Financed by payroll and income taxes but requiring no payments to hospitals or doctors by patients, the Kennedy-Corman bill, despite its higher cost, would impose virtually the same total cost for health care on families earning under $15,000 as the Administration and Kennedy-Mills bills, the report said.

But to raise the extra $23 billion it would cost, the Kennedy-Corman bill would impose sharply increased taxes on upper income families — as much as $1,000 a year more than under the Administration and Kennedy-Mills bills for a $40,000-a-year family.

* * *

One of the nation's most powerful unions — the Teamsters — backed away from support for the Kennedy-Corman bill to federalize national health care.

A high Teamsters official told a national health conference that "we have become increasingly distressed . . . by the possibility that a National Health Insurance plan which runs all of the money for the purchase of health care through the federal government, such as the Health Security Act (Kennedy-Corman), might be adopted . . . we cannot support a program that gives the federal government total control over financing and delivery of health care," said Daniel Shannon, Teamsters executive director of the central states, southeast and southwest areas, Health Welfare and Pension Fund.

Speaking before the National Leadership Conference on America's Health Policy in Washington, D.C., Shannon said "let's maximize the utilization of the private system rather than handing the entire problem over to the government."

Hitherto, organized labor had presented what appeared to be a united block in favor of the Kennedy bill which would eliminate private health insurance and have the government finance all health care. The Teamsters had not been in the forefront of the labor push, but they had not opposed it.

* * *

The Senate has passed legislation establishing a Presidential Commission to review all biomedical and behavioral research done by the government.

The Presidential Commission would replace an existing commission now working in the Department of Health, Education and Welfare. It would consist of 11 members from the fields of law, ethics, theology, the sciences, and health administration. Sponsors of the legislation want the Commission to have broad authority over all federal departments and agencies. A special section of the bill, now before the House, directs the Commission to investigate research in DNA.

* * *

A top Food and Drug Administration official has warned that the integrity of the medical profession is threatened by the growing influence of drug companies on medical education and medical publications.

Bureau of Drugs Director Richard Crout, MD, told a Senate committee that "educational materials produced by and for an industry with an interest in increasing sales of drugs, will — on balance — be biased in a direction intended to promote drug use."

Dr. Crout said he considers only the *New England Journal of Medicine* and the *Journal of the American Medical Association* to be "scholarly" publications. In the 26 other medical magazines, the content tends to be "overwhelmingly optimistic about drug therapy . . . the issue is not whether the article is scientifically correct or whether it is proper to publish such information . . . (but) whether such an article presents . . . in the guise of a scientific paper, promotional informa-

tion which otherwise could not be legally published as drug advertising or drug labelling."

Crout was also critical of pharmaceutical companies' funding of continuing post graduate education for physicians.

The FDA will try to establish a clear definition of the role of audio-visual and printed materials funded by the pharmaceutical companies in post-graduate medical education, Dr. Crout told the Senate Monopoly Subcommittee headed by Sen. Gaylord Nelson (D-Wis.).

Dr. Crout said the new regulations would "permit truly independently prepared educational materials which do not have an overall promotional message to be distributed by drug manufacturers."

* * *

Federal control of medical devices similar to its present authority over drugs has been passed by the Congress into law, capping a ten-year campaign by the government.

The measure passed by Congress and sent to the White House for President Ford's signature provides three general classifications for devices.

Custom devices ordered by physicians for individual patients are exempt in most cases.

Federal courts in recent years have given the Food and Drug Administration considerable authority to regulate devices as well as drugs. The Congressional action had been long anticipated by FDA which has formed advisory committees that already have reviewed and classified most devices on the market.

Controversy in the past has erupted over intrauterine devices and cardiac pacemakers, among others.

In its report on the legislation, the House Commerce Committee said that "although many lives have been saved or improved by new discoveries, the potential for harm to consumers has been heightened by the critical medical conditions in which sophisticated modern devices are used and by the complicated technology involved in their manufacture and use. In the search to expand medical knowledge, new experimental approaches have sometimes been tried without adequate premarket clinical testing, quality control in materials selected, or patient consent."

The general aim of the legislation is to prevent public marketing of devices that aren't reliable or safe. FDA has always had the power to move against unsafe devices after the fact.

The three classifications are:

**General controls — record and report keeping, good manufacturing practices, registration of manufacturers, prohibition of misbranded or adulterated products.

**Performance standards — standards will be set by the government.

**Premarket approval — covers implanted devices or those considered to be life sustaining or supporting. Devices not intended to remain in the body more than 30 days in general would not be considered implanted devices. Devices with a long history of safe use such as dental devices, bone screws and hip pins would not fall in this group.

Panels of experts will make classification recommendations on devices after which the HEW Department will classify the devices by regulation.

No one expects the device regulatory program to experience clear sailing. There will be many disputes over classifications and problems over what constitutes "custom devices" not requiring clearance.

At a recent conference on the devices legislation, William Wardell, MD, of the University of Rochester School of Medicine, warned of "negative impacts" such as a lag in research and innovation in the device field.

FDA has divided devices into distinct categories: orthopedics; cardiovascular diseases; dentistry; anesthesiology; obstetrics and gynecology; gastroenterology; urology; radiology; neurology; ear, nose, and throat disorders; ophthalmology; plastic and general surgery; physical medicine; clinical pathology; and general and personal use.

* * *

The financial outlook for Social Security remains precarious, the Trustees of the system have reported to Congress. They predict Social Security will be running in the red for many years unless Congress moves swiftly to increase the tax.

The economic upturn over the past year has helped the short-range outlook somewhat since the last annual report to Congress, but over the long-haul Social Security appears to be in worse trouble than ever.

The actuarial shakiness of the Social Security system and public and Congressional resistance to increasing the Social Security tax bite have severely damaged prospects for sweeping National Health Insurance proposals based on Social Security financing.

The trust funds for Old Age and Disability Benefits will decline by $4.3 billion this year, instead of the $5.8 billion predicted in a 1975 report.

"The long-term picture is now shown, under new assumptions, as holding out the prospects of higher future costs than had been previously projected." Social Security Commissioner James B. Cardwell said.

Cardwell is Secretary of the Board of Trustees which includes Treasury Secretary William Simon, HEW Secretary David Mathews and Labor Secretary W. J. Usery.

The report covers the four trust funds established for Social Security programs, including the old age and survivors trust funds, disability insurance, and Medicare hospital and supplemental insurance.

* * *

President Ford has told Congress that deaths from coronary heart disease, stroke and hypertension continue to decline. The third annual report of the National Heart and Lung Institute which Ford sent to

Congress said that the new initiatives undertaken since 1972 provide "encouraging programs in the fight against heart, blood vessel, lung and blood diseases."

"These diseases, in 1972, led to an estimated national economic loss of more than $57 billion annually," Ford said.

Book Review

Books Received

Hysterectomy, by Nancy Nugent, 181 pp, $6.95, New York: Doubleday & Company, Inc., 1976.

In Memoriam

Wiley Davis Forbus, M.D.

Dr. Wiley Davis Forbus, one of the original faculty members of the Duke University School of Medicine, died March 3 in Durham.

Dr. Forbus was born in Zieglerville, Mississippi on March 14, 1894. He received his undergraduate education at Washington and Lee University where he graduated with the A.B. degree in 1916. In 1923 he received his M.D. degree from the Johns Hopkins University School of Medicine. After a residency in pathology at Johns Hopkins, he joined its faculty and remained there until 1930 when he was appointed professor and department chairman of pathology at Duke University and chief pathologist to Duke Hospital. He held this position for 30 years until his retirement in 1960. As professor and chairman emeritus of the department of pathology, he was extremely active in the field of medical education, particularly pathology.

A proponent of forensic medicine, Dr. Forbus led a long campaign in North Carolina to improve the coroner system. This resulted in the passage of legislation in 1955 establishing the state's medical examiner program.

In 1975 the American Association of Pathologists and Bacteriologists presented Dr. Forbus with the Gold Headed Cane Award, created to honor "a pathologist representing the highest ideals in pathology and medicine."

During his long and distinguished career Dr. Forbus was a member of many professional societies and organizations. He also served as consultant and adviser to numerous special committees. During World War II he was consultant to the Secretary of War on infectious disease and to the Armed Forces Institute of Pathology. In 1952 he was appointed consultant to the Atomic Energy Commission, Division of Biology and Medicine, and in 1953 to the Atomic Bomb Casualty Commission, Japan.

During the 1950s Dr. Forbus was adviser on medical education and pathology — Taiwan University Medical School, Keio University in Tokyo and the British Colonial University in Hong Kong. He helped modernize these medical schools and improved their pathology laboratories.

Dr. Forbus was the author of many scientific publications. His pathology textbook, *Reaction to Injury*, first published in 1943, is generally regarded as the most influential pathology textbook ever published. Its theme, that disease represents a reaction to injury from bacteria, virus, chemical or physical agents, did much to clarify modern thinking about the nature of disease. He was also a member of the editorial board and a contributor to the North Carolina Society's "Medicine in North Carolina, Essays in the History of N.C. Medicine."

Dr. Forbus was held in the highest esteem by students and colleagues alike. He was a dedicated teacher and chairman of the department of pathology. He also has been called "one of the fathers of modern pathology."

Dr. Forbus is survived by his wife, Mrs. Elizabeth Forbus; three daughters, Mrs. Georg'Ellen Betts of Raleigh, Mrs. Elizabeth Adams of Asheboro and Mrs. Martha Suaki of East Lyme, Connecticut; three sisters, Mrs. W. E. Percival of Rolling Fork, Miss., Mrs. Pat Woodall of Brinkley, Ark., and Lady Willie Forbus of Seattle, Washington; and 10 grandchildren.

DURHAM-ORANGE COUNTY MEDICAL SOCIETY

Committee and Commission Appointments 1976-1977

Committee and Commission Appointments 1976-1977

NOTE: The Committees listed herein have been authorized by President Jesse Caldwell, Jr., M.D., and/or as required under the *Constitution and Bylaws*.

Particular note should be taken of the authorization of the HOUSE OF DELEGATES of a Commission form of organization activity and that all Committees, excepting *COMMITTEE ON NOMINATIONS* and *MEDIATION COMMITTEE* are segregated under the respective Commission in which the function of the Committee logically rests. This will tend to eliminate overlapping and duplication in activity programs and result in coordination of the work of the Society in a manner to lessen the work of the delegates in the Annual Meeting of the HOUSE OF DELEGATES.

(Superior figures (e.g. 21) indicate the component County Society from which the member emanates, as in the Membership list of the ROSTER.)

I. ADMINISTRATION COMMISSION

A. Hewitt Rose, Jr., M.D., *Chairman*
3801 Computer Drive, Raleigh 27609

Committee Listing

1. **Finance, Committee on (I-1)** — **No. 20**
   T. Tilghman Herring, M.D., *Chairman*
   Wilson Clinic, Wilson 27893

2. **Personnel & Headquarters Operation, Com. on (I-2)** — **No. 37**
   A. Hewitt Rose, Jr., M.D., *Chairman*
   3801 Computer Drive, Raleigh 27609

3. **Insurance, Com. on Professional (I-3)** — **No. 41**
   John C. Burwell, Jr., M.D., *Chairman*
   1026 Professional Village, Greensboro 27401

4. **Retirement Savings Plan Committee (I-4)** — **No. 44**
   Robert W. Williams, M.D., *Chairman*
   3208 Oleander Drive, Wilmington 28401

II. ADVISORY AND STUDY COMMISSION

T. Reginald Harris, M.D., *Chairman*
808 N. DeKalb St., Shelby 28150

1. **Allied Health Professionals, Com. on (II-1)** — **No. 1**
   Oliver Ray Hunt, Jr., M.D., *Chairman*
   1607 Doctors Circle, Wilmington 28401

2. **Anesthesia Study, Com. on (II-2)** — **No. 2**
   Albert Arthur Bechtoldt, Jr., M.D., *Chairman*
   UNC School of Medicine, Chapel Hill 27514

3. **Auxiliary, Committee Advisory to (II-3)** — **No. 5**
   Gloria F. Graham, M.D., *Chairman*
   702 Broad St., Wilson 27893

4. **Cancer, Committee on (II-4)** — **No. 8**
   James A. Maher, M.D., *Chairman*
   Wayne Co. Hospital, Dept. of Pathology,
   Goldsboro 27530

5. **Constitution & Bylaws, Com. on (II-5)** — **No. 12**
   Louis deS. Shaffner, M.D., *Chairman*
   Bowman Gray, Winston-Salem 27103

6. **Medical Students, Com. Adv. to (II-6)** — **No. 31**
   William P. J. Peete, M.D., *Chairman*
   Duke Univ. Med. Ctr., Box 3506, Durham 27710

7. **Traffic Safety, Com. on (II-7)** — **No. 47**
   Edgar T. Beddingfield, Jr., M.D., *Chairman*
   Wilson Clinic, Wilson 27893

8. **ad hoc Committee Advisory on Swine Flu Vaccine (II-8)** — **No. 49**
   J. Newton MacCormack, M.D., *Chairman*
   P.O. Box 2091, Raleigh 27602

III. ANNUAL CONVENTION COMMISSION

Josephine E. Newell, M.D., *Chairman*
P.O. Box 68, Bailey 27807

1. **Arrangements, Committee on (III-1)** — **No. 3**
   Jack Hughes, M.D., *Chairman*
   923 Broad St., Durham 27705

2. **Audio-Visual Programs, Com. on (III-2)** — **No. 4**
   David Allen, M.D., *Chairman*
   107 Canterbury Rd., Southern Pines 28387

3. **Awards, Committee on Scientific (III-3)** — **No. 6**
   Oscar L. Sapp, III, M.D., *Chairman*
   UNC School of Medicine, Chapel Hill 27514

4. **Credentials, Com. on (of House of Delegates) (III-4)** — **No. 14**
   John A. Payne, III, M.D., *Chairman*
   Box 157, Sunbury 27979

5. **Exhibits, Committee on (III-5)** — **No. 19**
   Josephine E. Newell, M.D., *Chairman*
   Box 68, Bailey 27807

6. **Medical Education, Committee on (III-6)** — **No. 29**
   Albert L. Chasson, M.D., *Chairman*
   Rex Hospital, Raleigh 27603

IV. PROFESSIONAL SERVICE COMMISSION

M. Frank Sohmer, Jr., M.D., *Chairman*
Professional Bldg., Winston-Salem 27103

Blue Shield, Committee on (IV-1) No. 7
R. Bertram Williams, Jr., M.D., *Chairman*
1414 Medical Center Dr., Wilmington 28401

Crippled Children's Program, Adv. Com. to (IV-2) No. 15
Robert Underdal, M.D., *Chairman*
1900 S. Hawthorne Rd., Winston-Salem 27103

Health Planning & Development, Com. on (IV-3) No. 21
Henry H. Nicholson, Jr., M.D., *Chairman*
1012 Kings Dr., Ste. 708, Charlotte 28283

Hospital & Professional Relations & Liaison to North Carolina Hospital Association, Com. on (IV-4) No. 22
Charles L. Herring, M.D., *Chairman*
310 Glenwood Ave., Kinston 28501

Industrial Commission, Com. to Work with N.C. (IV-5) No. 23
Ernest B. Spangler, M.D., *Chairman*
Drawer X3, Greensboro 27402

Insurance Industry Committee (IV-6) No. 24
Charles H. Duckett, M.D., *Chairman*
Bowman Gray, Winston-Salem 27103

Physical & Vocational Rehabilitation, Com. on (IV-7) No. 39
Edwin H. Martinat, M.D., *Chairman*
3333 Silas Creek Parkway, Winston-Salem 27103

Social Services Programs, Com. on (including Medicaid) (IV-8) No. 45
J. Elliott Dixon, M.D., *Chairman*
215 E. 2nd Street, Ayden 28513

V. PUBLIC RELATIONS COMMISSION

Marshall S. Redding, M.D., *Chairman*
708 W. Church St., Elizabeth City 27909

Community Medical Care, Com. on (V-1) No. 11
J. Kempton Jones, M.D., *Chairman*
1001 S. Hamilton Rd., Chapel Hill 27514

Disaster & Emergency Medical Care, Com. on (V-2) No. 16
George T. Wolff, M.D., *Chairman*
1200 N. Elm St., Greensboro 27401

Eye Care & Eye Bank, Com. on (V-3) No. 19
Albin W. Johnson, M.D., *Chairman*
1300 St. Mary's St., Raleigh 27605

Legislation, Committee on (V-4) No. 25
H. David Bruton, M.D., *Chairman*
Town Center, Southern Pines 28387

Medical-Legal Committee (V-5) No. 30
Julius Howell, M.D., *Chairman*
Bowman Gray, Winston-Salem 27103

North Carolina Pharmaceutical Association, Com. Liaison to (V-6) No. 38
Charles W. Byrd, M.D., *Chairman*
Box 708, Dunn 28334

Public Relations, Com. on (V-7) No. 42
John L. McCain, M.D., *Chairman*
Wilson Clinic, Wilson 27893

Radiation, Committee on (V-8) No. 43
Thomas C. Worth, M.D., *Chairman*
Rex Hospital, Raleigh 27603

Sports Medicine, Com. on (V-9) No. 46
Frank C. Wilson, M.D., *Chairman*
N.C. Memorial Hospital, Chapel Hill 27514

VI. PUBLIC SERVICE COMMISSION

Philip G. Nelson, M.D., *Chairman*
Medical Pavilion, Greenville 27834

Child Health & Infectious Diseases, Com. on (VI-1) No. 9
William L. London, M.D., *Chairman*
306 S. Gregson St., Durham 27701

Chronic Illness, TB & Heart Disease, Com. on (VI-2) No. 10
Dirk Verhoeff, M.D., *Chairman*
Huntersville Hospital, Huntersville 28078

Drug Abuse, Committee on (VI-3) No. 17
W. J. Kenneth Rockwell, M.D., *Chairman*
Duke Univ. Med. Ctr., Durham 27710

Marriage Counseling & Family Life Education, Com. on (VI-4) No. 26
Luther M. Talbert, M.D., *Chairman*
N.C. Memorial Hosp., Chapel Hill 27514

Maternal Health, Committee on (VI-5) No. 27
W. Joseph May, M.D., *Chairman*
300 S. Hawthorne Rd., Winston-Salem 27103

Medicine & Religion, Com. on (VI-6) No. 32
Jack W. Wilkerson, M.D., *Chairman*
1001 E. 4th St., Greenville 27834

Mental Health, Committee on (VI-7) No. 33
Philip G. Nelson, M.D., *Chairman*
Medical Pavilion, Greenville 27834

Occupational & Environmental Health, Com. on (VI-9) No. 36
Charles F. Martin, M.D., *Chairman*
1201 Maple St., Greensboro 27405

Committees Not Assigned to a Commission

COUNCIL ON REVIEW & DEVELOPMENT No. 13
Frank R. Reynolds, M.D., *Chairman*
1613 Dock St., Wilmington 28401

MEDIATION COMMITTEE No. 28
Charles W. Styron, M.D., *Chairman*
615 St. Mary's St., Raleigh 27605
James E. Davis, M.D., *Secretary*
1200 Broad St., Durham 27705

Oscar L. Sapp, III, M.D., *Chairman*
UNC School of Medicine, Chapel Hill 27514

1. Committee on Allied Health Professionals (8) (1 Consultant) II-1

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1607 Doctors Circle, Wilmington 28401
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Wayne B. Venters, M.D.[67]
200 Doctors Dr., Ste. J., Jacksonville 28540
Donald Wallace, M.D.[63]
945 Sandavis Rd., Southern Pines 28387
John W. Watson, M.D.[39]
104 New College St., Oxford 27565
Hal T. Wilson, M.D.[34]
1990 Beach St., Winston-Salem 27103

Consultant:

Bryant D. Paris, Jr., Executive Secretary
N.C. Board of Medical Examiners
Suite 214, 222 N. Person St., Raleigh 27611

2. Committee on Anesthesia Study (10) II-2

Albert Arthur Bechtoldt, Jr., M.D.[32] *Chairman*
UNC School of Medicine, Dept. Anes., Chapel Hill 27514
Benjamin F. Fortune, M.D.[41]
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401 Fesbrook Court, Charlotte 28211
Glen E. Hawkins, M.D.[53]
106 Hillcrest St., Sanford 27330
John R. Hoskins, III, M.D.[11]
202 Doctors Bldg., Asheville 28801
Stephen H. Mazur, M.D.[96]
504 Walnut Creek Dr., Goldsboro 27530
Rodney L. McKnight, M.D.[23]
315 S. Poston St., Shelby 28150
Bill Joe Swan, M.D.[13]
776 Williamsburg Dr., Concord 28025
H. Ryland Vest, Jr., M.D.[76]
529 Edgewood Rd., Asheboro 27203

3. Committee on Arrangements (15) III-1

Jack Hughes, M.D.[32] *Chairman*
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Box 40, Tarboro 27886
H. David Bruton, M.D.[63]
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Henry J. Carr, Jr., M.D.[82]
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Kenneth E. Cosgrove, M.D.[45]
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Quail Hollow Rd., Box 848, Clemmons 27102
H. Fleming Fuller, M.D.[54]
Kinston Clinic, Box 268, Kinston 28501
C. Bernard Gantt, M.D.[53]
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Emery C. Miller, M.D.[34] (BG)
Bowman Gray, Winston-Salem 27103
Michael Pishko, M.D.[63] (GOLF)
Pinehurst Surg. Clinic, Pinehurst 28374
William H. Romm, M.D.[70] (TENNIS)
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Oscar L. Sapp, III, M.D.[32] (UNC)
UNC Sch. of Med., Chapel Hill 27514
Delford L. Stickel, M.D.[32] (DUKE)
Box 3917, Duke Hosp., Durham 27710

*Coordinator for General Sessions Program

4. Committee on Audio Visual Programs (9) III-2

David Allen, M.D.[63] *Chairman*
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379 S. Cox St., Asheboro 27203
Jack C. Evans, M.D.[29]
244 Fairview Dr., Lexington 27292
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Box 760, Smithfield 27577
Hervy B. Kornegay, Sr., M.D.[96]
238 Smith Chapel Rd., Mt. Olive 28365
J. Lloyd Pate, M.D.[78]
208 Iona St., Fairmont 28340
Albert Stewart, Jr., M.D.[26]
114 Broadfoot Ave., Fayetteville 28305

5. Committee Advisory to Auxiliary (7) (1 Consultant) II-3

Gloria F. Graham, M.D.[98] *Chairman*
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Jefferson D. Bulla, II, M.D.[1]
780 Woody Dr., Graham 27253
Patricia Ann Lawrence, M.D.[60]
Doctors Bldg., Ste. 821, Charlotte 28283
Edwin H. Martinat, M.D.[34]
3333 Silas Creek Parkway, Winston-Salem 27103
Latham C. Peak, M.D.[82]
403 Fairview Rd., Clinton 28328
Philip E. Russell, M.D.[11]
204 Doctors Bldg., Asheville 28801

Consultant:

Mrs. William Corpening (AMA-ERF Auxiliary Chairman)
Box 200, Granite Falls 28630

6. Committee on Scientific Awards (9) (3-yr. terms) III-3

Oscar L. Sapp, III, M.D.[32] (1978) *Chairman*
UNC Sch. of Medicine, Chapel Hill 27514
Lloyd W. Bailey, M.D.[33]
109 Foy Dr., Rocky Mount 27801
George M. Bilbrey, Jr., M.D.[11] (1979)
520 Biltmore Ave., Asheville 28801
John A. Brabson, M.D.[60] (1979)
225 Hawthorne Lane, Charlotte 28204

Emery C. Miller, M.D.[34] (1977)
Bowman Gray, Winston-Salem 27103
Charles Henry Peete, Jr., M.D.[32] (1977)
Duke Univ. Med. Ctr., Box 3192, Durham 27710
Roger E. Smith, M.D.[60] (1978)
1351 Durwood Dr., Charlotte 28204
Timothy C. Smith, M.D.[33] (1978)
1042 Sycamore St., Rocky Mount 27801
Walter George Wolfe, M.D.[32] (1978)
Duke Med. Ctr., Box 3507, Durham 27710

. Committee on Blue Shield (29) IV-1

R. Bertram Williams, Jr., M.D.[65] (GS) *Chairman*
1414 Med. Ctr. Dr., Wilmington 28401
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1134 N. Road St., Elizabeth City 27909
Arthur E. Davis, Jr., M.D.[92] (PTH)
1209 Cowper Dr., Raleigh 27608
Robert Dale Ensor, M.D.[60] (U)
1335 Romany Rd., Charlotte 28204
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Bowman Gray, Dept. of Neurosurg., Winston-Salem 27103
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20 Doctors Dr., Boone 28607
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2240 Cloverdale Ave., Winston-Salem 27103
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Wilbur Thaddeus Shearin, Jr., M.D.[65] (U)
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John L. Wooten, M.D.[74] (ORS)
6 Medical Pavilion, Greenville 27834

8. Committee on Cancer (11) (Legal-1 ea. Congressional District) (4 Consultants) II-4

James A. Maher, M.D.[96] (3rd) *Chairman*
Wayne Co. Hosp., Dept. of Path., Goldsboro 27530
Rowell C. Cloninger, M.D.[23] (10th)
Shelby Med. Center, Shelby 28150
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P.O. Box 329, Reidsville 27320
Eugene B. Linton, M.D.[34] (5th)
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435 E. Statesville Ave., Mooresville 28115
Robert C. Moffatt, M.D.[11] (11th)
306 Doctors Bldg., Asheville 28801
Ray G. Silverthorne, M.D.[7] (1st)
408 E. 12th St., Washington 27889
Lewis S. Thorp, M.D.[33] (2nd)
100 Med. Arts Mall, Rocky Mount 27801
John Morris Wallace, M.D.[84] (8th)
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D. E. Ward, Jr., M.D.[78] (7th)
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Consultants:

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H. David Homesley, M.D.[34]
Bowman Gray, Dept. OBG, Winston-Salem, 27103
Josephine E. Newell, M.D.[98]
Box 68, Bailey 27807

9. Committee on Child Health & Infectious Diseases (14) VI-1

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Box 2091, Raleigh 27602

Karla E. Nelson, M.D.[74]
1211 E. Rock Spring Rd., Greenville 27834
J. Dale Simmons, M.D.[86]
819 Rockford St., Mt. Airy 27030

10. Committee on Chronic Illness, Including TB & Heart Disease (14) VI-2

Dirk Verhoeff, M.D.[60] *Chairman*
Huntersville Hospital, Huntersville 28078
Samuel T. Bickley, M.D.[32]
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Victor M. Cresenzo, M.D.[79]
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P.O. Box 1284, Marion 28752
Wilbur James Steininger, M.D.[47]
McCain Hospital, McCain 28361
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12. Committee on Constitution & Bylaws (5) II-5

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13. Council on Review & Development (10) (4 Ex Officio with vote) (1 non-voting)

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14. Committee on Credentials (of Delegates to House of Delegates) (3) III-4

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16. Committee on Disaster & Emergency Medical Care (14) V-2 (1 consultant)

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18. Committee on Exhibits (7) III-5

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22. Committee on Hospital & Professional Relations & Liaison to North Carolina Hospital Association (10) IV-4

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23. Committee to Work with North Carolina Industrial Commission (18) IV-5

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27. Committee on Maternal Health (14) (6-yr. terms) (3 Consultants) VI-5

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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Please see following page.

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The published record on Librium is enormous. So large, in fact, we put it into a computer literature retrieval system to make it more accessible in answering your inquiries.*

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If you have a question about Librium or any other Roche product, write to Professional Services, Roche Laboratories, Nutley, New Jersey 07110.

Please see preceding page for a summary of product information.

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY August 1976, Vol. 37, No. 8

NORTH CAROLINA
Medical Journal

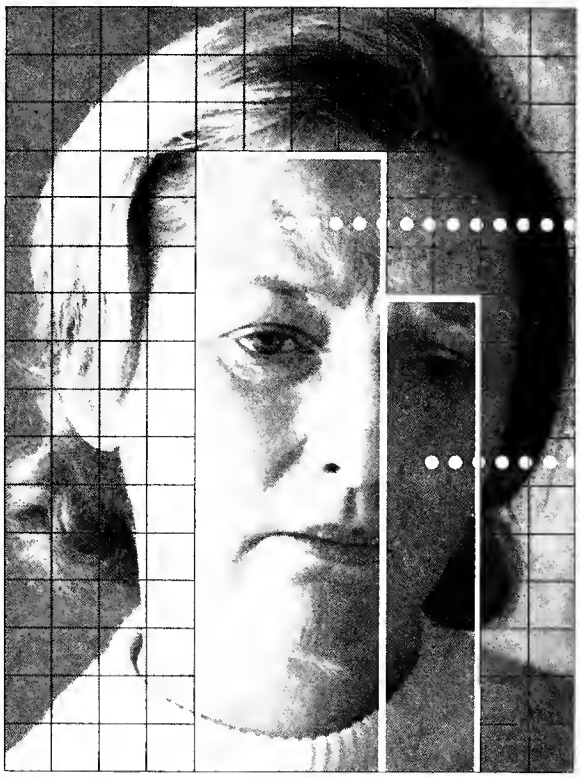
IN THIS ISSUE: Message of the President to the House of Delegates, James E. Davis, M.D.; The President's Address: Cool Heads for Critical Times, James E. Davis, M.D.; Scintillation Camera Imaging of Acute Myocardial Infarction Using Technetium-99m Stannous Pyrophosphate: A Clinical Trial, Richard J. Kelly, Robert J. Cowan, M.D., C. Douglas Maynard, M.D., and Robert N. Headley, M.D.; Removal of Blunt Esophageal Foreign Bodies: Foley Catheter Technique, James E. Crowe, M.D.

1976 Committee Conclave
Sept. 22-26—Southern Pines

1977 Leadership Conference
January 28-29 — Raleigh

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina
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August 1976, Vol. 37, No. 8

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Famous Fighters

NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains Aerosporin* brand Polymyxin B Sulfate 5,000 units, zinc bacitracin 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML

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JUST ONE CHEWABLE TABLET

usually eradicates pinworms in both children and adults

No dosage calculations

Vermox (mebendazole) offers a greatly simplified method of treating pinworm. Just one tablet, for every member of the family, regardless of weight or age.†

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Patients can take the tablet at any time. It can be chewed, swallowed, or crushed and mixed with food. No messy liquids to pour.

Not a dye

Vermox will not stain clothes, teeth, feces, toilet bowls, etc.

Highly effective

In clinical studies, the pinworm mean cure rate with Vermox was 95% (range 90-100%). In cases where reinfection occurs, a repeat tablet is advised.

Well tolerated

Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

Also effective against whipworm...as well as roundworm and hookworm

Just one simple dosage, regardless of weight or age,† for single or mixed infections: 1 chewable tablet b.i.d. for 3 consecutive days. If the patient is not cured 3 weeks after treatment, a second course of treatment is advised.

†Because Vermox has not been extensively studied in children under 2 years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug

a single chewable tablet treatment for pinworm

Vermox

TRADEMARK

chewable tablets

(mebendazole)

DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. An insignificant amount of mebendazole is absorbed from the gastrointestinal tract. Most of this is excreted in the urine within three days either as metabolites or unchanged drug.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.

Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below.

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates mean (range)	68% (61-75%)	98% (91-100%)	96% –	95% (90-100%)
egg reduction mean (range)	93% (70-99%)	99.7% (99.5-100%)	99.9% –	– –

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY*. VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE. The drug has not been extensively studied in children under two years, therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.

If the patient is not cured three weeks after treatment, a second course of treatment is advised.

No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as tablets, each containing 100 mg of mebendazole and is supplied in boxes of twelve tablets.

VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.

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(nicotinic acid)

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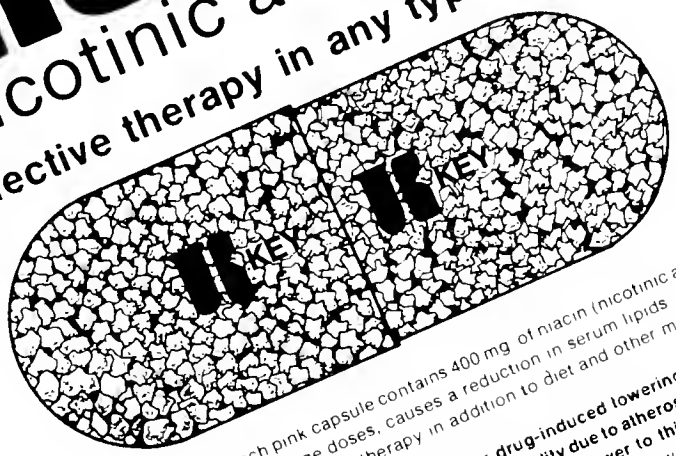

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ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown

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Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a beneficial or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams

Please arrange to provide starter samples and/or complimentary "Starter" prescription booklets for:

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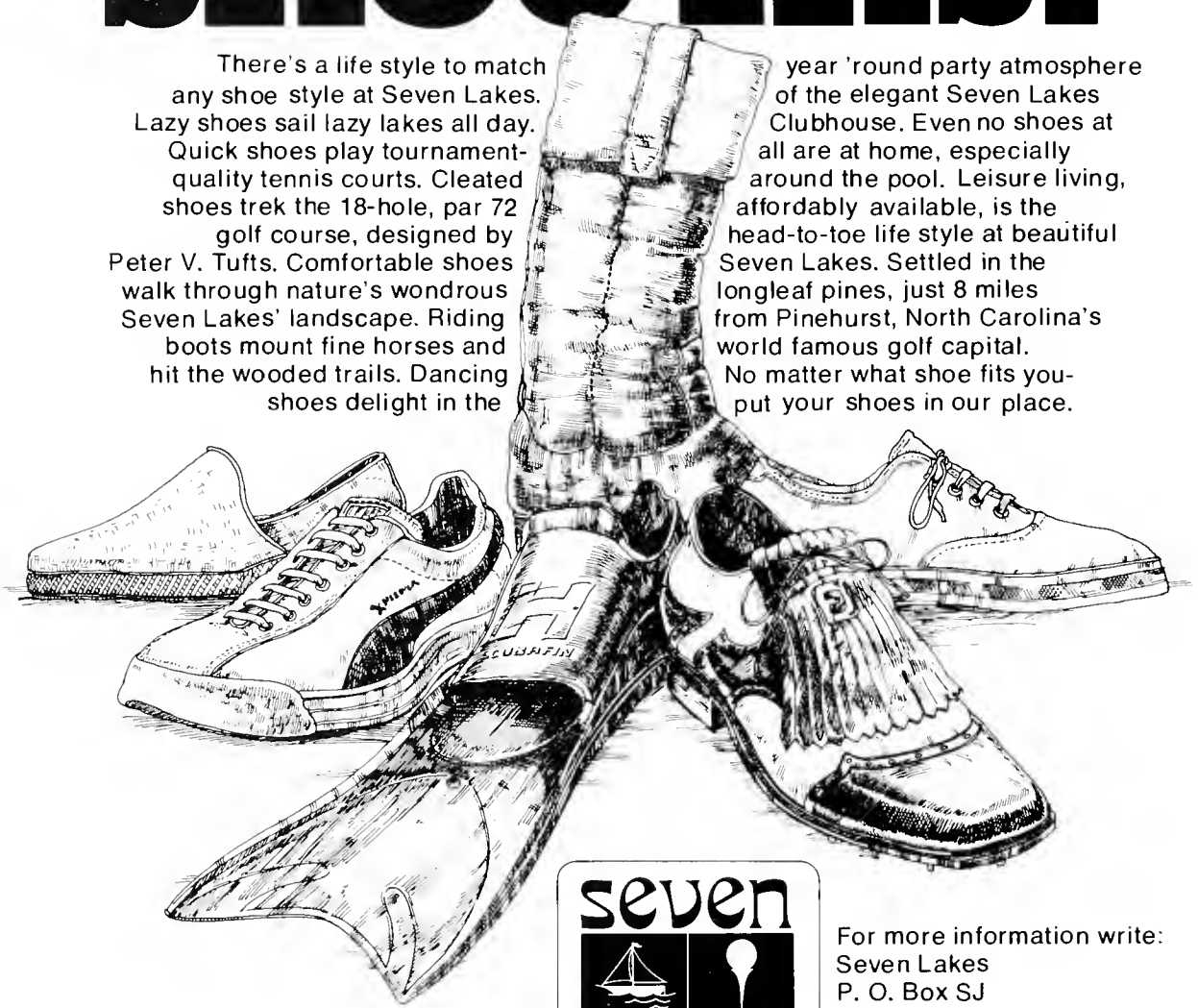

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Obtain HUD property report from developer and read it before signing anything. HUD neither approves the merits of the offering nor the value, if any, of the property.

Just what is North Carolina Drug Utilization Review all about?

Drug Utilization Review is part of the Medicaid drug program in your state. The goal is to assist in the delivery of rational drug therapy for Medicaid patients and reduce the over all cost of the Medicaid drug program.

How can Drug Utilization Review do that?
It is done by reviewing Medicaid drug use and sharing the results of the review with those doctors and pharmacists involved in treating the patient. When a Medicaid prescription claim is processed, a computer records who received the drug, who prescribed it, who dispensed it, and what kind of drug it was. Once a month, the computer compares the drug use records of each patient with several criteria, such as kinds of drugs used, amounts purchased, number of doctors visited, and so on.

When a patient's drug use goes beyond any of the criteria, the computer prints a report for review by the Drug Utilization Review Committee.

Just who is the Drug Utilization Review committee?
It is a group of fellow health care professionals—physicians and pharmacists from your area. Committee members are selected from nominations made by your local medical and pharmaceutical associations. Each member serves for 1 to 3 years. You may be invited to serve on the committee at some time.

What does the Drug Utilization Review committee do?
The committee reviews patient drug histories showing drug use patterns which exceed criteria set for the program. If the questionable pattern appears to be minor or temporary, the committee may decide to take no further action.

If the situation is more serious, the committee will write to the doctors and pharmacists involved to advise them of the potential problem. For example, the records might show that a patient is going to several doctors to get prescriptions for the same drug. The committee would advise each of the doctors of this practice. In another case, the committee might recommend that a doctor prescribe maintenance drugs in larger, more economical quantities, if the patient's condition warrants it.

Are you trying to tell me how to treat my patients?
Not at all. Your patients' treatment is in your hands, where it belongs. All Drug Utilization Review does is give you information about your patients' drug use that hasn't been available before. The committee can't dictate the kind of drug therapy you use, and wouldn't want to if it could.

What do I have to do if I get a letter about a patient?
The committee will ask you to review your records to see if the situation described in their letter is with your knowledge and conforms with your diagnosis and treatment. If so, please advise the committee of your diagnosis and treatment plan so they'll know that the drug use is appropriate and won't send additional letters in the future.

If the situation is not called for by your treatment plan, the committee asks that you review the situation and make those changes you feel are necessary. In all cases, they try to make it as easy as possible for you to respond to the committee and use the information provided.

How can a physician find out more about the Drug Utilization Program?
A pamphlet which explains the Drug Utilization Review program in detail is available or a visit to your office by a staff member can be arranged upon request. A speaker or a color/sound film can also be provided for local medical societies or other groups interested in further information about the program. Your peers who are members of local peer review committees will be glad to explain the program personally or answer any questions. If you will write or call PAID Prescriptions, any information requested will be provided including the names of committee members in your local area.

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Students, Medical .....

Delegates to the American Medical Association

JAMES E. DAVIS, M.D. .....1200 Broad St., Durham 27705 (December 31, 1978)

JOHN GLASSON, M.D. .....306 S. Gregson St., Durham 27701 (December 31, 1978)

FRANK R. REYNOLDS, M.D. 1613 Dock Street, Wilmington 28401 (December 31, 1978)

DAVID G. WELTON, M.D. 3535 Randolph Road, Charlotte 28211 (December 31, 1977)

EDGAR T. BEDDINGFIELD, JR., M.D. Wilson Clinic, Wilson 27893 (December 31, 1977)

Alternates to the American Medical Association

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LOUIS DES. SHAFFNER, M.D. Bowman Gray, Winston-Salem 27103 (December 31, 1978)

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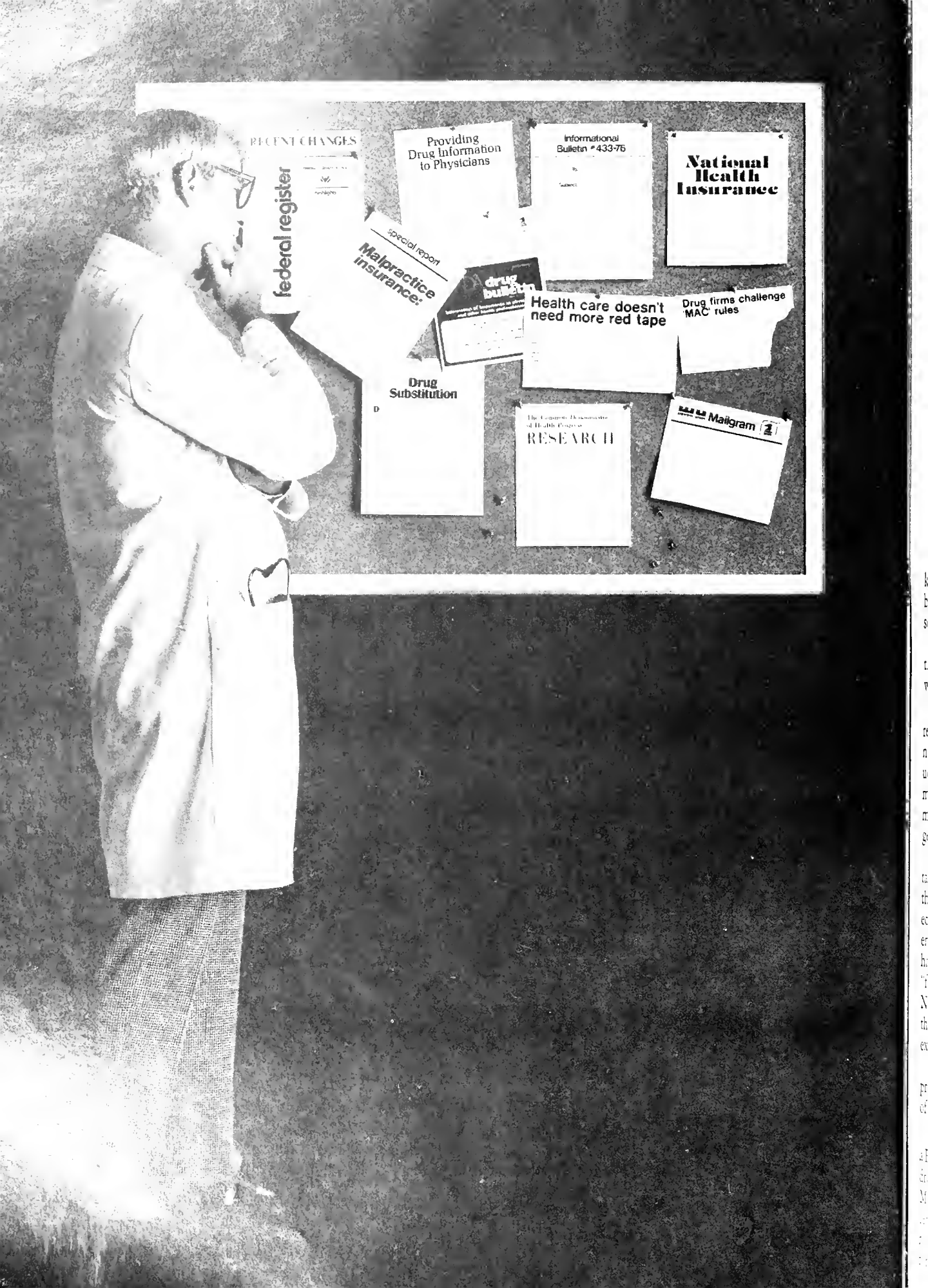
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Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

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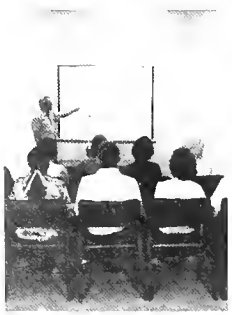

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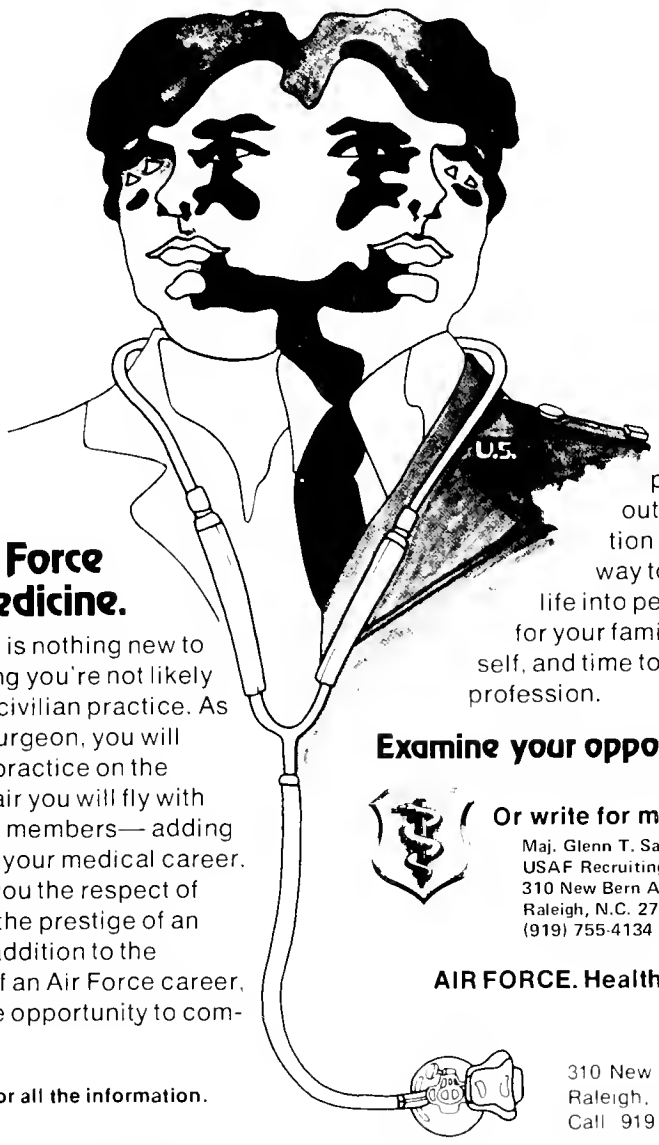

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40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
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Message of the President To the House of Delegates

James E. Davis, M.D.

AS I did just one short year ago, I again thank the House of Delegates, and through you the entire membership of our society, for the privilege of serving as president of the North Carolina Medical Society. Without a doubt, this opportunity has been one of the most challenging and rewarding of my life. I want you to know that I am deeply and sincerely grateful.

I welcome the opportunity to account to you on the stewardship you entrusted to me last May, to report on the state of the society today and to comment on and evaluate many of the activities of the past twelve months. Obviously, this has been an extremely busy and demanding period, but quite frankly, it has also been exciting, enjoyable and educational. Our concerns have ranged from an in-depth study of the problems of children to the investigation of prison conditions; from assisting physicians who were indicted by the courts on drug charges, to instituting suit against the Secretary of Health, Education and Welfare over national legislation; from finding ways to stimulate greater activity on the part of medical students and house officers in the affairs of organized medicine to gleaning greater support by our own membership for the American Medical Association; from trying to find professional liability insurance at any cost for physicians who were not practicing because of the lack of it, to establishing a company to provide insurance; and from a workshop on the theory of the legislative process in North Carolina to the very practical application of influence on the General Assembly to encourage them to enact laws to improve the insurance climate in North Carolina. Of all the many things that raced through my mind as I stood before you last year and accepted this responsibility, not once did I imagine that these duties might conceivably include being president of an insurance company or suing the Secretary of HEW! And yet, quite honestly, the number and variety of these problems, the many concerns and different reactions of physicians, and the questions which people ask has been one of the intriguing benefits of this year. Just last week, I had a call from a secretary in one of the departments of state government asking if the medical society had a roster of physicians of the state, broken down by age and sex. I rapidly told her that I could give her a list of physicians who were broken down by age but I didn't think it quite fair to list those broken down by sex!

What is the state of our society today? At the end of the last calendar year, we had more members than ever before, some 4,787, and currently we have 4,633 members — considerably more than the number this time last year. Also, for the first time in our history, we have more than 4,000 members who are also affiliated with the American Medical Association. That has earned us a fifth delegate and alternate delegate to the AMA. More important than our numerical strength, in my judgment, is the fact that more of our members are now participating in and are involved with society activities than ever before. Perhaps our recent problems and adversities have had a beneficial effect through convincing physicians that by working together we can solve our problems; that together we have the best chance of preserving and improving *quality* medicine which we so strongly desire for our patients. Today we have a strong, respected society, quite capable of shaping our own destiny and able to influence medicine and health care in a positive way, both now and in the foreseeable future.

As one looks back on the events of the past year,

Given before the House of Delegates, North Carolina Medical Society, Pinehurst, North Carolina, May 6, 1976.

Reprint requests to Dr. Davis, 1200 Broad Street, Durham, North Carolina 27705

clearly professional liability problems have been the most demanding and time consuming of all. As you well recall, in the fall of 1975 physicians in North Carolina were closing their offices and leaving their practices because they couldn't get professional liability insurance. Responding to this crisis, which threatened the entire health care delivery system, the executive council founded the Medical Liability Mutual Insurance Company of North Carolina, with the unanimous endorsement of a special session of the House of Delegates. I am pleased to be able to tell you today that this company, in the six months of its existence, has issued 1,292 policies with a premium of $1,373,000. This income is, of course, in addition to our million-dollar capitalization. This company is not only viable, but it is vigorous, well staffed and managed and is doing an exceedingly commendable job in the name of our society. And so, the problem of *availability* of professional liability insurance in North Carolina appears to have been solved.

What about the root causes of our professional liability problems — the causes that can be addressed and corrected only by remedial legislation in the General Assembly? You will recall that last spring the Society proposed several bills to the 1975 General Assembly and that, except for one bill that empowers the Board of Medical Examiners to remove a license for incompetence, all of these were referred to a professional liability study commission.

The commission, after reviewing recommendations from many individuals and organizations, including specific suggestions from us, and after studying the problem throughout the winter, reported this spring. Its recommendations were reviewed last week by the insurance committees of the General Assembly and two specific bills have been introduced into the legislature. As of this minute, the standing of these bills is as follows:

1) *TORT LIABILITY BILL*
   a) Statute of Limitation — limits liability in the case of adults to three years after occurrence plus one year after discovery of a foreign body inadvertently left in the patient — during a 10-year period after operation. Limits liability in minors to 18 years plus the same one year provision.
   b) Informed Consent — as recommended by the study commission
   c) Good Samaritan Provision — as recommended
   d) Ad Damnum Clause — as recommended (on suits over $10,000)

(BOTH HOUSES PASSED 2nd READING THIS MORNING)

2) *PATIENT COMPENSATION BILL*
   Introduced into each chamber this morning, will go to the respective insurance committees this afternoon.
   Provides for:
   Fund of undetermined amount to be established — to pay awards in excess of $100,000 up to $2,000,000 — the amount of the fund and the surcharge to be charged to float as needed.
   Fund to be administered by a board of eight persons, to be selected as follows:
   2 appointed by Lt. Governor (on recommendation of North Carolina Medical Society)
   2 appointed by the Speaker of the House (on recommendation of North Carolina Hospital Association)
   3 appointed by the governor
      (1 on recommendation of nurses assoc.)
      (1 on recommendation of dental assoc.)
      (1 on recommendation of other health care providers not mentioned above)
      The commissioner of insurance.

Last year, both Dr. Reynolds and I, in our addresses to you, spoke of the dangers and entangling potential of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641). Today, these dangers are even closer to realization. Because we feel that this law, when fully implemented, will interfere in the doctor-patient relationship, will interfere in your free right to practice good medicine as you think best, the society has joined the State of North Carolina in a suit filed last week, to test the constitutionality of this act. One of the requirements of this law is that every state must have a certificate of need requirement. The Supreme Court of North Carolina in 1973 ruled such a requirement unconstitutional. Consequently, North Carolina must either lose all federal health dollars by noncompliance with the requirements of this law, or be forced to enact legislation that has been ruled unconstitutional in our state. The American Medical Association is also planning to institute suit and these suits will be joined.

In spite of the heavy burden of socioeconomic-political-legislative matters this year, the essential and traditional work of our commissions and committees has continued unabated. To have you think otherwise would be unfair to more than 750 members who have labored so diligently for us on more than 60 different committees. Their accomplishments are in your annual reports, and I take this opportunity to express the society's gratitude to each participant for his contribution. There have been so very many of you who have made unusual contributions that I would prefer not to mention individuals in this report. However, the work of some has been so demanding and outstanding that I would feel negligent in not having you know of it, and I ask the understanding of those who should be mentioned and will not, simply because of the limits of time.

The work of Dr. Ira Hardy, both as chairman of the Ad Hoc Committee on professional liability insurance problems and as a member of the study commission and that of Dr. John Gamble on the commission have been exemplary, difficult and productive. Dr. Richard Wrenn, chairman of our legislative action committee working directly with Mr. Steve Morrisette, has been

most successful in contacting the individual legislators and assuring that each understands our position on the recommendations of the study commission. Any success we have in the General Assembly will, in large part, be due to the superior work of these men, the members of their respective committees, and our legal counsel, Mr. John Anderson.

The public relations committee, under Dr. John McCain's direction, continued its broad program of informing physicians and the public of our work in the public good. The medical leadership conference in January was superior, had extremely good attendance and participation, and it dispersed important information for the good of both the public and the profession. This committee also planned and produced, under the guidance of Drs. Clement Lucas and Archie Johnson, our first quality of life conference — the Governor's Conference on Children. Co-sponsored by Lieutenant Governor Hunt and Secretary Flaherty, this day-and-a-half, intense study of the problems of the children of North Carolina attracted over 300 persons from many governmental, industrial, medical and allied health groups. Their cooperative efforts will not only result in better conditions for our children but establish a model that makes medicine in North Carolina the focus for all who are concerned with health and health-related problems to come together to seek solutions and remedies.

The medical education committee has taken giant strides towards assuring that all of our members understand and are actively participating in the medical educational requirements established by this House of Delegates. Our society has been designated by the AMA Council on Medical Education as the accrediting agency for the state, thanks to the work of chairman Albert Chasson and his committee. They are now developing mechanisms and authority so substantive programs in your own area and in your own hospital can be accredited. This will assure quality and fully accredited programs available to you locally without requiring undue time and travel.

Dr. Philip Nelson's always busy mental health committee has had extraordinary demands made upon it this year with requests to aid physicians who have been indicted, investigation of conditions in the Women's Correctional Institution in Raleigh, and efforts to seek to have North Carolina designated as one of the pilot states for an in-depth study of prison conditions.

Our peer review insurance committees, specifically the Blue Shield committee, the insurance industry committee, the committee to work with the industrial commission, and the committee on professional insurance, are among the least understood and perhaps least appreciated of our many groups. These committees, and their dedicated members, contribute an almost unbelievable amount of time and effort in fairly and equitably adjudicating claims and helping to establish policies which will be fair to the patient, to the physician and to the corporations involved. These committees continually demonstrate to our colleagues, to the public, to industry and to government that medical judgment, in order to be fair and equitable, must be made by physicians. By this demonstration these committees, in my view, assure the continuation of peer review and belie the erroneous but often repeated statement that medicine today is too big for doctors and must be controlled by others.

The committee on legislation, ably led by Dr. David Bruton, has performed continuously, constructively and most helpfully. The legislative workshop staged in Boone last September was highly successful and has done much to establish a better understanding between our legislators and North Carolina medicine and a better understanding of the legislative process on the part of many physicians. In the area of professional liability insurance problems, this committee has been extremely helpful in preparing bills that went to the 1975 General Assembly, in presentations to the legislative study commission, and in working with the legislative action committee in preparation for the current special session of the General Assembly.

Your executive council's work this year must receive special recognition. This was the year when there was not only a called meeting of the House of Delegates but also three called meetings of the executive council. This was the year that members of the council were asked to do double duty and also serve as a very active board of directors of the Medical Liability Mutual Insurance Company. It is evident what sacrificial service these men have given! In addition, many of these same men have also served as members of the board of directors of the North Carolina Medical Peer Review Foundation. In all honesty, I can tell you that I have never seen one group work so tirelessly and selflessly.

A special word must also be said about our truly amazing auxiliary! Last year, my first official act early one Sunday morning — after a raucous evening of swearing-in — was to meet with Shirley Herring's auxiliary board to ask for their support and help. On every occasion that we sought help, and there were many, it was always forthcoming — in a most cheerful, enthusiastic and effective manner. No one could have been more pleasant to work with than Shirley Herring. In thanking her we also express our appreciation to her board and members and, once again, we recognize the invaluable nature of the society-auxiliary relationship. To Martha Martinat, and to those who will be working with her in the coming year, we wish total success and satisfaction.

To Mr. William Hilliard and his most competent headquarters staff, I express my and your sincerest appreciation for a year of hard and demanding work — one which seldom fell below the crisis level. Certainly, our headquarters staff is truly a professional group of the highest caliber, and one of whom we are very proud.

To all of you I once again express my sincerest and heartfelt appreciation for your confidence, your support and your help. It has been a privilege and a distinct honor to have served with you.

The President's Address "Cool Heads for Critical Times"

James E. Davis, M.D.

LAST year, in beginning my term of office as president, I suggested that perhaps our two greatest needs were participation and unity. Greater participation in those organizations which speak for us — the North Carolina Medical Society and the American Medical Association — greater participation in the issues and the problems facing us as citizens and as physicians, and unity of purpose and effort so that our voice would be better heard by those (and they are many and they are varied) who strive to change the profession which we love so dearly and which we know serves our people so ably.

With modesty, let me now suggest that we have achieved greater participation. Our society is larger and more participatory than ever before, and we are seeking and addressing the health problems of our state. Let me also suggest that since we are now communicating better among ourselves, our purposes and our voices are better unified. Our leaders speak with greater authority and are listened to more attentively. During the past year, your desires and your decisions have not only been expressed to but have been heard by governors, lieutenant governors, heads of state agencies, numerous legislative commissions and committees, judges, national and state meetings, regional meetings, local groups, and the state and national news media. The North Carolina Medical Society today is recognized, not only by the leaders of our state but by the people themselves, as a strong association which must be considered in all health and health-related matters, and one which has the abilities, the capabilities and the willingness to speak and act for the public good.

As we now look to the future — both near and distant future — what continuing and approaching problems face us? What lies ahead?

Certainly, we, and the nation, will continue to have problems with professional liability and with the insurance to cover this liability. Though the question of availability of such insurance in North Carolina now seems to have been solved, and though the General Assembly, in partial response to the needs of the people in North Carolina, appears ready to begin to improve the insurance climate in North Carolina, much remains to be done. This must be considered only a beginning! We must continue our efforts to assure that the populace of our state remains informed about these matters and remains aware that these problems are, in fact, their problems. We must maintain our efforts to assure that succeeding sessions of the General Assembly restudy these problems and enact more effective legislation so that our climate continues to improve. Until more significant improvement is obtained, we continue to live under the possibility of recurring crises in the availability of insurance at reasonable costs, and under the fear that the delivery of health care could be interrupted at any time. Until the professional liability situation stabilizes and becomes less threatening, we will continue to see physicians retire prematurely, we will still have difficulty in retaining the young physicians whom we educate and train, and we will continue to find fewer physicians electing to move their practice to North Carolina.

Health Planning and Resources

Undoubtedly, the greatest threat to individualized, personalized, quality medical care — now and in the future — lies in the National Health Planning and Resources Development Act of 1974 (P.L. 93-641). How can such a strong statement be made about a law which has been considered and enacted by the Congress of the United States? Simply because this ill conceived, almost totally misunderstood legislation, which in one act federalizes health care as a public utility, was rushed through the Congress in the dying hours of its 93rd session and adopted by its uninformed members. At the time of its passage, no

Given before the Second General Session, North Carolina Medical Society, Pinehurst, North Carolina, May 8, 1976.

Reprint requests to Dr. Davis, 1209 Broad Street, Durham, North Carolina 27705.

printed copy of this law existed and the presiding officers of the Congress had to use a "paste-up" of the numerous, lengthy and confusing amendments which were included. Admirably, this law proposes that the vast powers of planning and the control of resources be done at the local level, and we have consequently in North Carolina developed six Health Service Areas. In each we have chosen a board of directors of the Health Services Agency. However, all the decisions of these local groups are subject to reconsideration, change, or negation by the state agency and coordinating council, and all of the decisions and actions of the state groups are then subject to ultimate change or cancellation by one individual, whoever happens to be Secretary of the Department of Health, Education, and Welfare. Be also reminded that resources include not only facilities but also services and personnel, which means that this one individual, the Secretary of HEW, is truly a czar of American medicine. He will have unlimited control over the health care of the entire nation, including control and regulation of your office and mine, your practice and mine, your fees and mine. This one man has the authority, and the responsibility, to determine for every single community of our nation what buildings and equipment for health care it may have, what health services it may have, and by whom (and in what numbers) these services may be provided. Has any one man, short of our presidents, in the history of our country ever been given such awesome, impossible responsibility?

Because this law infringes on your right to practice medicine as you know best, because it infringes on the proper physician-patient relationship, and because it will work to the detriment of good medicine, your society is supporting the State of North Carolina in testing the constitutionality of this act. Our state is in a uniquely favorable position for such a suit, since this law requires a certificate of need. Such a requirement was declared unconstitutional by the North Carolina Supreme Court in 1973. Consequently, as it now stands, this law requires North Carolina to either lose all federal health dollars because of noncompliance, or requires it to enact legislation which has been declared unconstitutional. On behalf of all the physicians of the nation, the American Medical Association will also enter suit against the federal government, and these suits will be joined.

However, until this matter is finally settled, we as individuals, and we as a society, should support what is literally the law of the land. Consequently, we have encouraged physicians to offer themselves as members of the board of directors of the Health Services Agencies, and we have been assured that knowledgeable physicians and those familiar with the functions of organized medicine will be appointed to the state Health Coordinating Council. There is no dichotomy, as might appear, in our vigorously and sincerely contesting this act, and at the same time supporting what is already the law, until this law is either declared invalid, amended to a more proper form, or implemented in a much more equitable and palatable fashion. Make no mistake! We will be working with and controlled by this law for a long time to come!

Cost Containment

While we actively oppose those who would control and regulate medicine, especially when this is done on the basis of dollar savings without due consideration of the quality of the care which will result, we must, at the same time, be wise enough and be fair enough to recognize that all possible efforts, especially ours, must be directed toward containing the ever-escalating costs of health care. There are many substantial and convincing reasons why health care costs have risen, over and above the basic reasons that all costs have increased. And yet, as good citizens we have to be concerned that rising costs make it impossible for some Americans to receive proper treatment, and as physicians we must take the lead in working with other providers and with the insurance industry to assure that all Americans can and do receive a single standard of high quality medical care, from which has been eliminated the unnecessary, the redundant and the over-priced. Many ways in which this might be done come readily to mind: educational efforts to prevent or to minimize illness, more ambulatory care to eliminate some hospitalization, prior-to-admission studies to reduce the length of hospitalization, better delineation of the care-site, so that only those actually requiring acute care remain in the expensive acute care facility, and greater use of "physician extenders." There must be many other ways in which costs can be restrained and reduced without sacrifice of quality.

To this end, two days ago, I asked a selected group of very knowledgeable physicians, those experienced in working effectively in these areas of endeavor, to meet with Dr. Caldwell and me. We have begun to explore this issue and we hope to subsequently recommend to the society ways in which the medical profession in North Carolina can take its rightful and appropriate place of leadership in this important matter. Incoming president Caldwell assures me he will support and work with this group during his tenure of office.

Expanded Public Information Program

Still another need which I feel we have and which we must address is that of an improved and more extensive program of public information. Our public relations commission, our public relations committee and the staff who work in this area are doing an excellent and effective job. I have repeatedly expressed my appreciation for the fine work which these people do. But the times and conditions under which we live and work indicate still a greater effort on the part of our society to see that medicine, its motivations, its conscience, its concerns and its accomplishments are put in a stronger and more positive posture before the public. We are not after a "Madison Avenue" approach to glorify or to seek recognition for what we do. But we do want to be even more accountable to

our people, to have them feel that we are always "leveling" with them, that our purpose is to be constantly concerned with their health needs, constantly seeking to fulfill these needs, and fully informing them at all times. As you may recall, the House of Delegates in 1974 passed the amended Moore County resolution which directed the society to "increase its activity in the area of public relations, legislative contact, and governmental relations." I feel that my proposal today is a logical extension, currently applied, of the sentiment of the House of Delegates two years ago.

Perhaps this would require the formation of a separate public information section of our society, over and above our present commission and committee structure. It would undoubtedly require additional personnel and additional funds. Quite conceivably, though, assistance in the planning, implementation and even funding of such a project might be available from such outside sources as the American Medical Association, private and public foundations. As difficult and costly as this may seem and may prove to be, I feel that it is of ultimate importance and that the success of many of our present and future endeavors may depend on such an improved posture.

National Health Insurance

One cannot speak of medicine of the future without facing the issue of National Health Insurance. Each of the past several years has brought expectations that some form of national health insurance would be enacted "in the near future." Today, in spite of the rhetoric which will abound in this election year, we are probably further removed from it than at any time in recent memory. Yet, the probability of its ultimate occurrence — after we have accomplished greater economic recovery and the political situation is more stable — still seems likely. As you know, many such bills have been introduced or re-introduced into Congress and hearings on the many aspects of this subject are under way. We must continue to alertly monitor this situation, participate as much as possible in the investigations and planning now going on, in the hopes of wisely and favorably influencing the ultimate result. Though presently obscured from sharp vision by more pressing issues, national health insurance will be back, in sharp focus and on center stage, in the not-too-distant future.

Serving Our Patients

The challenges we have had in the past year and those that we will be facing in the coming years are all important and require our careful attention and diligent work. However, let me suggest that of greater importance than any of them, and the one which will have lasting value, is the care we give our patients, and the care our patients think we are giving them. There is no doubt in my mind that the American public today receives the best medical care that man has ever known. But there are many reasons to know that the public, though often recognizing the quality, still feels at times that our care is impersonal, unsympathetic, hurried and even indifferent. It is only human for each of us to think that if these accusations are true, they are generalizations and certainly do not apply to me.

Whether or not the generalizations are true, whether or not they are applicable to us individually, they are of such importance to us collectively that each of us must accept them as being true, as being directed at each one of us. Each of us must resolve to do everything possible to correct this feeling. You know of those things which you can do to help correct these impressions, but I would suggest that all of us learn to listen to patients more and to listen better. And though we know that we have absolutely no extra time, we must resolve to find more time to spend with patients. Also, we must take the time to be sure our patients understand what we're telling them and that we answer their questions thoroughly. For many reasons, patients today are better informed and more inquisitive about medical matters than ever before, and they need answers, and answers from you — because you are best qualified to give them. We must continue to work with the difficult problem of patient access to health care, to get patients into the health care system promptly and to direct them to the provider most appropriate to their need. I commend our few county societies who have established telephone referral services for anyone in need who calls — but the public needs to be better informed that such services are available, and they need such services in many more areas. Each of us needs to become better informed about the current costs of hospitalization, x-rays, laboratory tests and other services, both to help contain these costs and to better and more accurately inform the patient of charges which they are incurring. There must be countless other ways we can better serve our patients, and we should do these things, not because of "defensive medicine," or of legal implications, but simply and wholly because they are an integral and necessary part of good medicine.

We do have problems, but never let us forget that we also have the noblest and the most respected profession of all, that we have a very strong society made up of strong members and able leaders, and that our foundations are firm. Today, we need to maintain these firm foundations and expand them to the greater service of the profession and our patients. We must keep cool heads, be alert and participate in decisions, so that we can continue to lead the way to the best health possible for our people.

In concluding this year's work, let me express to the membership my sincere gratitude for the privilege of having served as president and for the magnificent support and cooperation you have given me. I am especially indebted to my fellow officers, to the members of the executive council, the commissioners, the committee chairmen, to Mr. William Hillard and his superb headquarters staff, and to our most able legal counsel, Mr. John Anderson. We are fortunate in having a man of Dr. Jesse Caldwell's abilities to assume the reins, and undoubtedly he will have the total support of us all.

Scintillation Camera Imaging of Acute Myocardial Infarction Using Technetium-99m Stannous Pyrophosphate: A Clinical Trial

Richard J. Kelly, Robert J. Cowan, M.D., C. Douglas Maynard, M.D., and Robert N. Headley, M.D.

RAPID advances in medical technology result in the continuing introduction of newer diagnostic procedures with which the practicing physician must become familiar. In this paper, we present our experience with the relatively new procedure of imaging acute myocardial infarctions using the bone seeking agent technetium-99m pyrophosphate to help physicians assess its usefulness in their practice.

In 1974, Bonte and associates[1] successfully produced scintillation images of experimental myocardial infarctions in dogs using the bone scanning agent technetium-99m pyrophosphate. Earlier workers[2–5] observed that calcium was incorporated into hydroxyapatite-like crystalline structure in the mitochondria of myocardial cells irreversibly damaged by ischemia. Later the validity of using technetium-99m pyrophosphate myocardial scans in the diagnosis of both recent transmural[6–8] and recent subendocardial[9] infarctions was demonstrated in man.

We have investigated the usefulness of this procedure as an aid in the diagnosis of acute myocardial infarction in order to assess its usefulness in clinical medicine.

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PATIENTS AND METHODS

Thirty-four patients admitted to the Cardiac Care Unit (CCU) with chest pain suggesting acute myocardial infarction (MI) were studied. Initial chart screening was performed and informed consent obtained in all cases. Sixty to 90 minutes after the intravenous injection of 20 mCi of technetium-99m pyrophosphate, scintigrams of the precordium were made in the anterior, left anterior oblique and left lateral projections. A Nuclear/Chicago (Searle) gamma scintillation camera with a high resolution collimator was used. Serial scans later performed on patients transferred out of the CCU were done with a Picker Dyna Camera 4 also equipped with a high resolution collimator. Patients were moved to the imaging areas while under constant electrocardiographic (EKG) monitoring, and scans were produced on both Polaroid black and white film (Type 107 G) and on transparencies (Kodak X-omatic G; Type XG-14), using 500,000 counts per image.

Scans were attempted on the first, third and 15th day after admission to the CCU unless the patient's cardiac status was unstable; in these cases, scans were performed from two to four days after admission and again from seven to nine days after admission. Fifteen-day scans were obtained if the patient remained hospitalized that long. Serial scans could not be done on all patients because of early discharge or sudden death or because repeated scanning was not warranted clinically.

Scintigrams were read by the staff of the Nuclear Medicine Department without knowledge of the patient's EKG or enzyme data. Scans were interpreted as follows: negative; diffuse uptake; or localized uptake. The location of the infarct was determined when possible; however, the resolution achieved in many cases made precise localization difficult. Scan data were compared serially on patients with two or more studies. The MB isoenzyme of creatine phosphokinase (CPK) and EKG data were also correlated with scan results and the patients were categorized accordingly (Table 1).

RESULTS

Eleven patients had only one scan performed during their first week of hospitalization; 23 had two or more scans. Table 1 briefly categorizes

TABLE 1

	Patients with acute MI		Patients without acute MI	
	EKG:	MI	EKG:	No MI
	Enzymes:	Elevated	Enzymes:	Normal
	MB CPK	Pos.	MB CPK	Neg.
Scan Pos.		16		6
Scan Neg.		0		12

these patients according to the scintigraphic, EKG and enzyme data. Sixteen of 16 patients with clinical and laboratory evidence of acute infarction had positive scans (Fig. 1), yielding a 100% correlation; there were no false negative scintigrams. Twelve of the 18 patients with normal serum enzymes and EKGs not indicative of an acute process had normal scans (Fig. 2). However, six of the patients who were not thought to have acute myocardial infarctions by EKG or enzyme evidence had positive pyrophosphate studies (Table 2). Three patients were thought to have had left ventricular aneurysms, two on the basis of cardiac catheterization data and one on the basis of EKG findings. Two patients were thought to have had subendocardial infarctions on the basis of EKG changes and the clinical picture presented. The clinical diagnosis of the last patient is in doubt; however, ischemic changes were noted electrocardiographically.

TABLE 2

False Positive Scintigrams

	Diagnosis
Case 1	Left ventricular aneurysm
Case 2	Left ventricular aneurysm
Case 3	Probable left ventricular aneurysm
Case 4	Subendocardial infarction
Case 5	Subendocardial infarction
Case 6	Possible subendocardial infarction

Serial scans demonstrated reinfarction in one patient and extension of the infarct in two patients. It was also noted that scintigrams in two patients were either normal or slightly positive when done during the first 24 hours after infarction. Most patients with postive scans who were studied serially showed a marked decrease in activity seven days after infarction, and by 15 days after injury scans appeared normal in five of eight patients (Fig. 3).

DISCUSSION

In 1964, D'Agostino[2] described the localization of calcium within the mitochondria of necrotic rat myocardial cells and later noted that calcium appeared to be incorporated into an hydroxyapatite-like crystalline deposit in human myocardium.[3] Shen and Jennings[5] then suggested that calcium uptake was a function of irreversible cellular injury and that it occurred only when arterial blood flow was restored.

In 1974, Bonte et al[1] successfully produced scintillation camera images of experimental infarcts in dogs using technetium-99m pyrophosphate. The images appeared to diminish with time, suggesting a role of pyrophosphate scanning in the diagnosis of acute myocardial infarctions. Later studies in dogs[10] and in humans[6] revealed that diagnostic positive images were not obtainable until 16-24 hours after the infarction. Deposition of the radio-pharmaceutical seemed to reach a maximum from 1-6 days post infarction and then to recede slowly,[10] presumably because of normal myocardial healing. Our findings are consistent with these observations in that scans done within 24 hours of the onset of symptoms were normal or only equivocally positive. All patients with well-documented infarcts showed discretely positive scintigrams from day one to day six. Patients who were scanned from seven to nine days post myocardial infarction showed a significant decrease in activity from the original scan. By 15 days after infarction most of these were normal; a few patients showed minimal uptake.

These characteristics of technetium-99m pyrophosphate myocardial imaging are extremely helpful in the detection of both reinfarction and extension of an infarct. Scans done subsequent to a new clinical episode may show increased uptake or possibly a larger infarct area on scintigram. In addition, serial scans are helpful in following the resolution of an infarct. The correlation in this series between EKG, serum enzyme levels (CPK) and myocardial scintigrams demonstrates the sensitivity of scanning in detecting myocardial infarcts. Most patients with positive scans demonstrated EKG and enzymatic evidence of acute myocardial infarction prior to pyrophosphate imaging. Patients with negative scans showed no enzyme elevation, but they did demonstrate ischemic EKG changes suggesting

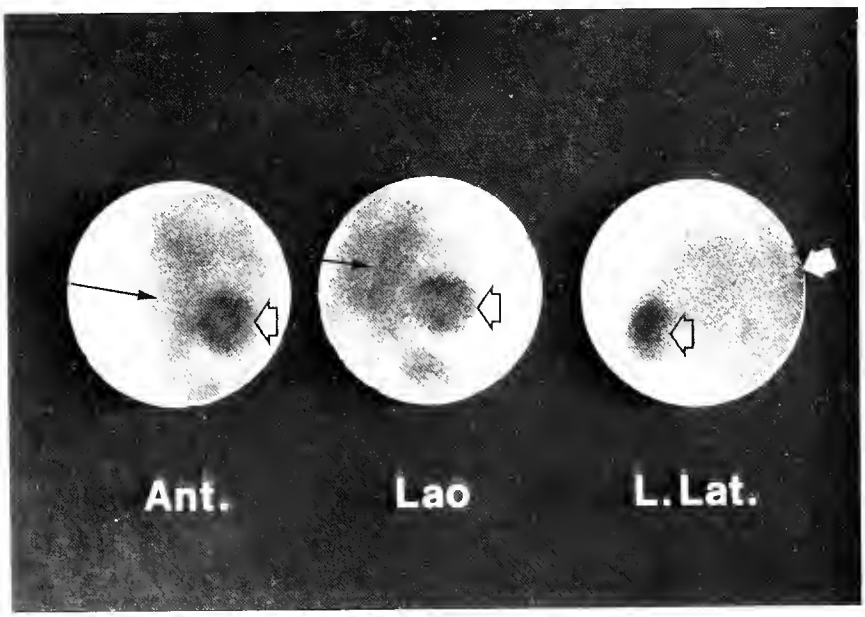

Fig. 1. Positive technetium-99m pyrophosphate myocardial scan seen in the anterior, left anterior oblique and left lateral projections. Note: sternum (thin arrow); spine (thick solid arrow); and area of abnormal myocardial activity (hollow arrow).

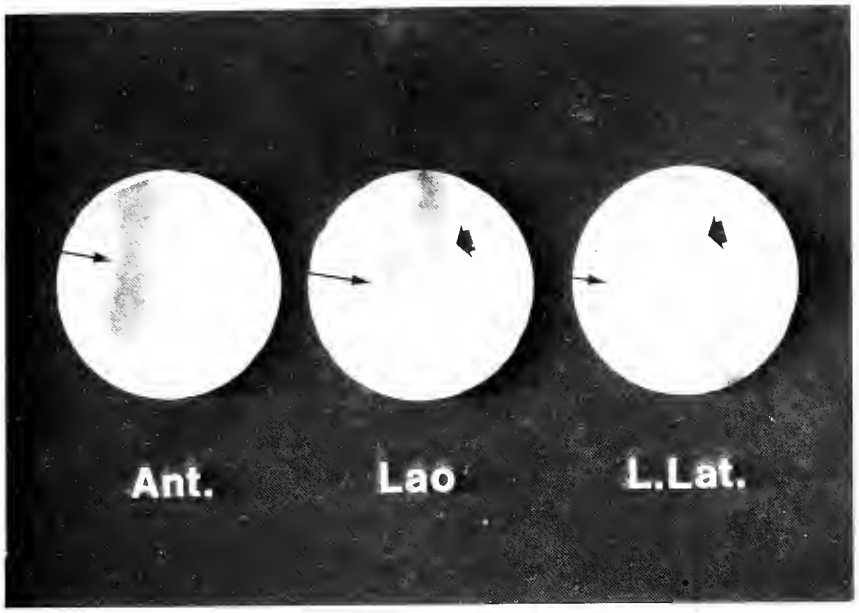

Fig. 2. Normal technetium-99m pyrophosphate myocardial scan as seen in the anterior, left anterior oblique and left lateral projections. Note: sternum (thin arrow) and spine (solid arrow).

that scintigrams may be helpful in differentiating myocardial ischemia from acute infarction.

The large proportion of positive pyrophosphate studies in this series probably reflects preliminary chart screening prior to selection of the patients for entry into this study. Only patients whose initial evaluation made acute myocardial infarction likely were chosen for imaging. Had we randomly selected patients from all those with chest pain admitted to the Cardiac Care Unit the number of negative scans may have been greater. Previous reports have indicated that false positive examinations are rare[11] but they have been reported with breast tumors, rib fractures and myocardial contusion.[12] Willerson et al[9] noted that scintigrams were negative in a variety of other cardiac abnormalities and that false negative examinations were unusual. We also had few false negative examinations, but our high number of apparent false positive scans is somewhat disturbing.

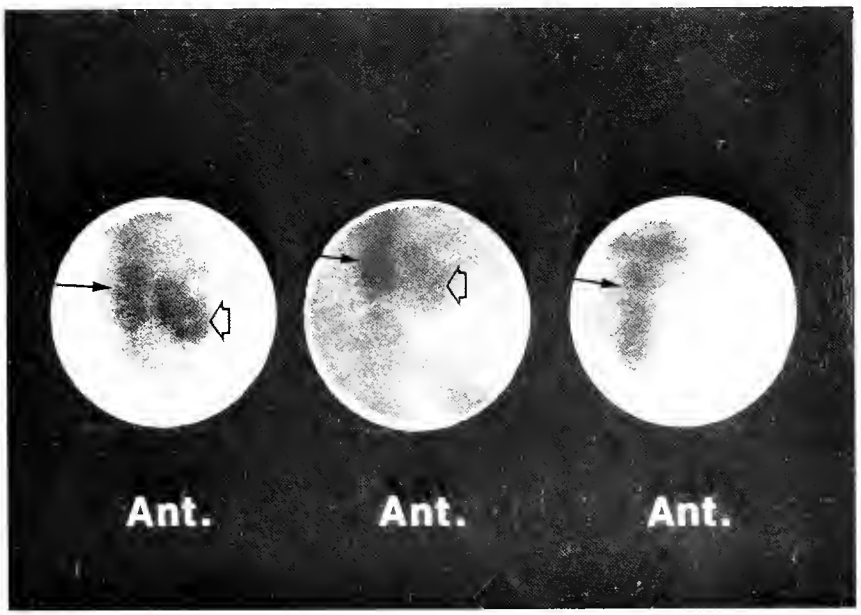

Fig. 3. Serial anterior technetium-99m pyrophosphate myocardial scans performed on the fourth, eighth and 16th days after acute myocardial infarction showing gradual decrease of activity during resolution of the infarct. Note: sternum (thin arrow) and abnormal myocardial activity (hollow arrow).

Patients in the false positive category were reviewed and classified according to their final diagnoses (Table 2). Two of these patients (Cases 1 and 2) had ventricular aneurysms documented by cardiac catheterization and a third (Case 3) was suspected electrocardiographically of having such a lesion. Pyrophosphate uptake by ventricular aneurysms has been observed previously (Miale A: personal communication). The exact mechanism of uptake and site of localization of the radiopharmaceutical in the ventricular aneurysm is not as yet understood. Serial scans in our three patients show a reduction in pyrophosphate uptake over a 15-day period. This is opposite the expected finding in acute myocardial infarction where a definite decrease in myocardial uptake is usually seen on serial scans. This observation may in the future prove useful in the detection of ventricular aneurysms.

The diagnosis of acute myocardial infarction by standard EKG and serum enzyme activity can be difficult in many clinical situations, especially in cases of subendocardial infarction. Willerson et al[9] have demonstrated that pyrophosphate imaging is effective in making this particular diagnosis. In our remaining patients with false positive scans we suspect subendocardial infarction because of the clinical picture and electrocardiographic evidence of severe myocardial ischemia in the face of equivocal enzyme changes.

CONCLUSION

Technetium-99m pyrophosphate myocardial scanning appears to be an easy, safe, noninvasive procedure that can be helpful in the diagnosis of acute myocardial infarction in patients with an uncertain clinical and laboratory picture. Its use in the detection of extension, re-infarction and possibly ventricular aneurysms

should be considered. Pyrophosphate scanning is a sensitive but not entirely specific test for recent acute myocardial infarction.

ACKNOWLEDGMENT

The authors would like to express their deep appreciation to the Nuclear Medicine Technologists and the nursing staff of the Cardiac Care Unit for their diligent efforts during this study.

This project was partially supported by a grant from the Education and Research Foundation, The Society of Nuclear Medicine.

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A very slight inflammation of the membranes of the brain, will destroy, or pervert, for a time, the judgment, the memory, the feelings, the affections, of the greatest philosopher or divine. How, then, can we wonder that various derangements of the body, and especially of those organs with which the brain is closely linked in sympathy, should disturb the subordinate attributes of mind, and especially the TEMPER of an individual.*

*When I say that the manifestations of the faculties of the mind are dependent on, and influenced by, the state of our corporeal organs, I offer no support to the doctrines of the Materialists. The muscles are the organs of motion, but they are not the faculty which *causes* the motion. The eye is the material organ of sight, but it is not the faculty of vision. *Sight* is not seated in the coats or humours of the eye — in the retina — the optic nerve — nor, in fact, in any portion of the brain. All these parts are constructed so as to convey the images of things to the *mind* — but none of these parts can see — not even the ultimate particle of brain in which the optic nerve terminates. They are all *instruments* of vision, and the faculty or sense itself is beyond the boundaries of matter. The same may be said of hearing, and of every other sense. Dr. Haslam, and some other of our modern philosophers, have uttered great absurdities, when they said that the "brain may think." The brain can no more think, than the globe of the eye, the optic nerve, or the thalamus nervi optici can see. The brain is merely that portion of matter which is in most proximate communication with the mind or immaterial principle. It is, therefore, only an *instrument* through which the mind receives impressions from without, and transmits its dictates from within. But in all intellectual operations, the material organ is as necessary to the mind, as the mind is to the material organ. When the instrument is disordered, the manifestation of the mind is deranged. From this explanation it will be remembered that, when I speak of disorders of the *mind*, I merely mean the material organ of the mind. —*An Essay on Indigestion, or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 57.

Removal of Blunt Esophageal Foreign Bodies: Foley Catheter Technique

James E. Crowe, M.D.

MOST foreign objects swallowed by children cause no problems, since they pass through the gastrointestinal tract. Occasionally, however, an object becomes lodged in the esophagus, usually at the level of the thoracic inlet. If the object is removed endoscopically, the patient is subjected to the inconvenience and expense of hospitalization, the hazards of general anesthesia and the risk of esophageal perforation. A new method of removing blunt esophageal foreign bodies is now available.

MATERIALS AND METHOD

Frontal and lateral roentgenograms of the neck, chest and abdomen are obtained to locate the suspected foreign object. If it is lodged in the upper esophagus, the radiologist passes a #8-#14 Foley catheter with a 5 cc balloon through the nose or mouth until the tip of the catheter lies beyond the level of the object. With the child in a prone position and under fluoroscopic visualization, the balloon is inflated with 4-5 cc of water-soluble contrast material (Fig. 1). The catheter is then gently pulled back, dislodging the foreign body which rides up and out of the esophagus on the balloon. When the object reaches the mouth, the patient expectorates it or the radiologist manually removes it. The balloon is deflated and the catheter removed. During the past two years I have removed without complications 14 esophageal foreign bodies using the Foley catheter technique. They included 11 coins, a button, a bead from a necklace and a clasp from a key chain. I extracted nine of the coins, the other two passed into the stomach and subsequently were eliminated. I failed at first to remove a large button because the child swallowed it each time I brought it into the oropharynx. At subsequent endoscopy, the endoscopist could not see the button. Another fluoroscopic examination showed the button still lying in the upper esophagus. On the second try, I removed it.

A 12-year-old girl swallowed a metal clasp which became attached to the esophageal mucosa. By gently manipulating the balloon in the esophagus I freed the clasp, which fell through the esophagus and into the stomach and was subsequently passed uneventfully.

DISCUSSION

In 1966, Bigler[1] first described the Foley catheter technique for removing blunt esophageal foreign objects. He successfully extracted a jackstone and a coin. Eight similar reports have subsequently described the removal of 66 foreign

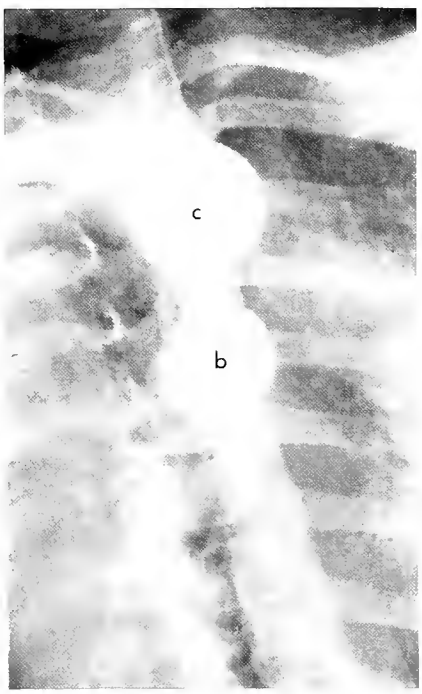

Fig. 1. Spot film shows position of the coin (c) and balloon (b) in upper segment of esophagus.

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bodies.[2-9] In addition to coins (which make up the majority), radiologists using this technique have successfully removed jackstones,[1,2] buttons,[5,7] marbles,[3,4] a battery,[6] a plastic toy[2] and a fine wire mesh.[7]

No major complications have been reported. A minor complication occurred in one of these 66 cases. The radiologist pulled the coin into the nasopharynx; but he manually removed the coin without difficulty.

If the oral route is used, one must insert a padded tongue blade or other object between the upper and lower teeth to prevent the child from biting the catheter and the fingers of the individual who inserts the catheter. Trial distention of the balloon before insertion allows one to discard catheters with balloons that leak or are asymmetrical when fully inflated. Placing the child in the prone position makes aspiration less likely and facilitates expectoration of the foreign body. The syringe for inflating the balloon should remain attached to the catheter during manipulation so the physician can easily change the pressure of inflation. The catheter will not move freely in the esophagus if the balloon is overinflated. If the balloon slips past the foreign body during removal, it should be deflated and the procedure repeated after readvancing the catheter to the proper position.

Sedation of patients before the procedure is not necessary. A word of caution: never remove sharp objects by this technique because one may perforate or lacerate the esophagus. If the object is not radiopaque, one can administer barium to outline and localize it; however, one should use only small quantities of contrast material to avoid aspiration in the event that the foreign body has obstructed the esophagus.

Some authors suggest the catheter technique be used only for foreign bodies that have been present less than 48 hours.[6,8] The time interval is probably not as important as the condition of the esophageal mucosa. Campbell and Davis[7] suggest that if the foreign body has been present for over one week, the radiologist should do an esophagram to see if significant mucosal reactive changes have occurred. If such changes are absent the catheter technique is safe.

Although the chances of aspiration of a foreign body the size of a coin are remote, one must be prepared to intubate the child should respiratory complications develop. The radiologist should have both a laryngoscope and endotracheal tube in the fluoroscopic room. If he is not experienced in using these instruments he should request the presence of someone who is. Since a child could aspirate an object smaller than a penny, I do not recommend this technique for small foreign bodies. Fortunately, objects of this small size almost never lodge in the upper esophagus.

CONCLUSION

This paper describes a method of removing blunt foreign bodies from the upper esophagus with a Foley catheter. Proper performance of the procedure in selected patients will result in uncomplicated, successful removal of the foreign object in virtually all cases.

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It is quite in vain to attempt to rally people into good spirits by mere argument, when the cause is of a physical nature, which it generally is. The mental despondency resulting from a moral cause, as a domestic affliction, a pecuniary loss, disappointed ambition, or crosses in love, is of a different character from that which is the consequence of corporeal disorder. It very generally, however, induces this corporeal disorder, and then the malady is necessarily increased, and its symptoms complicated, partaking of a moral and physical nature. It is in such circumstances that judicious medical advice may be of considerable importance. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 59.

Editorials

FAMILY PRACTICE: THE CURRENT CLIMATE

This is the season when our phone rings frequently with calls from communities in search of a doctor. The same thing happens at all family medicine training centers, for geographic maldistribution of physicians is a nationwide problem. Towns without physicians continue to offer enticements, with little effect; programs such as the National Health Service Corps provide only minimal relief. What can be done, short of governmental regulation, to encourage young doctors to settle where they are needed?

Although national figures show that 40% of all graduates of family medicine programs (now some 1,700) are practicing in towns of 15,000 or fewer, this proportion might be increased if communities and doctors in need of help took heed of certain factors important to a young doctor in search of a practice site. Financial inducements and the prospect of 15-pound bass just may not be enough; there are more important considerations to many being trained in the specialty of family practice.

For one thing, few of today's graduates intend to enter solo practice. They are aware that practicing alone in an underserved area, while it has its rewards, can mean professional isolation with little opportunity to read, talk with colleagues and get away for continuing education. It may mean a work load so heavy that it leaves no time for the vital business of raising a family; this is a trap that a good family doctor should avoid.

The obvious way to avoid the problems presented by solo practice is to associate with established practitioners, or to start one's practice in a small town in which other doctors can provide the needed professional relationships. Many young doctors have found, to their dismay, that this is not easy. Graduates trained in today's concepts of health care delivery frequently find established practitioners unreceptive to new methods. It is not uncommon for partnerships between older and younger doctors to disintegrate after a few years when it becomes apparent that differences of opinion cannot be resolved.

At times, residents in training form a small group with the intention of setting up practice in a community in need of doctors. Unless they affiliate with an established practitioner, such a group may find their entry into practice discouraged, ironically, by the very local physicians who are overworked and in need of help.

Life in a small town has many advantages for a doctor and for his family, but there are some disadvantages too. It is possible — indeed, probable — that the doctor will have to settle for a less than adequate education for his children. The doctor's wife may not fit easily into the traditional role assigned by the community; the nonprofessional husband of a woman doctor may be even more uncomfortable. As women in medicine become more numerous, communities must accept their dual role as a mother and physician, something many communities are not yet prepared to do.

There are some further questions that should be asked. Is the community ready to accept modern concepts of health care delivery using paramedical professionals, or is only the doctor considered competent to provide care? How acceptable is the concept of the health team? Of the satellite clinic? If each small town is convinced that it needs just one good doctor, the needs of the underserved areas will never be met.

Communities that need doctors can take positive steps to encourage their entry by planning for group practices of three or more, rather than trying to lure single physicians. They should discuss this matter with their present doctors and those in nearby towns and, in consultation with people skilled in health care planning, join forces to establish medical centers that will serve a population of 15,000 or more. They should promote the educational and cultural resources of their region, not only the recreational opportunities. And they should take a long look at their attitudes toward the young doctor who will bring into the community new and progressive viewpoints on health care delivery and, perhaps, on life styles.

Doctors and representatives of such communities might visit training programs to talk with residents in training (during their second year, not just before graduation) and with people interested in health care delivery, encouraging the formation and recruitment of groups to fill the needs of their area. This approach would surely be more fruitful than "job fairs" and advertisements. Those of us involved in the training of family doctors would welcome the opportunity to help.

COLLIN BAKER, M.D.
Director of Undergraduate Programs
Family Medicine Program
Duke University Medical Center
and Watts Hospital
Durham, North Carolina 27705

IF TAKEN IN EXCESS, THIS PRODUCT MAY BE DANGEROUS TO YOUR FINANCIAL HEALTH

It is too late now to subscribe to The Franklin Library's series — The 100 Greatest Masterpieces of American Literature — modestly called "the most important book collection in the history of our nation" because July 31, 1976, was the deadline. Each book was "to be luxuriously bound in the finest leather and ornamented in 22 karat gold;" subscribers will be guaranteed an issue price of $35 for each volume "bound in genuine leather expressly for me" so the series will cost only $3,500 rather than the $6,000-8,000 which The Franklin Library assures us would be the price were they not offering such a wonderful deal. Not only that but "leading universities in all 50 states and the U.S. territories" have submitted nominations, titles to be included in this incomparable collection. When all the titles were received a star-studded Advisory Board, grim of mien, careful of step assembled, their shoulders squared, their brows lined for they had to select "the most important and significant book collection in the history of our nation." And they did it, they finally did it, did it for us, exclusively, for only $3,500 if we subscribed in time. But they didn't tell us the titles.

And the dozen who choose, who accepted such grave responsibility — who are they? Where are they from? How did they qualify? They are writers: novelists, essayists, critics, translators, historians; at least eight of the 12 because I had never heard of four, fully one-third of the board. Nine of them are men, three women, inconsistent with population percentages of our great nation. Six are from the East, two from the South, two from the Midwest and two from the Far West, and seven are from the 13 original colonies, two from states of the Old Confederacy. Creed and color are not given nor is political affiliation. And still, despite their differences, despite their similarities, they have done it; they have really done it for us exclusively for $3,500, an $8,000 value and their selections have been authenticated, have been sanctified in secular fashion by the American Revolution Bicentennial Administration (ARBA).

But The Franklin Library and the ARBA have failed. They haven't told us all the titles! We may have read them, self-selected, without help from Professor Irving Stone, University of California, Berkeley. We may have read them without the prior approval of Professor James Dickey of the University of South Carolina (what is such a "good ole boy" doing in such sophisticated company?) We may disagree with Professor Willie Lee Rose, visiting professor at Oxford University, but we do respect her judgment for she has written of American history. (Did the committee overcome her objections and include her own *Rehearsal for Reconstruction*. It should have, or perhaps the eleven waited for her to leave for England before it did so.)

I've written them, The Franklin Library and the ARBA, for titles but their answer may come too late, after July 31 when it will be too late for me to subscribe and to find out what books Professor John Barth of Johns Hopkins University has agreed deserve my most respectful attention. It may be that I can get the leather bindings, "ornamented in 22 karat gold" at a special rate and sew in my own editions, hard or paperbacks removed.

What happened to the also-rans? (To be sure "leading universities" had to select more than 100 books for the Advisory Board Members to select from.) Will we later be asked to subscribe to the Second 100 Greatest Masterpieces in Fine Cloth Bindings, embroidered in delicate patterns and still later to the Third 100 Greatest Masterpieces in Paperback with unfracturable spines and an envelope in the back to retain pages that fall out on the third reading, all autographed by the advisory board members including Professor Carlos Baker of Princeton University who heads the list because no one whose name began with A made it?

How tall is the series and how many minutes a day will be required for its reading if I am to be as cultivated as those who read the Harvard Classics, that five-foot shelf* which could lead us to culture if only we spent 15 minutes a day, just 15 minutes a day?

But it is too late. That $8,000 value has been missed — "an heirloom collection . . . in magnificent leather bindings"—and I still ache to know whether I've read 75 of the 100, enough to be passed, perhaps, by the Advisory Board Members and by ARBA if my lack of $3,500 ($8,000 value) doesn't disqualify me forever from the company of learned men and three woman — Professor Nina Baym, University of Illinois; Professor Willie Lee Rose, visiting professor at Oxford University; and Professor Helen Hennessy Vendler, Boston University.†

J.H.F.

*Apparently selected without help from leading universities, just from Harvard by Dr Charles W. Eliot, its president from 1869 to 1909

†And so they won't feel slighted here are the other distinguished Advisory Board Members: Professor Ralph Ellison, New York University, Professor Robert Stuart Fitzgerald, Harvard University, Professor John Christian Gerber, University of Iowa; Professor Monroe Kirk Spears, Rice University, Professor Wallace Stegner, Stanford University, emeritus

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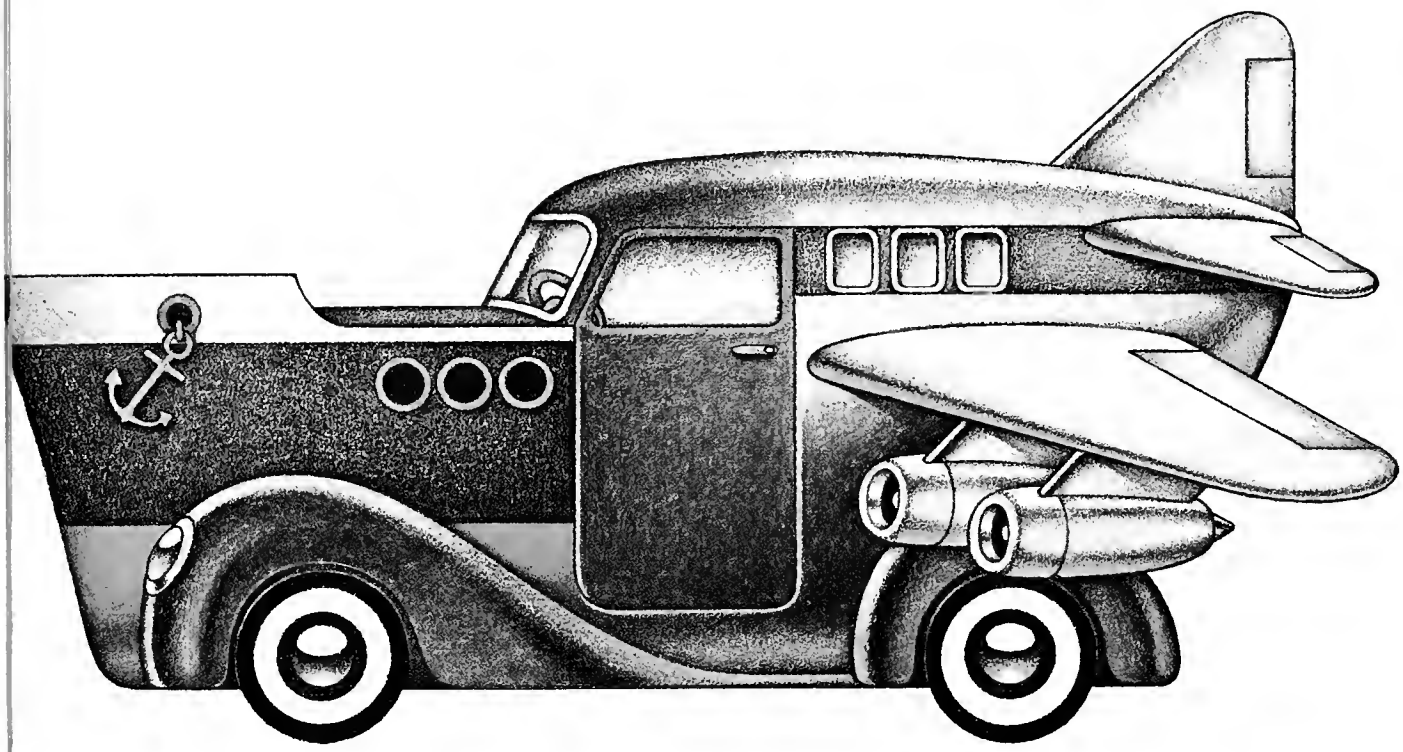
This curse of civilization is not confined to any age or any nation. Wherever the mind has been cultivated at the expense of the body, there hypochondriacism has prevailed. Aristotle informs us that all the great men of his time were hypochondriacs, or at least melancholics; and the disease, in its more marked forms, has been described by physicians and even by poets, from Hippocrates down to the present time.—*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*. James Johnson, 1836, p 59.



On land, sea, and in the air...

Up to 24 hours of effective control with a single dose...in nausea, vomiting and dizziness associated with motion sickness.

Dosage: 25 to 50 mg. 1 hour before travel.

Available on prescription only.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25 Chewable Tablets
(meclizine HCl) 25 mg.

for motion sickness

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension.* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F CO., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

a new tablet design for

Orinase®

tolbutamide, Upjohn

0.5 Gm tablets

This new design will help pharmacists, physicians, nurses, and patients identify Orinase by name and manufacturer. The number on the tablet is for identification and is not related to tablet strength.

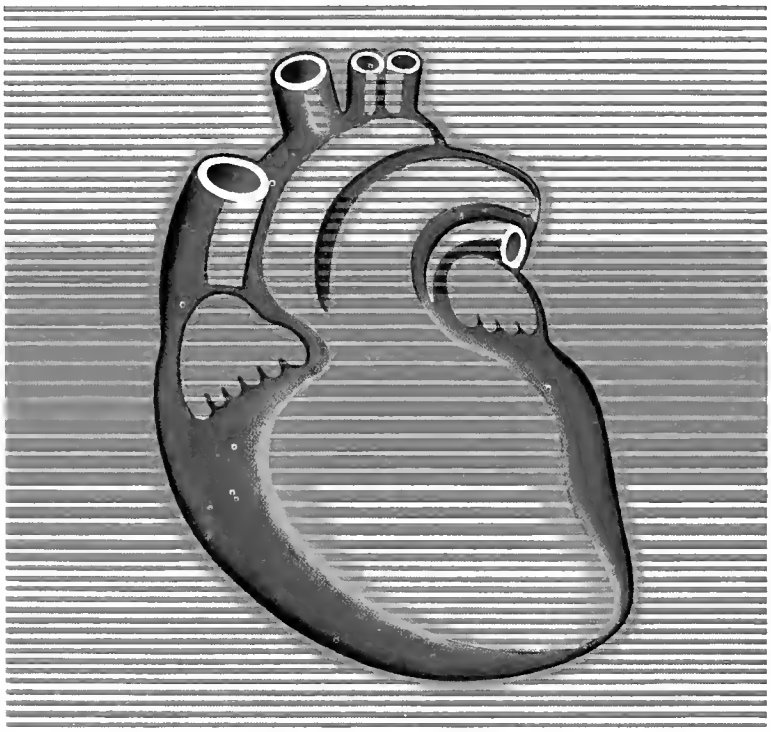
You may wish to advise your patients that this change is taking place.

J-5255-6

The Upjohn Company, Kalamazoo, Michigan 49001 **Upjohn**

WHEN ANXIETY INTERFERES.

The cardiac patient and anxiety.



"The [cardiac] patient is anxious about minor symptoms, about the implications of his diagnosis, and about real or imagined limitations of function."*

The worst is over. The cardiac patient is out of the acute stage, out of the hospital, and well on his way to recovery. How quickly he comes back to near normal functioning may depend on his psychological as well as his physical rehabilitation.

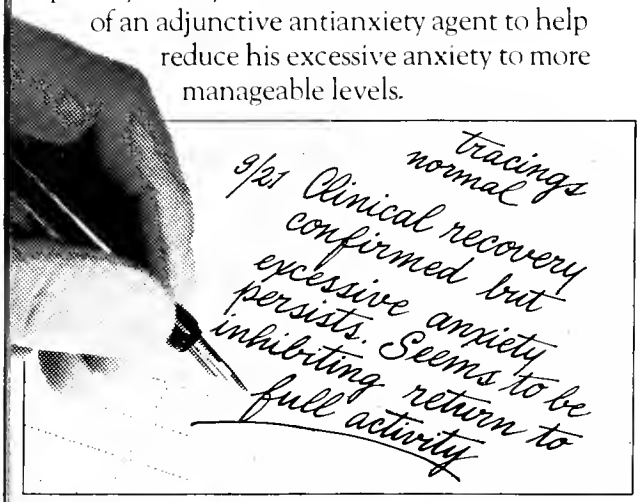
Clinical anxiety, for example, may be one reason for prolonged recuperation following cardiac healing. Yet anxiety can sometimes be beneficial in facilitating patient compliance.

The patient who is realistically concerned about resuming his precoronary functioning may be highly motivated to adhere to his rehabilitation regimen. However, the cardiac patient with *excessive* or unresolved anxiety may be so fearful of future heart failure that he refrains from your prescribed regimen. These excessively anxious cardiac patients eventually present the same clinical characteristics as patients deconditioned by bed rest.

Excessive anxiety can interfere with patient management

When excessive anxiety diminishes your

patient's ability to participate fully in his rehabilitation program, your counseling and reassurance are often sufficient. But when his anxiety is so great that it actually interferes with his ability to listen and respond, you may want to consider the addition of an adjunctive antianxiety agent to help reduce his excessive anxiety to more manageable levels.



Librium® (chlordiazepoxide HCl) an effective adjunct to your reassurance and counseling

Safety: Librium has a highly favorable benefits-to-risk ratio and a wide margin of safety. Because of its low incidence of side effects, it is regarded as one of the safest antianxiety agents available. And Librium does not adversely affect the cardiovascular system. See complete product information for warnings, precautions and adverse reactions.

Performance: Hundreds of clinical trials, thousands of published papers, and millions of patients comprise the record of performance for Librium.

Concomitant use: Of special significance in treating the cardiac patient already taking multiple agents is the fact that Librium is used concomitantly with most primary medications, such as cardiac glycosides, diuretics and antihypertensives.

*Zohman BL. *Geriatrics* 28 110-119, Feb 1973

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

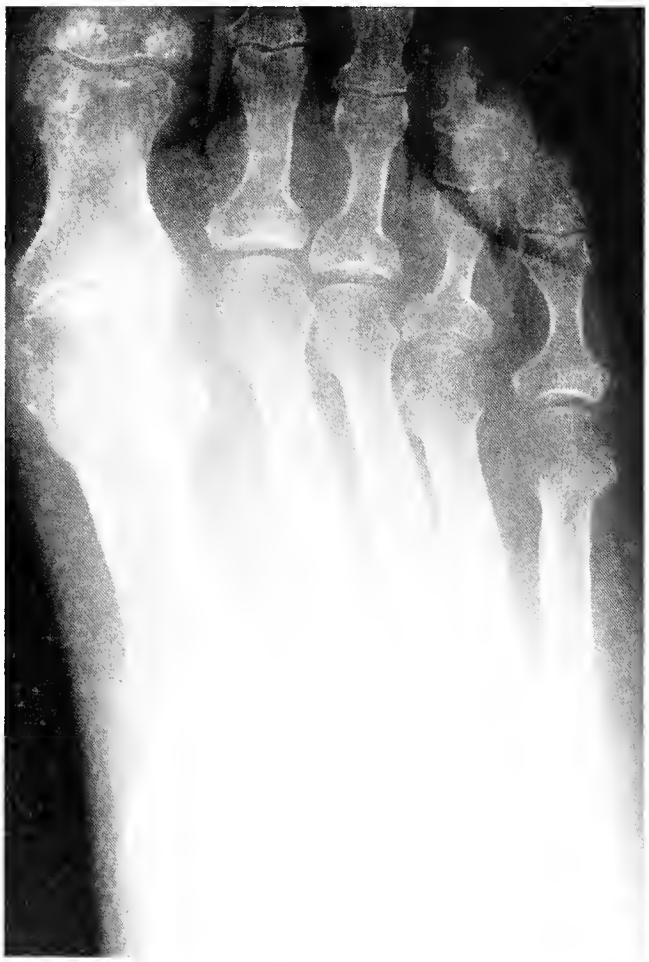
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

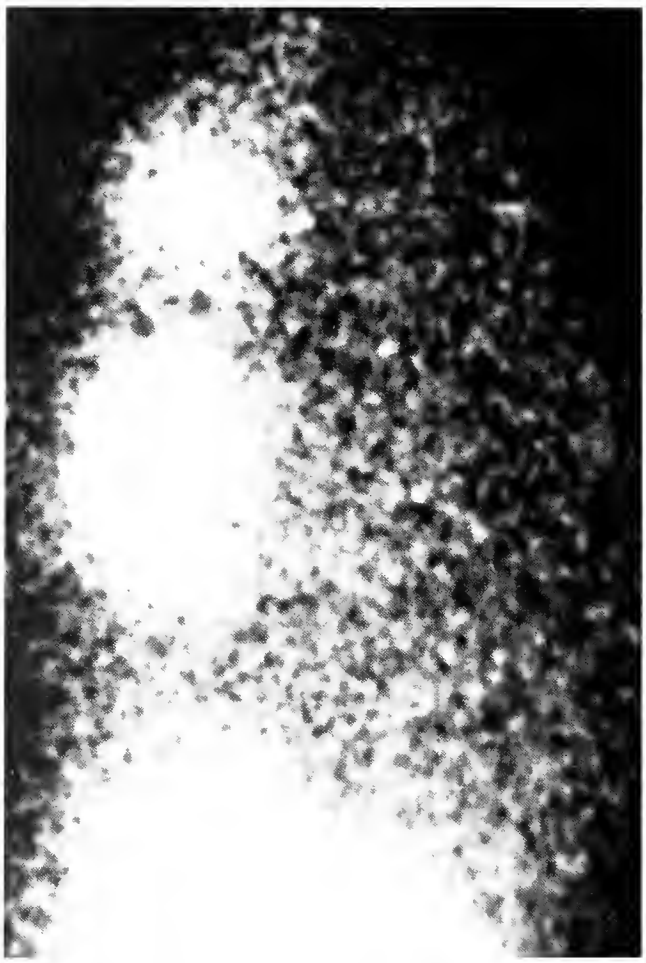
ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Adjunctive
LIBRIUM® IV
chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules
THE ANXIETY-SPECIFIC

VISUAL FOCUS ON ACUTE GOUTY ARTHRITIS



Foot of patient with acute gouty arthritis as seen by conventional x-ray.



Scintiphotogram of same foot reflects inflammatory process.

The scintiphotograph on the right shows increased uptake of radiotechnetium polyphosphate in the metatarsophalangeal joint and the proximal interphalangeal joint of the great toe of a patient with acute gouty arthritis. This increased uptake probably results from increased vascularity in the affected areas.

For a more detailed description of scintiphotography, see "addendum" at right.

THERAPEUTIC FOCUS ON

CAPSULES, 25 mg and 50 mg

INDOCIN®

(INDOMETHACIN | MSD)

helps relieve pain and other symptoms of inflammation in acute gouty arthritis in selected patients

INDOCIN is a potent drug with anti-inflammatory, antipyretic, and analgesic properties. It should not be used in conditions other than those recommended. Although INDOCIN does not alter the progressive course of the underlying disease, in selected patients with acute gouty arthritis it has been found highly effective in relieving pain and in reducing fever, swelling, and tenderness.

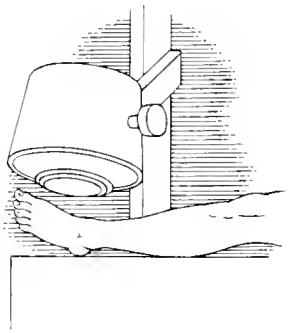
MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

addendum

MSD
MERCK SHARP & DOHME

Facts about Scintiphotography



In recent years a variety of radiopharmaceuticals have been employed to aid in the diagnosis of bone and joint disorders. The joint-imaging technique consists of injecting technetium polyphosphate intravenously, and imaging is performed with the scintillation camera two hours after the administration of the radionuclide. In general, for joint surveying, the shoulders, elbows, hands, wrists, knees, ankles, feet, and vertebral column are mapped. The entire scanning process takes approximately one hour. The criterion for a positive image is a higher concentration of radioactivity in a joint region than in adjacent nonarticular bone. In effect, each patient serves as his own control.

INDOCIN®
(INDOMETHACIN | MSD)

helps relieve pain
and other symptoms
of inflammation
in acute
gouty arthritis
in selected patients

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended. The drug should not be prescribed for children because safe conditions for use have not been established.

Because of the high potency of the drug and the variability of its potential to cause adverse reactions, the following are strongly recommended: 1) the lowest possible effective dose for the individual patient should be prescribed. Increased dosage tends to increase adverse effects, particularly in doses over 150-200 mg per day, without corresponding clinical benefits; 2) careful instructions to, and observations of, the individual patient are essential to the prevention of serious and irreversible, including fatal, adverse reactions, especially in the aging patient.

Contraindications: Children 14 years of age and under; pregnant women and nursing mothers; active gastrointestinal lesions or history of recurrent gastrointestinal lesions; allergy to aspirin or indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, at times, severity of gastrointestinal reactions, be continuously alert for any sign or symptom signaling a possible gastrointestinal reaction. The risks of continuing therapy with INDOCIN in the face of such symptoms must be weighed against the possible benefits to the individual patient. Gastrointestinal effects may be reduced by giving the drug immediately after meals, with food, or with antacids. Use greater care in aging patients.

Ocular Effects: Corneal deposits and retinal disturbances, including those of the macula, have been observed in some patients on prolonged therapy. Discontinue therapy if such changes are observed. Ophthalmologic examination at periodic intervals is desirable in patients on prolonged therapy.

Central Nervous System Effects: INDOCIN may aggravate psychiatric disturbances, epilepsy, and parkinsonism, and should be used with considerable caution in patients with these conditions. If severe CNS adverse reactions develop, discontinue the drug.

Precautions: Blurred vision may be a significant symptom that warrants a thorough ophthalmologic examination. Patients should be cautioned about engaging in activities requiring mental alertness and motor coordination, as driving a car. Headache which persists despite dosage reduction requires complete cessation of the drug. May mask the usual signs and symptoms of infection; therefore, the physician must be continually on the alert for this and should use the drug with extra care in the presence of existing controlled infection. After the acute phase of the disease is under control, an attempt to reduce the daily dose should be made repeatedly until the patient is off entirely.

Drug Interactions: Although INDOCIN has not influenced the hypoprothrombinemia produced by anticoagulants, patients on anticoagulant therapy should be observed closely for alterations in prothrombin time. In patients receiving probenecid, plasma levels of indomethacin are likely to be increased and a lower total daily dose of INDOCIN may produce a therapeutic effect; increases in the dose of INDOCIN should be made cautiously and in small increments.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcerations of the esophagus, stomach, duodenum, or small intestine, including perforation and hemorrhage, with fatalities in some instances; rarely, intestinal ulceration has been associated with stenosis and obstruction; gastrointestinal bleeding without obvious ulcer formation; perforation of preexisting sigmoid lesions (diverticulum, carcinoma, etc.); rarely, increased abdominal pain in ulcerative colitis patients or development of ulcerative colitis and regional ileitis; gastritis may persist after the cessation of the drug; nausea, vomiting, anorexia, epigastric distress, abdominal pain, and diarrhea.

Eye Reactions: Corneal deposits and retinal disturbances, including those of the macula, have been observed on prolonged therapy; blurring of vision.

Hepatic Reactions: Rarely, toxic hepatitis and jaundice, including some fatal cases.

Hematologic Reactions: Aplastic anemia, hemolytic anemia, bone marrow depression, agranulocytosis, leukopenia, and thrombocytopenic purpura may occur rarely. Since some patients manifest anemia secondary to obvious or occult gastrointestinal bleeding, appropriate blood determinations are recommended.

Hypersensitivity Reactions: Acute respiratory distress, a rapid fall in blood pressure resembling a shock-like state, angioedema, dyspnea, asthma, angiitis, pruritus, urticaria, skin rashes, purpura.

Ear Reactions: Hearing disturbances—deafness reported rarely; tinnitus.

Central Nervous System Reactions: Psychic disturbances including psychotic episodes, depersonalization, depression, and mental confusion; coma; convulsions; peripheral neuropathy; drowsiness; lightheadedness; dizziness; syncope; headache.

Cardiovascular-Renal Reactions: Edema, elevation of blood pressure, hematuria.

Dermatologic Reactions: Loss of hair, erythema nodosum.

Miscellaneous: Rarely, vaginal bleeding, hyperglycemia, glycosuria, ulcerative stomatitis, and epistaxis.

Supplied: Capsules containing 25 mg indomethacin each, in single-unit packages of 100 and bottles of 100 and 1000; capsules containing 50 mg indomethacin each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

Correspondence

ALLERGIC REACTIONS TO CHOCOLATE

To the Editor:

I am interested in finding the incidence of allergic reactions to chocolate because of a recent query I received from a chocolate manufacturer.

I would appreciate hearing from physicians the estimated number of their patients allergic to chocolate, and the symptoms produced. I would also like to receive specific case reports, results of laboratory tests and any other comments on the subject.

Please send this information to:

CLAUDE A. FRAZIER, M.D., P.A.
Doctors Park — Bldg. 4
Asheville, North Carolina 28801

Committees and Organizations

MEDICAL SYMPOSIA AND OTHER CONTINUING MEDICAL EDUCATION EXPERIENCES OFFERED ANNUALLY IN NORTH CAROLINA

Chronological List*

January

Annual Postgraduate Course in Medicine, First District, North Carolina Medical Society [25]
Annual Surgical Symposium (*Title*)** [30]
North Carolina Medical Society Conference for Medical Leadership [53]

February

Annual John W. Umstead Distinguished Lecture Series [15]
Annual Workshop on Fluid and Electrolyte Balance [34]
Second District (North Carolina Medical Society) Annual Meeting [64]
Wingate Johnson Memorial Lecture [69]

March

Annual E. C. Hamblen Symposium on Reproductive Biology and Family Planning [12]
Annual Frank R. Lock Ob/Gyn Symposium [14]
Annual Radiology Symposium [26]
Annual Wilson Memorial Hospital Postgraduate Symposium (*Title*) [31]
Greensboro Academy of Medicine (#) Annual Medical Symposium [43]
Internal Medicine Annual Symposium [44]
North Carolina League for Nursing Annual Meeting [50]
Annual Duke Radiology "Tutorial" Postgraduate Course [40A]

April

American College of Surgeons, North Carolina Chapter, Annual Meeting [2]
Annual Arthritis Symposium [5]
Annual Meeting of the North Carolina Thoracic Society [21]
Annual Pediatrics Symposium [24]
Craven-Pamlico-Jones Annual Medical Symposium [38]
Joseph W. Hooper Memorial Lecture [45]
Southeastern Regional Meeting of American Group Practice Association [66]

May

(#) Annual Duke-McPherson Otolaryngology Symposium [9]
Annual Meeting and Scientific Session, North Carolina Heart Association [18]
Annual Meeting, North Carolina Affiliate, American Diabetes Association [19]
Breath of Spring (year), Respiratory Care Symposium [36]
Dermatology Section Annual Meeting, North Carolina State Medical Society [39]
North Carolina Medical Society (#) Annual Session [52]

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*The number in brackets at the end of each title refers to the number of that item on the alphabetical list. The source of additional information is given on the alphabetical list

**The designations "(#)", "(title)", or "(year)" indicate that this additional information is included each year as part of the full title of that respective year's meeting

June

Baptist Medical Symposium [35]

Mountaintop Medical Assembly [46]

North Carolina Hospital Association Annual Meeting [49]

Seaboard Medical Association (of Virginia and North Carolina). Annual Meeting [63]

July

Annual Duke Medical Postgraduate Course [10]

Annual Meeting of the Southern Obstetric & Gynecological Seminar, Inc. [23]

Annual Sports Medicine Symposium [28]

Annual Duke Radiology Postgraduate Course [40B]

August

Annual Beach Workshop [6]

September

(#) Annual Angus M. McBryde Perinatal Symposium [3]

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and the North Carolina Pediatric Society [22]

Annual Seminar in Medicine [27]

North Carolina Association of Blood Bankers Annual Convention [48]

North Carolina Medical Society Annual Committee Conclave [51]

North Carolina Office of Emergency Medical Services Annual Meeting [56]

Walter L. Thomas Symposium on Gynecological Malignancy and Surgery [68]

October

Annual Charlotte Postgraduate Seminar [8]

Annual Duke Symposium on Orofacial Anomalies [11]

Annual Fall Meeting, North Carolina Society of Internal Medicine [13]

Annual Winston-Salem Heart Symposium [32]

Clinical Urology Symposium [37]

Fourth District (North Carolina Medical Society) Annual Meeting [42]

North Carolina Orthopedic Association Annual Meeting [57]

Raleigh Academy of Medicine (#) Annual Clinical Symposium [62]

Annual Duke Radiology Postgraduate Course [40C]

November

Annual Arthritis Symposium [4]

North Carolina Academy of Family Physicians Annual Scientific Assembly [47]

December

American College of Physicians — North Carolina Society of Internal Medicine Annual Meeting [1]

Annual Staff Meeting, Depts. of Ophthalmology, N.C. Memorial Hospital-McPherson Hospital [29]

Annual Workshop in Family Medicine [33]

(#) North Carolina Postgraduate Course on Pulmonary Disease [58]

Spring

Annual Malignant Disease Symposium [17]

North Carolina Obstetrical & Gynecological Society Annual Spring Meeting [55]

Perinatology Postgradaute Course [60]

Southeastern Neuropsychiatric Association Annual Meeting [65]

Fall

Annual Cancer Symposium [7]

Annual Joint Meeting of the North Carolina & South Carolina Societies of Ophthalmology & Otolaryngology [16]

Fifth District (North Carolina Medical Society) Annual Meeting [41]

North Carolina Neuropsychiatric Association [54]

North Carolina Society of Anesthesiology Annual Meeting [59]

Public Health & Education Section Meeting [61]

(#) State Workshop on Clinical Hypnosis [67]

Spring, Summer, Fall

Duke Radiology Postgraduate Courses [40]

Alphabetical List

1. American College of Physicians — North Carolina Society of Internal Medicine Annual Meeting (Dec.)
   For information: John T. Sessions, Jr., M.D., Dept. of Medicine, UNC School of Medicine, Chapel Hill 27514
2. American College of Surgeons, North Carolina Chapter, Annual Meeting (April)
   For information: James S. Mitchener, Jr., M.D., Box 1599, Laurinburg 28352
3. *(#) Annual Angus M. McBryde Perinatal Symposium (Sept.)
   For information: Lillian R. Blackmon, M.D., Asst. Professor of Pediatrics, Box 3936, Duke University Medical Center, Durham 27710
4. Annual Arthritis Symposium (Nov.)
   For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
5. Annual Arthritis Symposium (April)
   For information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514
6. Annual Beach Workshop (Aug.)
   For information : Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
7. Annual Cancer Symposium (Fall)
   For information: Benjamin S. Shepard, Cancer Program Manager, Division of Health Services, Chronic Disease Branch, Box 2091, Raleigh 27602
8. Annual Charlotte Postgraduate Seminar (Oct.)
   For information: David S. Citron, M.D., 1012 Kings Drive, Charlotte 28283

*The number in brackets at the end of each title refers to the number of that item on the alphabetical list. The source of additional information is given on the alphabetical list. The designations "(#)", "(title)", or "(year)" indicate that this additional information is included each year as part of the full title of that respective year's meeting.

9. (#) Annual Duke-McPherson Otolaryngology Symposium (May)
   For information: Joseph Farmer, M.D., Box 3805, Duke University Medical Center, Durham 27710
10. Annual Duke Medical Postgraduate Course (July)
    For information: William DeMaria, M.D., Department of Pediatrics, Box 2991, Duke University Medical Center, Durham 27710
11. Annual Duke Symposium on Orofacial Anomalies (Oct.)
    For information: Raymond Massengill, Jr., Ed.D., Department of Surgery, Duke University Medical Center, Durham 27710
12. Annual E. C. Hamblen Symposium in Reproductive Biology and Family Planning (March)
    For information: Charles B. Hammond, M.D., Box 3143, Duke University Medical Center, Durham 27710
13. Annual Fall Meeting, North Carolina Society of Internal Medicine (Oct.)
    For information: Mrs. Jackie Cutrell, North Carolina Society of Internal Medicine, P.O. Box 27167, Raleigh 27611
14. Annual Frank R. Lock Ob/Gyn Symposium (March)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
15. Annual John W. Umstead Distinguished Lecture Series (Feb.)
    For information: Mrs. Pauline Woods, Coordinator of Training, Division of Mental Health Services, 325 North Salisbury Street, Raleigh 27611
16. Annual Joint Meeting of the North Carolina & South Carolina Societies of Ophthalmology & Otolaryngology (Fall)
    For information: William W. Satterwhite, M.D., Secretary-Treasurer, North Carolina & South Carolina Societies of Ophthalmology & Otolaryngology, 1420 Plaza Drive, Winston-Salem 27103
17. Annual Malignant Disease Symposium (Spring)
    For information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514
18. Annual Meeting and Scientific Session, North Carolina Heart Association (May)
    For information: Mr. James Street, North Carolina Heart Association, #1 Heart Circle, Chapel Hill 27514
19. Annual Meeting, North Carolina Affiliate, American Diabetes Association (May)
    For information: Mr. John A. Laurents, Executive Director, North Carolina Affiliate, American Diabetes Association, 408 North Tryon Street, Charlotte 28202
20. Annual Meeting of the American Association of Medical Assistants, North Carolina State Society
    For information: Ms. Jean Hathaway, CMA, President, North Carolina State Society of the American Association of Medical Assistants, 1107 Kenwick Place, Apt. 3, Monroe 28110
21. Annual Meeting of the North Carolina Thoracic Society (April)
    For information: Mr. C. Scott Venable, Executive Director, North Carolina Lung Association, P.O. Box 127, Raleigh 27602
22. Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and the North Carolina Pediatric Society (Sept.)
    For information: Mrs. John McLain, Executive Secretary, 3209 Rugby Road, Durham 27707
23. Annual Meeting of the Southern Obstetric & Gynecological Seminar, Inc. (July)
    For information: W. Otis Duck, M.D., Treasurer, Southern Obstetric & Gynecological Seminar, Inc., Drawer F, Mars Hill 28754
24. Annual Pediatrics Symposium (April)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
25. Annual Postgraduate Course in Medicine, First District, North Carolina Medical Society (Jan.-Feb.) (weekly for six weeks)
    For information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932
26. Annual Radiology Symposium (March)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
27. Annual Seminar in Medicine (Sept.)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
28. Annual Sports Medicine Symposium (July)
    For information: Frank C. Wilson, M.D., Division of Orthopaedics, North Carolina Memorial Hospital, Chapel Hill 27514
29. Annual Staff Meeting, Depts. of Ophthalmology, N.C. Memorial Hospital-McPherson Hospital (Dec.)
    For information: S. D. McPherson, Jr., M.D., Chairman, McPherson Hospital, 1110 West Main Street, Durham 27701
30. Annual Surgical Symposium (*Title*) (Jan.)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
31. Annual Wilson Memorial Hospital Postgraduate Symposium (*Title*) (March)
    For information: A. Tyson Jennette, M.D., Wilson Memorial Hospital, 1705 Tarboro Street, Wilson 27893

32. Annual Winston-Salem Heart Symposium (Oct.)
    For information: Mrs. Betty Cauthen, Executive Director, Forsyth County Heart Association, 2046 Queen Street, Winston-Salem 27103
33. Annual Workshop in Family Medicine (Dec.)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
34. Annual Workshop on Fluid and Electrolyte Balance (Feb.)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
35. Baptist Medical Symposium (June)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
36. Breath of Spring (*year*), Respiratory Care Symposium (May)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
37. Clinical Urology Symposium (Oct.)
    For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103
38. Craven-Pamlico-Jones Annual Medical Symposium (April)
    For information: Zack J. Waters, Jr., M.D., Box 1089, New Bern 28560
39. Dermatology Section Annual Meeting, North Carolina Medical Society (May)
    For information: Elizabeth Kanof, M.D., 1300 St. Mary's Street, Raleigh 27605
40. Duke Radiology Postgraduate Courses (Spring, Summer, Fall)
    40A. March: Annual Duke Radiology "Tutorial" Postgraduate Course
    40B. July: Annual Duke Radiology Postgraduate Course
    40C. October: Annual Duke Radiology Postgraduate Course
    For information: Robert McLelland, M.D., Radiology Department, Box 3808, Duke University Medical Center, Durham 27710
41. Fifth District (North Carolina Medical Society) Annual Meeting (Fall)
    For information: Hugh A. McAllister, M.D., 2702 Shaw Avenue, Lumberton 28358
42. Fourth District (North Carolina Medical Society) Annual Meeting (Oct.)
    For information: Robert Hadley, M.D., President, Wilson Memorial Hospital, Wilson 27893
43. Greensboro Academy of Medicine (#) Annual Medical Symposium (March)
    For information: Samuel A. Sue, Jr., M.D., 1311 North Elm Street, Greensboro 27401
44. Internal Medicine Annual Symposium (March)
    For information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514
45. Joseph W. Hooper Memorial Lecture (April)
    For information: James S. Mitchener, Jr., M.D., Box 1599, Laurinburg 28352
46. Mountaintop Medical Assembly (June)
    For information: R. Stuart Roberson, M.D., Box 307, Hazelwood 28738
47. North Carolina Academy of Family Physicians Annual Scientific Assembly (Nov.)
    For information: Edwin P. Davis, Executive Director, North Carolina Academy of Family Physicians, 1002 Wake Forest Road, Raleigh 27604
48. North Carolina Association of Blood Bankers Annual Convention (Sept.)
    For information: Roy A. Weaver, M.D., Cape Fear Valley Hospital, P.O. Box 2000, Fayetteville 28302
49. North Carolina Hospital Association Annual Meeting (June)
    For information: Mrs. Diane Turner, North Carolina Hospital Association, Box 10937, Raleigh 27605
50. North Carolina League for Nursing Annual Meeting (March)
    For information: North Carolina League for Nursing, Box 10683, Raleigh 27605
51. North Carolina Medical Society Annual Committee Conclave (Sept.)
    For information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611
52. North Carolina Medical Society (#) Annual Session (May)
    For information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611
53. North Carolina Medical Society Conference for Medical Leadership (Jan.)
    For information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611
54. North Carolina Neuropsychiatric Association (Fall)
    For information: Mrs. Jackie Harper, Executive Secretary, North Carolina Neuropsychiatric Association, P.O. Box 6507, Raleigh 27608
55. North Carolina Obstetrical & Gynecological Society Annual Spring Meeting (Spring)
    For information: R. Pinkney Rankin, Jr., M.D., 1851 East Third Street, Suite 102, Charlotte 28204
56. North Carolina Office of Emergency Medical Services Annual Meeting (Sept.)

For information: Mr. Chris A. Gentile, N.C. Office of Emergency Medical Services, Division of Facility Services, Raleigh 27611

57. North Carolina Orthopaedic Association Annual Meeting (Oct.)
For information: Cecil H. Neville, Jr., M.D., Pinehurst Surgical Clinic, Pinehurst 28374

58. (#) North Carolina Postgraduate Course on Pulmonary Disease (Dec., bi-annual, even years)
For information: Mr. C. Scott Venable, Executive Director, North Carolina Lung Association, P.O. Box 127, Raleigh 27602

59. North Carolina Society of Anesthesiology Annual Meeting (Fall)
For information: H. A. Ferrari, M.D., Department of Anesthesiology, Charlotte Memorial Hospital, P.O. Box 2554, Charlotte 28201

60. Perinatology Postgraduate Course (Spring)
For information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

61. Public Health & Education Section Meeting (Fall)
For information: J. N. MacCormack, M.D., Chairman, Section on Public Health & Education, Box 2091, Raleigh 27602

62. Raleigh Academy of Medicine (#) Annual Clinical Symposium (Oct.)
For information: E. L. Pierce, M.D., Secretary, Raleigh Academy of Medicine, 1110 Wake Forest Road, Raleigh 27604

63. Seaboard Medical Association (of Virginia and North Carolina) Annual Meeting (June)
For information: Mrs. Annette S. Boutwell, P.O. Box 10387, Raleigh 27605

64. Second District (North Carolina Medical Society) Annual Meeting (Feb.)
For information: Charles P. Nicholson, Jr., M.D., 3108 Arendell St., Suite #6, Morehead City 28557

65. Southeastern Neuropsychiatric Association Annual Meeting (Spring)
For information: Robert L. Green, Jr., M.D., Chief of Staff, Veterans Administration Hospital, Durham 27705

66. Southeastern Regional Meeting of American Group Practice Association (April)
For information: Luther W. Kelly, Jr., M.D., Nalle Clinic, 1350 South Kings Drive, Charlotte 28207

67. (#) State Workshop on Clinical Hypnosis (Fall)
For information: Troy Sluder, D.D.S., Secretary, N.C. Society for Clinical Hypnosis, 208 Brauer Hall, University of North Carolina, Chapel Hill 27514

68. Walter L. Thomas Symposium in Gynecologic Malignancy and Surgery (Sept.)
For information: William T. Creasman, M.D., Director, Gynecologic Oncology, Box 3079, Duke University Medical Center, Durham 27710

69. Wingate Johnson Memorial Lecture (Feb.)
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

—Committee on Medical Education
Albert N. Chasson, M.D., Chairman

Bulletin Board

NEW MEMBERS
of the State Society

Chase, Robert Eugene, MD (AN), 903 Kemp Road, West, Greensboro 27401
Clark, Patrick F., MD (GP), (RENEWAL) P.O. Box 369, Murphy 28906
Craig, Isaac Alan, MD (PTH), 807 West Road, Kinston 28501
Dhillon, Tejpac Singh, MD (ORS), P.O. Box 1688, Smithfield 27577
Dolcourt, John Lawrence, MD (INTERN-RESIDENT), 1907 Ephesus Church Road, Chapel Hill 27514
Fitts, Vlad, MD (INTERN-RESIDENT), 191 Dalewood Dr. Apt. 2, Winston-Salem 27104
Laupus, William Edward, MD (PD), 218 Country Club Dr., Greenville 27834
Lorenzo, Luisa Almedia (STUDENT), 7 E. Berkshire Manor Apts., Carrboro 27510
Mayhew, James Franckle, MD (AN), Duke Medical Center, Durham 27710
Mohamed, Adel Wagdi, MD (U), 415 North 7th St., Smithfield 27577
Neal, James Earl, MD (IM), 469 Hosp. Dr., Suite B, Gastonia 28052
Newman, Kurt Douglas (STUDENT), Route #2, Box 291, Chapel Hill 27514
Parmelee, Warren Earl, MD (EM), 404 Woodview Circle, Goldsboro 27530
Reddy, Amarendra Busa, MD (C), Ste. 220, 1300 St. Mary's St., Raleigh 27605
Skolochenko, Michael, MD (FP), General Delivery, Rutherford College
Stover, John Oliver, Jr., MD (R), 145 Steeplechase Road, Rocky Mount 27801
Tolliver, James Bert, MD (FP), 510-A Turner St., Thomasville 27360
Tolmie, John, MD (RENEWAL), 1543 Abbey Court, Winston-Salem 27103
Weaver, Michael David, MD (DR), 1711 W. Sixth St., Greenville 27834
Winfield, Heber Grey, III, MD (ORS), Fairgrove Church Road, Catawba Medical Center, Hickory 28601

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

September 10-11

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society
Place: Pinehurst Hotel, Pinehurst
For information: Mrs. John McLain, Executive Secretary, 3209 Rugby Road, Durham 27707

September 13-15

Emergency Medicine Today
Place: Great Smokies Hilton, Asheville
Fee: $35 (includes banquet)
For information: Mr. Chris A. Gentile, N.C. Office of Emergency Medical Services, Division of Facility Services, Raleigh 27611

September 13-17

Postgraduate Course in Hand Rehabilitation
Sponsor: Office of Continuing Education, UNC School of Medicine
For information: Irene Hollis, O.T., Box 45, North Carolina Memorial Hospital, Chapel Hill, 27514

September 15

Oncology Workshop
Place: Allied Health Auditorium, Belk Building, South Charles St.
Sponsors: American Cancer Society, Adria Laboratories, Inc., Duke University Comprehensive Cancer Center, Eastern Area Health Education Center
Fee: $5
Credit: 7 hours AAFP, .7CEUs, Division of Continuing Education
For information: F. M. Simmons Patterson, M.D., Executive Director, Eastern AHEC, P.O. Box 3157, Greenville 27834

September 15-16

21st Annual Angus M. McBryde Perinatal Symposium
Fee: $50
Credit: 12 hours; AAFP approval requested
For information: Lillian R. Blackmon, M.D., Box 3936, Duke University Medical Center, Durham 27710

September 16-18

Selected Topics in Internal Medicine
Fee: $125
Credit: 15 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

September 16-19

Invitational Assembly for Advanced Urology: The Prostate
Place: Pinehurst Hotel & Country Club, Pinehurst
Fee: $135; registration is limited; pre-registration required
Credit: 18 hours
For information: Ms. Virginia Jordan, Assembly Secretary, P.O. Box 3707, Duke University Medical Center, Durham 27710

September 17-18

6th Walter L. Thomas Symposium
Credit: 12 hours
For information: William Creasman, M.D., P.O. Box 3079, Duke University Medical Center, Durham 27710

September 22-26

North Carolina Medical Society Annual Committee Conclave
Place: Mid-Pines Club, Southern Pines
Regular meetings will be scheduled for the chairman and members of almost all regular committees of the Medical Society. Committee members should plan to be present if at all possible

For information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

September 23-25

Seminar and Workshops: Immunohematology
Place: Sheraton Crabtree Motor Inn, Crabtree Valley Mall, Raleigh
Sponsor: North Carolina Association of Blood Bankers (Fourth Annual Convention)
Fee: $15
For information: Roy A. Weaver, M.D., Pathology Department, Box 2000, Cape Fear Valley Hospital, Fayetteville 28303

September 30

Effective Treatment of Psychosomatic Problems
Place: Country Club of Southern Pines (Elks Club) (dinner 6:30; speaker 8:15)
Sponsors: Moore Memorial Hospital and UNC Office of Continuing Education
Fee: $11.50 (includes dinner)
Credit: 2 hours; AMA category I; AAFP approved
For information: C. H. Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

September 30-October 2

Dermatology for Non-Dermatologists
Fee: $125
Credit: 17½ hours
For information: Gerald Lazarus, M.D., Box 2987, Duke University Medical Center, Durham 27710

October 1-2

Clinical Urology
Fee: $75
Credit: 12 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 2

New Developments in the Control of Sexually Transmitted Diseases
Place: Berryhill Hall
Sponsors: U.N.C. School of Medicine, Department of Medicine, American Social Health Assoc., American Veneral Disease Assoc., and North Carolina Medical Society
Fee: $25; registration limited to 200
Credit: 7 hours AAFP approval requested
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, U.N.C. School of Medicine at Chapel Hill, 27514

October 6-7

Sixteenth Annual Charlotte Post Graduate Seminar
Place: Charlotte Memorial Hospital and Medical Center Auditorium
Sponsors: Mecklenburg Chapter North Carolina Academy of Family Physicians; Mecklenburg County Medical Society
Credit: 12 hours; AAFP approved
For information: David S. Citron, M.D., 1012 Kings Drive, Suite 1024, Charlotte 28283

October 8

Diabetes Symposium
For information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill, 27514

October 22

Forsyth County Heart Association meeting
For information: Division of Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 27

Treatment of Acute Alcoholism, Including DT's
Place: Country Club of Southern Pines (Elks Club) (dinner 6:30; speaker 8:15)
Sponsors: Moore Memorial Hospital and UNC Office of Continuing Education
Fee: $11.50 (includes dinner)
Credit: 2 hours; AMA category 1; AAFP approved
For information: C. H. Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

October 29-30

Alumni Meeting Scientific Sesssion
Credit: 5 hours; AAFP approval requested
For information: Emery C. Miller, Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 29-30

Anesthesiology Fall Seminar — "Safe Anesthesia"
Place: The Sheraton Center, Charlotte
Sponsors: Department of Anesthesiology, Charlotte Memorial Hospital; Department of Anesthesiology, North Carolina Memorial Hospital, Chapel Hill; North Carolina Society of Anesthesiologists
Fee: Physicians $55; Nurse Anesthetists $45; Residents and Nurse Anesthetists in training $30; registration for one day only, $30
Credit: 10 hours; AMA Category I
For information: H. A. Ferrari, M.D., Chairman, Department of Anesthesiology, Charlotte Memorial Hospital, Charlotte 28234

October 30-31

Dermatology for the Non-Dermatologist
Place: Blockade Runner, Wrightsville Beach
Fee: $50
Credit: 7 hours; AAFP approval requested
For information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

October 31-November 2

North Carolina and South Carolina Society of Ophthalmology and Otolaryngology Annual Meeting
Place: Pinehurst Hotel, Pinehurst
For information: William M. Satterwhite, Jr., M.D., 1420 Plaza Drive, Winston-Salem 27103

November 5

Third Annual Arthritis Symposium: Therapy of the Rheumatic Diseases
Fee: $35
Credit: 7 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

December 3-4

Second Annual Family Medicine Workshop
Fee: $100
Credit: 9 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 12

First District Medical Society Postgraduate Course in Medicine (the first of six weekly sessions)
Sponsors: First District Medical Society and the Office of Continuing Education, UNC School of Medicine
Fee: To be determined
Credit: 12 hours
For information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932

January 21-22

Current Surgical Problems
Fee: $100
Credit: 12 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 16

Wingate Johnson Memorial Lecture
Speaker: Eugene Braunwald, M.D., Harvard Medical School
Credit: 2 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 23-26

Workshop: Electrolyte and Acid-Base Disorders
Fee: $150
Credit: 21 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

ITEMS OF SPECIAL INTEREST

October 18

Nursing and Allied Health Aspects of Care
Place: Elks Club, Southern Pines
Sponsors: North Carolina Heart Association, Inc.; Fayetteville Area Health Education Center; Moore Memorial Hospital, Inc.; Kate B. Reynolds Health Care Trust; North Carolina Regional Medical Program
Fee: $8.50; pre-registration required
Credit: 6 continuing education credits applied for
For information: Moore Memorial Hospital, P.O. Box 3000, Pinehurst 28374, Attention — Beverly Graham, R.N.

October 25-29

New Concepts in General Radiology
Place: Southampton Princess Hotel, Bermuda
Fee: $250
Credit: 25 hours
Program: The scientific program will take place from 8:00 A.M. to 1:00 P.M. each day, and will be organized around a disease oriented format. Subject areas and guest faculty who will address these include: chest — Robert Heitzman, M.D., Syracuse, New York; gastro-intestinal tract — Roscoe E. Miller, M.D., Indianapolis, Ind.; genito-urinary — John A. Evans, M.D., New York, N.Y.; nuclear medicine — Alexander Gottschalk, M.D., New Haven, Conn.; pediatric radiology — J. Scott Dunbar, M.D., Cincinnati, Ohio; skeletal system — Elias G. Theros, M.D., Washington, D.C.
For information: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham 27710

January 2-15

Second Medical Refresher Cruise Seminar—(Yucatan Peninsula, Coast of Guatemala — Colombia, Montego Bay)
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
Fee: Tuition $200; other fees dependent upon accommodations
Credit: 21½ hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

Instructional Materials Available on Problem-Oriented Medical Records

As part of a two-year project financed by the North Carolina Regional Medical Program, the UNC School of Nursing at Chapel Hill has developed two manuals designed to assist health personnel with implementation of the POMR system. These are:

—a Self-Instructional Manual on the basic components of POMR, designed for nurses (46 pages)
—Guidelines for Implementation of the POMRS (53 pages), which includes a bibliography on POMR, section on obstacles to implementation and questions.

The manuals are available for $1.00 each plus postage. A variety of videotapes demonstrating the use of POMR to nurses, slides and a film produced by Lawrence Weed, M.D., and associates on POMR, may be borrowed for training.

For more information contact: Ruth J. Harris, Assistant Professor, School of Nursing, UNC-CH, Chapel Hill 27514

Courses In Ultrasound

A series of three ten-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: September 27-December 3, 1976, January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category I.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem, North Carolina 27103.

PROGRAMS IN CONTIGUOUS STATES

September 3

4th Annual Cardiac Rehabilitation Workshop
For information: Gerald F. Fletcher, M.D., Georgia Baptist Medical Center, 300 Boulevard NE, Atlanta, Georgia 30312

September 16-18

2nd Annual Postgraduate Course in Adolescent Medical and Social Problems
Place: Richmond Hyatt House, Richmond, Virginia
Sponsor: Section of Adolescent Medicine — Department of Pediatrics, Medical College of Virginia, Virginia Commonwealth University
Fee: $80; enrollment limited to 75
Credit: 15 hours; AAFP approved
For information: Dr. George M. Bright, Medical College of Virginia, Box 151, Richmond, Virginia 23298

September 23

Diabetes 1976
Sponsors: Division of Endocrinology and Metabolism, and the Department of Continuing Education
Fee: Physicians, $30; visiting interns and residents, nurses, dietitians, and other health personnel, $10; enrollment limited to 275
Credit: 6¼ hours; AMA Category 1; AAFP approval requested
For information: Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, MCV Station, Richmond, Virginia 23298

September 26-October 2

Practicing Physicians Review Course
Place: Kiawah Island Inn
Program: Topics will include internal medicine, pediatrics, surgery, psychiatry and community health.
Fee: $150, payable on or before September 12; enrollment limited to 75
Credit: 40 hours AAFP and "AMA-PRA" for full-time attendance
For information: Vince Moseley, M.D., Director, Division of Continuing Education, Medical University of South Carolina, 80 Barre Street, Charleston, South Carolina 29401

October 18-20

Cancer Concepts 1976
Place: Gatlinburg, Tennessee
Sponsors: East Tennessee Cancer Research Center, Knoxville

Academy of Medicine and University of Tennessee Center for the Health Sciences/Knoxville
Program: "Using three types of cancers as focal points, breast, lung and gastrointestinal, topics such as xeromammography, sputum cytology, hormone receptors and adjuvant therapy will be explored."
For information: Muriel B. Levin, Associate Director for Education and Community Programs, East Tennessee Cancer Research Center, IBM Building Suite 201, 9040 Executive Park Drive, Knoxville, Tennessee 37919

October 24-28

Annual Meeting, American College of Chest Physicians
Place: Atlanta, Georgia
For information: American College of Chest Physicians, 911 Busse Highway, Park Ridge, Illinois 60068

November 15-18

61st Annual International Scientific Assembly of Interstate Postgraduate Medical Association
Place: Atlanta Marriott Hotel, Atlanta, Georgia
Program: ". . . major emphasis in family practice, internal medicine, obstetrics and gynecology and psychiatry."
Sponsors: Interstate Postgraduate Medical Association of North America; Georgia Academy of Family Physicians; Emory University School of Medicine; Medical College of Georgia
Fee: $50 in advance or $75 at the meeting; open to any licensed physician in the U.S. or Canada
For information: Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, Wisconsin, 53701

December 7-10

Structure-Function Correlations in Cardiovascular Disease
Place: Williamsburg Lodge, Williamsburg, Virginia
Fee: members $100; non-members $150
Credit: AMA category 1
For information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

The items listed in the above column are for the six months immediately following the month of publication. Requests for listing should be received by "WHAT? WHEN? WHERE?", P.O. Box 27167, Raleigh 27611, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

Our membership is at an all-time high—2,929. Our membership to national is 2,871 and we have 11 members at large.

Of the 100 counties in our state, 70 counties are organized into 51 auxiliaries. One county reorganized this year.

We sponsor two state projects and one of them is the Student Loan Fund. We have given six student loans of $500 each since June 1, 1975. As of June 30, we have 65 loans outstanding and none are past due. Twenty-two county auxiliaries have contributed $1,202 to the Student Loan Fund this year.

Our other state project is AMA-ERF. As of this date, we have sent $20,894.24 from North Carolina to AMA-ERF. The Medical Headquarters has recently received checks from AMA-ERF to be given to the medical schools in North Carolina: $8,944.79 to UNC; $9,501.05 to Bowman Gray; $8,351.95 to Duke; and $986.35 to East Carolina.

Our legislative chairman worked closely with Steve Morrisette on all legislative matters and has tried to keep us up to date on the malpractice issue and other issues. We have encouraged members to write their senators and representatives about the malpractice issue.

There has been much emphasis on health education and family and community health this year. One of the most effective ways of educating the student today in health education is through visual aids. We find that health fairs and health museums are effective ways of educating both families and communities. Approximately 2,850 fourth and fifth graders have been exposed to some form of health education by attending health fairs. Approximately 9,000 high school students have attended lectures and seen visual aids in the two health museums — one in Mecklenburg County and the other in Buncombe. Approximately 36 Health Career Clubs involve 1,236 students. Forty-five scholarships totaling $13,944 and seven loans totaling $1,875 have been given this year by the auxiliaries in this state. A committee of five from the medical society and auxiliary are working with the Department of Public Instruction in giving suggestions for improving health education in our school systems.

Auxiliaries across the state have become involved in the community by presenting many kinds of health programs. There is much interest in the child abuse program and one county has done a tremendous job in

informing the public of this problem. Many counties have helped with detection clinics such as Pap smears, breast self-examination, hearing, vision, learning disabilities and blood pressure. They have worked with bloodmobiles, the mentally retarded and Gems, a babysitting course for junior high students. They are not only involved in making their communities better places to live but are creating a better relationship between medical families and the communities they serve.

In keeping with the nation's 200th birthday, we have encouraged auxiliaries to bring their histories up to date and to help the medical societies do theirs. We have asked that a special program be given during the year on local medical history — or another project appropriate to the Bicentennial.

We will at all times try to help our physician husbands and their profession in every way we can. We are proud of our auxiliary and we hope you share this pride with us. We have strived to work together to serve as ambassadors for health and husbands, which has been my theme for the year. Incidentally, the term "physicians' wives" is becoming history. We have three male auxiliary members this year and are happy to have them. From here on out, we will be saying "physicians' spouses."

MRS. CHARLES HERRING
President, 1975-76

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

A Bowman Gray research team has produced evidence that the use of ultrasound increases the effectiveness of certain drugs in the treatment of leukemia in laboratory animals.

The study showed that ultrasound, used in combination with nitrogen mustard, brought about a significant increase in the survival time of mice which had been injected with leukemia cells.

Dr. Frederick W. Kremkau, reasearch assistant professor of medicine and director of the project, said that the ultrasound alone has no effect on the leukemia cell. However, for reasons yet undetermined, the use of ultrasound along with the chemotherapeutic agent, increases the uptake of the drug in the tumor cell.

In the leukemia cells treated with ultrasound, the uptake of the drug was twice that of cells which had not been exposed to ultrasound. "What this means," Kremkau said, "is that ultrasound has the same effect as doubling the drug dosage but without the harmful side effects." He explained that a double dose of the drug would elevate toxicity levels in the animals and would kill an increased number of normal cells.

The researchers have shown that it is possible to effect a 100 per cent cure of leukemia in laboratory animals with proper drug concentration and leukemia cell exposure to ultrasound.

* * *

Dr. Nat E. Smith, dean of Mercer University's developing medical school, has been named associate dean and professor of medicine at Bowman Gray.

Dr. Smith's primary responsibilities will relate to undergraduate medical education.

A former associate dean and professor of medicine at the University of Illinois College of Medicine, Dr. Smith was responsible there for planning and developing educational programs between the college of medicine and a new clinical school. He also served as coordinator of continuing education and special studies programs.

Other new members to the fulltime faculty include Dr. Thomas B. Cannon, instructor in family medicine; Dr. Robert G. Dillard, assistant professor of pediatrics; Dr. Alan Klein, instructor in radiology; Dr. Dan Wayne Laster, assistant professor of radiology (neuroradiology); Dr. William F. McGuirt, instructor in surgery (otolaryngology); Dr. Phillip H. McKinley, instructor in surgery (ophthalmology); Dr. Michael A. Moore, assistant professor of medicine (nephrology); Dr. Lewis H. Nelson, instructor in obstetrics and gynecology; and Dr. Joseph Nicastro, instructor in surgery (orthopedic surgery).

Also, Dr. Gary G. Poehling, instructor in surgery (orthopedic surgery); Dr. James C. Rose, assistant professor of physiology; Dr. Chirapa Sinthusek, assistant professor of medicine (general medicine and endocrinology); Dr. Peter B. Smith, assistant professor of biochemistry; Dr. Thomas E. Sumner, assistant professor of radiology and assistant professor of pediatrics; and Dr. John James Stuart, assistant professor of medicine (hematology/oncology).

Receiving appointments to the parttime faculty were Dr. John A. Brabson, clinical assistant professor of surgery; Dr. Ray L. Green, clinical instructor in obstetrics and gynecology; and Dr. Frank B. Hughes, clinical instructor in pediatrics.

* * *

Dr. William A. Brady, instructor in neurology, has received the 1976 North Carolina Heart Achievement Recognition Award. The award is presented for continued leadership in the North Carolina Heart Association.

* * *

Bowman Gray has been awarded a $9,501 grant by the American Medical Association Education and Research Foundation.

The grant is unrestricted and can be used at the discretion of the medical school. The most common uses are for student assistance and faculty development.

Money donated by the AMA foundation comes primarily from the physicians and medical auxilaries

throughout the nation. The foundation support is a major project of the Woman's Auxiliary of the AMA to the North Carolina Medical Society.

Bowman Gray has received $131,672 through the AMA foundation since 1957.

* * *

Twelve students at Bowman Gray have received grants to conduct research this summer at the medical school.

The 12 are Robert Patrick Yeatts of Winston-Salem; Mary V. Daly of Whispering Pines; Danny M. Honeycutt of Concord; Nicholas P. Christoff of Tonawanda, N.Y.; Philip Katz of New York City; Gayla Lowery of Shelby; Rodney Marriott of Rigby, Idaho; Richard A. Black of Worthington, Ohio; Nicholas P. Iannuzzi III of Medford, N.J.; G. Keith Bryson of Spruce Pines; William D. Leak of Garner; and Daniel F. Stroup of Cherryville.

* * *

Dr. A. Robert Cordell, professor of surgery, has been elected a member of the International Society of Surgery.

* * *

Dr. Robert W. Cowgill, professor of biochemistry, has been appointed to a three-year term on the board of editors of *Biochemica Biophysica Acta*.

* * *

Dr. Carol Cunningham, associate professor of biochemistry, has been named a scientific consultant to the North Carolina Alcoholism Research Authority.

* * *

Dr. Lawrence De Chatelet, associate professor of biochemistry, has been named a contributing editor to the fourth edition of the *Gould Medical Dictionary*.

* * *

Dr. Frank C. Greiss, professor and chairman of the Department of Obstetrics and Gynecology, has been appointed a council member of the American Gynecological Society.

* * *

Clyde T. Hardy, associate dean for patient services, is chairman of the Advisory Committee for the Association of American Medical College's Study of Medical Practice Plans.

* * *

Dr. Joseph E. Johnson III, professor and chairman of the Department of Medicine, has been appointed a member of the advisory panel for the Duke University/Price Waterhouse Study of Family Medicine Residency Programs. He also has received appointment to the Task Force on Manpower Needs in Internal Medicine of the Association of Professors of Medicine, and is a member of the planning committee for the third Postgraduate Course on Pulmonary Disease of the North Carolina Thoracic Society.

* * *

George Lynch, director of the Department of Audio-Visual Resources, has been elected treasurer and appointed to the board of governors for the Association of Medical Illustrators.

* * *

John E. Lynch, chief executive officer of North Carolina Baptist Hospital, has been appointed to a three-year term on the newly established North Carolina Health Coordinating Council.

* * *

Dr. C. Douglas Maynard, professor of radiology, recently was installed as vice president of the Society of Nuclear Medicine. He also has been appointed to the editorial board of the *Journal of Nuclear Medicine*.

* * *

Dr. James T. McRae, assistant professor of surgery, has been appointed to the National Faculty of the American Heart Association's CPR team.

* * *

Dr. Richard B. Patterson, professor of pediatrics, is chairman of the Committee on Childhood Cancer of the American Cancer Society.

* * *

Dr. Robert W. Prichard, professor and chairman of the Department of Pathology, has been elected secretary of the National Committee for Clinical Laboratory Standards.

* * *

Dr. Alfred J. Rufty, assistant professor of medicine, has been elected president-elect of the Forsyth County Heart Association.

* * *

Dr. Earl Watts, associate professor of medicine, recently received the Gold Service Recognition Medallion from the Forsyth County Chapter of the North Carolina Heart Association. He also has been elected to a three-year term on the board of directors of the Forsyth County Heart Association.

* * *

Dr. Kenneth R. Gallup, Chief Resident and Fellow in Pulmonary Disease, Department of Medicine, has been awarded a research grant by Southern Medical Association (SMA). Dr. Gallup is one of 25 researchers, selected from more than 100 applicants, to receive an SMA research grant this year. The grant will help to fund Dr. Gallup's project, The Relationship of Dose, Serum Level, and Bronchodilator Response with Oral Dyphylline in Asthmatic Subjects.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA
DIVISION OF HEALTH AFFAIRS

Dr. James W. Lea has been named director of the African Health Training Institutions Project (AHTIP) of the University of North Carolina at Chapel Hill.

Lea's appointment was announced by Dr. Tom Hall, director of the UNC-CH Carolina Population Center (CPC). The $3.2 million AHTIP program is administered by CPC and the Office of Medical Studies in the UNC-CH School of Medicine.

Lea has been acting director since July, 1975. He replaced Richmond K. Anderson who is affiliated now with the International Fertility Research Program in Chapel Hill.

AHTIP, funded by the U.S. Agency for International Development, was established three years ago to give African families better health care by enhancing teaching programs in African medical, nursing and midwifery schools. AHTIP also develops model family health curriculums, and provides special consultants in health training and fellowships to African faculty for short-term study.

Besides directing the AHTIP, Lea is associate director of the UNC-CH Clinical Cancer Education Program and assistant professor in the department of family medicine and Office of Medical Studies in the School of Medicine.

* * *

Everette J. Walton, Jr., M.D., of the department of medicine/endocrinology at UNC-CH has been awarded a research project grant by Southern Medical Association (SMA).

Dr. Walton is one of 25 researchers, selected from more than 100 applicants, to receive an SMA research grant this year. The grant will help to fund Dr. Walton's project, Role of 3′, 5′ cyclic monophosphate in Vitamin D-Stimulated Intestinal Calcium Absorption.

* * *

Dr. Roby C. Thompson, Jr., has been named the fifth R. Beverly Raney Visiting Professor in Orthopedic Surgery at the University of North Carolina School of Medicine at Chapel Hill.

The professor and chairman of orthopedic surgery at the University of Minnesota Health Sciences Center delivered the 1976 R. Beverly Raney Lecture on June 4. His topic was "The Management of Cervical Spine Fractures and Dislocations."

The Raney Lecture highlighted a three-day visit during which Dr. Thompson also conducted seminars on "Disorders of the Cervical Spine in Children" and on current concepts in the etiology of osteoarthritis.

Faculty Promotions

Effective July 1, new professors are: Svein U. Toverud, pharmacology and medicine, and department of oral diagnosis, School of Dentistry; Emily S. Barrow, pathology; George R. Breese, Jr., psychiatry and pharmacology; William E. Brenner and Jaroslav F. Hulka, obstetrics-gynecology; Frank S. French, pediatrics; Carl B. Lyle, Jr., medicine; Donald E. McMillan and Betsy J. Stover, pharmacology; Charles E. Morris, neurology and medicine; David A. Ontjes, medicine and pharmacology; Hubert C. Patterson, Jr., surgery; Philip F. Sparling, medicine and bacteriology-immunology; and Roger F. Spencer, psychiatry.

New associate professors, effective July 1 unless noted otherwise, are: Charles N. Carney, pathology (July 1, 1977); Thomas J. Wood, surgery (December 1, 1976); Chi-Bom Chae, biochemistry and nutrition; Gordon H. DeFriese, family medicine; Lester D. Grant, Raymond L. Paine, Jr., Carolyn S. Schroeder and Timothy C. Toomey (September 27, 1977) psychiatry; Richard P. McDonagh, Jr., and Paul Mushak, pathology; and David D. Raft, psychiatry and medicine.

New assistant professors are: William B. Hunter, psychiatry; Philip T. Johnson, pathology; Jeffrey C. Allen, pediatrics and neurology; Bruce R. Brodie, Susan S. Gustke, John T. Gwynne and Vernon B. Hunt, medicine; Rosemary Hunter, psychiatry and pediatrics; and Thomas M. Mettee, family medicine.

* * *

New Appointments — School of Medicine

Gary S. Berger, assistant professor, department of obstetrics and gynecology, is completing his last year of residency at the UNC School of Medicine. He received his A.B. from Harvard University and his M.D. from the University of Rochester School of Medicine.

Luz M. Estacio, assistant professor, department of anesthesiology, has been a fellow or an instructor at the UNC School of Medicine since 1969. A citizen of the Philippines, Estacio earned his B.S. from the University of the Philippines and his M.D. from Far Eastern University.

Mitchell Friedman, assistant professor, department of medicine, has been a pulmonary fellow at the Mt. Sinai Medical Center in Miami Beach for the past two years. He attended the University of Miami before receiving his M.D. from the School of Medicine there.

William H. McCartney, associate professor, department of radiology, has been chief of the Nuclear Medicine Clinic at the William Beaumont Army Medical Center for the past two years. He earned both his B.S. and M.D. degrees at Northwestern University.

John T. Cuttino, Jr., assistant professor, department of radiology, received his B.S. from Duke University and his M.D. from UNC-CH. For the past four years, he has been a resident and fellow at the Harvard Medical School.

John R. Perry, assistant professor, department of radiology, spent the past year as a fellow at N.C. Memorial Hospital. He earned his B.S. and M.D. degrees from the University of Tennessee.

* * *

Robert W. Heins has been named executive director of the Private Patient Service at the University of North Carolina School of Medicine at Chapel Hill. His appointment was effective July 1.

Heins, a native of New York, comes to UNC-CH from the University of Michigan Medical School where he has been director of the Medical Service Plan Office for the past year. From 1973 to 1974 he served as director of fiscal services at the North Carolina Memorial Hospital in Chapel Hill.

* * *

Dr. Michel A. Ibrahim has been appointed chairman of the department of epidemiology at the University of North Carolina School of Public Health at Chapel Hill.

He replaces Dr. John Cassel who retired from this position a year ago in order to return to teaching after 21 years as chairman.

"Dr. Ibrahim has made outstanding contributions to teaching and research in epidemiology since he joined the faculty of the school in 1971," said Dr. Bernard G. Greenberg, dean of the School of Public Health.

"On two previous occasions he has served as acting chairman. The school and the university are very fortunate to have someone of his professional reputation to assume leadership at this time."

Dr. Ibrahim received his M.D. degree from the University of Cairo, Egypt, and the M.P.H. degree in biostatistics and the Ph.D. in epidemiology from the University of North Carolina School of Public Health at Chapel Hill.

He is chairman of the editorial board of the American Journal of Public Health.

* * *

While serving as visiting professor of orthopaedic surgery at the University of Indiana School of Medicine recently, Dr. Frank C. Wilson delivered a lecture on "The Pathogenesis and Treatment of Injuries about the Ankle." Dr. Wilson is professor and chief of orthopaedic surgery here.

* * *

Dr. O. Dale Williams, assistant professor of biostatistics in the School of Public Health, has been elected to Fellowship in the Council on Epidemiology of the American Heart Association for his work in the international Lipid Research Clinics Program. Williams is director of the Lipid Program's Central Patient Registry and Coordinator Center, which is administered by the School of Public Health's de-

partment of biostatistics. The Lipid Program is attempting to measure blood lipid levels in selected population groups in 15 clinics in four countries and to test the theory that lowering cholesterol levels will reduce coronary heart disease.

* * *

A parasitologist from the University of North Carolina at Chapel Hill presided at the Fourth International Conference on Trichinellosis (trichinosis) in Poznan, Poland, in August.

Dr. John E. Larsh is president of the International Commission on Trichinellosis, an organization with members from 33 countries and the sponsor of the conference.

Larsh, professor and chairman of the UNC department of parasitology and laboratory practice, has been a faculty member at UNC-CH since 1943. He has devoted 33 years to research on trichinosis, a disease contracted by eating pork products that have not been cooked sufficiently. The disease is carried by a small parasitic trichina worm and can cause sterility in women, congestive heart failure and other diseases.

* * *

Dr. Walter E. Stumpf, professor of anatomy and pharmacology, recently presented a paper at the Symposium on the Pharmacology of Steroid Contraceptive Drugs in Milan, Italy. He was invited to speak on "Sites of Action of Contraceptive Steroids in the Central Nervous System."

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Duke's chairman of psychiatry believes that most drugs in use today in the treatment of mental illness have been discovered by chance and a considerable degree of luck.

In a book he recently co-authored, Dr. H. Keith Brodie expresses the hope that the new science of psycho-pharmacology will mean administration of drugs in an attempt to alter specific metabolic processes based on stated hypotheses rather than relying on discoveries achieved through empirical or serendipitous methods.

The book, a volume of the American Handbook of Psychiatry, also contains a chapter by Dr. Ewald W. Busse of Duke on "Social Changes, Economic Status and the Problems of Aging."

* * *

The AMA's Education and Research Foundation has given Duke an unrestricted grant of $8,351, bringing the total Duke has received from that source since 1957 to $146,609.

Dr. James J. Morris, Jr., associate professor of cardiology, has received the N.C. Heart Association's Silver Distinguished Service Medallion for his many years of service including last year's presidency.

Dr. W. Benson McCutcheon, Jr., assistant clinical professor of surgery, and Dr. Robert E. Whalen, professor of cardiology and director of the Cardiovascular Disease Service, were elected to the state association's board of directors.

* * *

Dr. Maurice B. Landers, III, associate professor of ophthalmology, was a panelist and guest speaker at the Virginia Oto-Ophthalmological Society Meeting. The titles of Landers' papers were "The Argon Laser: Its Use and Misuse" and "Vitrectomy 1976."

* * *

The Lions International Foundation became interested in heart research at Duke after sponsoring an Australian exchange student who was transferred to Duke from Oregon for treatment of Wolff-Parkinson-White Syndrome (WPW).

As a result, the foundation has made a grant of $3,600 to the Clinical Electrophysiology Laboratory to aid its research in refining procedures for diagnosis and treatment of WPW.

The first surgical technique for correcting WPW was developed at Duke, and the first WPW operation ever performed was done here in 1967. Since then approximately 60 have been performed at Duke.

* * *

Dr. Roscoe R. (Ike) Robinson, a professor of medicine and specialist in nephrology, is now associate vice president for health affairs to Dr. William G. Anlyan and chief executive officer of Duke Hospital. Both are new titles.

Anlyan said that Robinson will be responsible "not only for the overall operation of Duke Hospital, including the new Eye Center and services at Duke West (a ward of the hospital located in the Durham Rehabilitation Center), but also for administration and coordination of their interface with all clinical services and the other activities of the medical center."

Robinson will retain his directorship of the Division of Nephrology. A native of Oklahoma, Robinson earned his M.D. at the University of Oklahoma in 1954. He served an internship and residency at Duke and, following Air Force service as chief of nephrology at Wilford Hall USAF Medical Center, he joined the Duke faculty in 1960.

* * *

Other faculty promotions and appointments:

* Dr. Rebecca H. Buckley, chief of the division of pediatric allergy, immunology and pulmonary diseases, promoted to professor of pediatrics. Dr. Buckley headed a Duke research team that reported in the May 13 issue of the *New England Journal of Medicine* the successful treatment of a child with se-

vere immuno-deficiency by injecting liver cells from a fetus.

* Dr. Marc K. Drezner, named assistant professor of medicine.

* Dr. Elliott B. Hammett and Dr. Allan A. Maltbie, named assistant professors of psychiatry.

* Dr. Donald Hooper, Dr. Fritz F. Klein and Dr. Stanley Rosenberg, named assistant professors of anesthesiology.

* Dr. E. Lee Tyrey, promoted to associate professor of obstetrics-gynecology.

* Dr. James J. Murphy, chief of outpatient radiology at the Durham VA Hospital, named assistant professor of radiology.

* Dr. Salvatore V. Pizzo, named assistant professor of pathology.

* * *

Arthur F. Haney, M.D., of the Department of Obstetrics/Gynecology has been awarded a research project grant by Southern Medical Association (SMA). Dr. Haney is one of 25 researchers, selected from more than 100 applicants, to receive an SMA research grant this year. The grant will help to fund Dr. Haney's project, Regulation of Steroid Secretion and Gonadotropin Binding in Ovarian Cell Cultures.

Book Reviews

Step Right Up. By Brooks McNamara. 233 pages. Price, $12.95. New York: Doubleday & Co., 1976.

Before paved roads, electric lights and toll free telephones, townspeople relied on magazines, railroads, kerosene and their own wits for transportation, light and amusement. Peddlers brought news and needles into many settlements isolated by mud and scarcity and far from depots; rural churches were centers where circuit riders who, particularly when they conducted tent meetings, provided socializing as well as salvation. Medicine really hadn't changed much since Galen and if there were signs of change they weren't visible in many places in the country. Into such a vacuum established by uncertain remedies and by not a little boredom came the Medicine Show with its alcoholic elixirs, its panaceas brought by expert pitchmen and its promise of magic, complete with song, dance, jokes and flaming torches.

Television has now driven us indoors to Medicine Shows, the town opera house has been eclipsed by the movie house which provides the girlie shows of the old Midway and The Pure Food and Drug Act has driven snake oil, Indian remedies and guaranteed cures underground with occasional eruptions — Laetrile, Krebiozen, vitamin E, bone meal — to attract the credulous.

For better appreciation of this earlier time and for an understanding of how television and Madison Avenue have been its heir, McNamara's collection of illustrations, his comments about the evolution of Indian shows and his awareness that most of us are still being sold by media (whether by business, organized religion, Jimmy Carter, Ronald Reagan or Jerry Ford) are worth the having for sporadic browsing, for cultivating nostalgia or simply for pleasant viewing.

J.H.F.

Medical Statistics in World War II. Edited by Frank A. Reister, Office of the Surgeon General, Department of the Army, Washington, D.C. 1,215 pages. Price, $19.50. Government Printing Office, Washington, D.C., 1975.

This volume, another of the series prepared under the direction of the Surgeon General, United States Army, to commemorate our medical adventures in World War II, presents over 1,000 pages of tables covering almost every conceivable condition which might have been suffered by a member of the armed forces during the late unpleasantness. It is impossible, of course, to review such a volume, tables becoming rather repetitive. These data are, however, of value to compulsive measurers and should prove beyond a shadow of a doubt that everybody couldn't serve in the trenches, else no one would have been able to recognize what was going on. Actually, this achievement is awesome particularly if a reader knows what questions he has to answer. There is an index almost as awesome as the compilations themselves and a table of contents which can keep the wary scholar from getting lost. It isn't for bedside reading; its niche is in the large medical library.

J.H.F.

Books Received

A Pattern of Herbs. By Meg Rutherford. 157 pages, illustrated. Price, $2.95. New York: Doubleday & Co., 1976.

A New Kind of Joy. By James Haskins. 121 pages, illustrated. Price, $7.95. New York: Doubleday & Co., 1976.

Classified Ads

DUKE UNIVERSITY PHYSICIANS' ASSISTANT; National Boards, N.C. Certified, 1972 Graduate in Family Practice, desires to relocate in Eastern or Central North Carolina. Resume on Request. Reply: NCMJ-11, P.O. Box 27167, Raleigh, N.C. 27611.

PHYSICIANS NEEDED: M.D.'s having completed or near completion of internships or residencies for hospital/clinics/flight surgeon duties. Choice of duty station, $30,000-40,000 starting salary, travel and relocation expenses paid, 30 days paid vacation annually, duty rotation allows excellent family life. Contact LT. Ron Hewett, Navy Physician Programs, Navy Recruiting District, P.O. Box 18568, Raleigh, N.C. 27609 or call collect (919) 872-2547.

EXECUTIVE LOANS BY MAIL—Signature only, $5,000 to $25,000. Use for Investment, Real Estate, Equipment Purchase, Business Venture, etc. For further information in strict confidence, call (804) 262-5969 or write: Financial Resources Co., Box 502, Richmond, Virginia 23204.

POEMS WANTED: The North Carolina Society of Poets is compiling a book of poems. If you have written a poem and would like our selection committee to consider it for publication, send your poem and a self-addressed stamped envelope to: THE NORTH CAROLINA SOCIETY OF POETS, 614 — 1st Union Building, Winston-Salem, N.C. 27101.

EMERGENCY MEDICINE: Northeastern North Carolina; four, 12-hour evening rotations per week. Paid malpractice, vacation, professional dues. $45,000 annual remuneration. Contact Drs. Cooper or Spurgeon toll free 1-800-325-3982.

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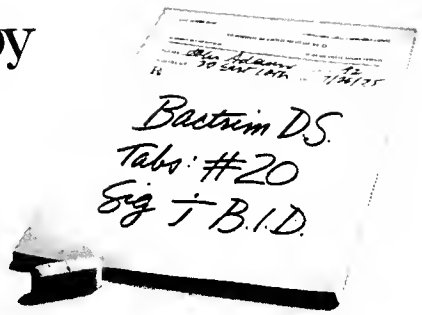
10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (*e.g.*, vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)
Double Strength tablets
Just 1 tablet B.I.D.

Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register,* 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

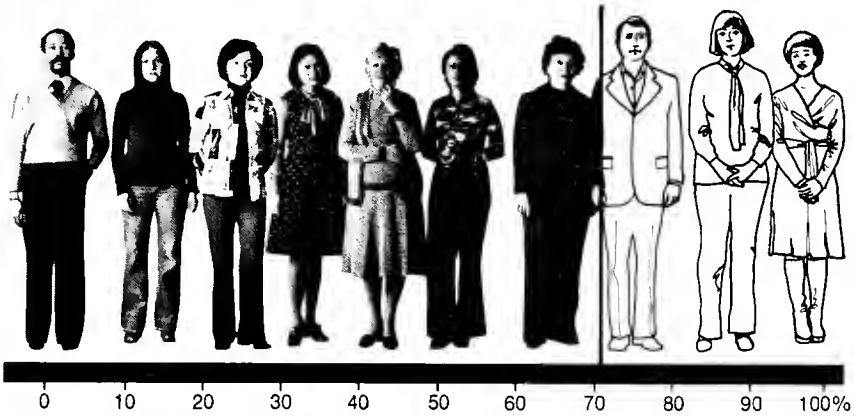
Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

ROCHE

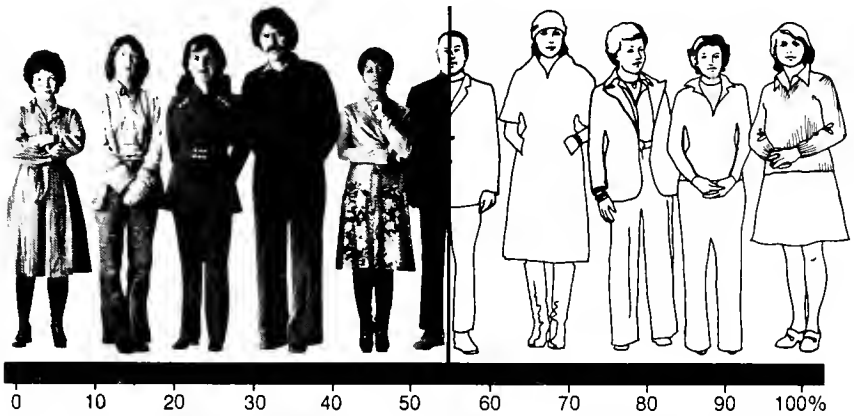
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Please see summary of product information on preceding page.

ROCHE

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY September 1976, Vol. 37, No. 9

NORTH CAROLINA
Medical Journal

IN THIS ISSUE: Ampicillin-Resistant Strains of Haemophilus Influenzae Type B in North Carolina, Edwin L. Anderson, M.D., Edward W. P. Smith, M.D., and Samuel L. Katz, M.D.; Management of Streptococcal Pharyngitis by North Carolina Physicians, Donna Upson, M.S.P.H., Robert A. Greenberg, M.D., Dennis B. Gillings, Ph.D., Thomas Nolan, M.D., and Michel Ibrahim, M.D.; The Autumnal High: Jimsonweed in North Carolina, Don W. Moore, M.D.

1976 Committee Conclave
Sept. 22-26—Southern Pines

1977 Leadership Conference
January 28-29 — Raleigh

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

Both often

Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

Valium®
(diazepam) Ⓘⓥ
2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

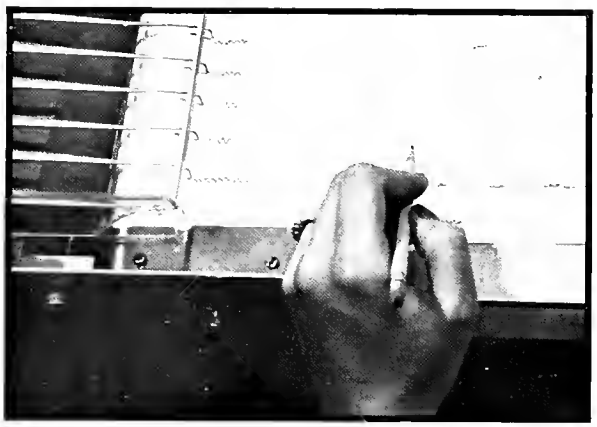
surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



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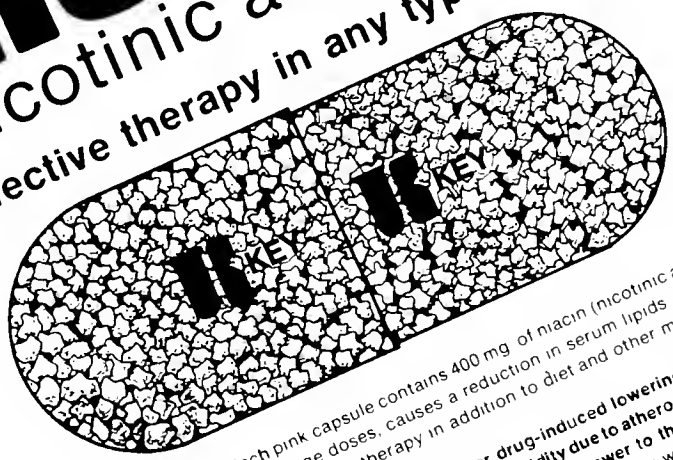
The Original Slow Release Form of Nicotinic Acid

nico-Span®

(nicotinic acid) 400 mg. capsules

Effective therapy in any type of drug responsive hyperlipidemia.



DESCRIPTION: Each pink capsule contains 400 mg. of niacin (nicotinic acid) in a special pelletized formulation for prolonged release

ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown

INDICATIONS: As adjunctive therapy in addition to diet and other measures in the treatment of hypercholesterolemia and hyperbetalipoproteinemia

Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a beneficial or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams

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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina
Medical Society

September 1976, Vol. 37, No. 9

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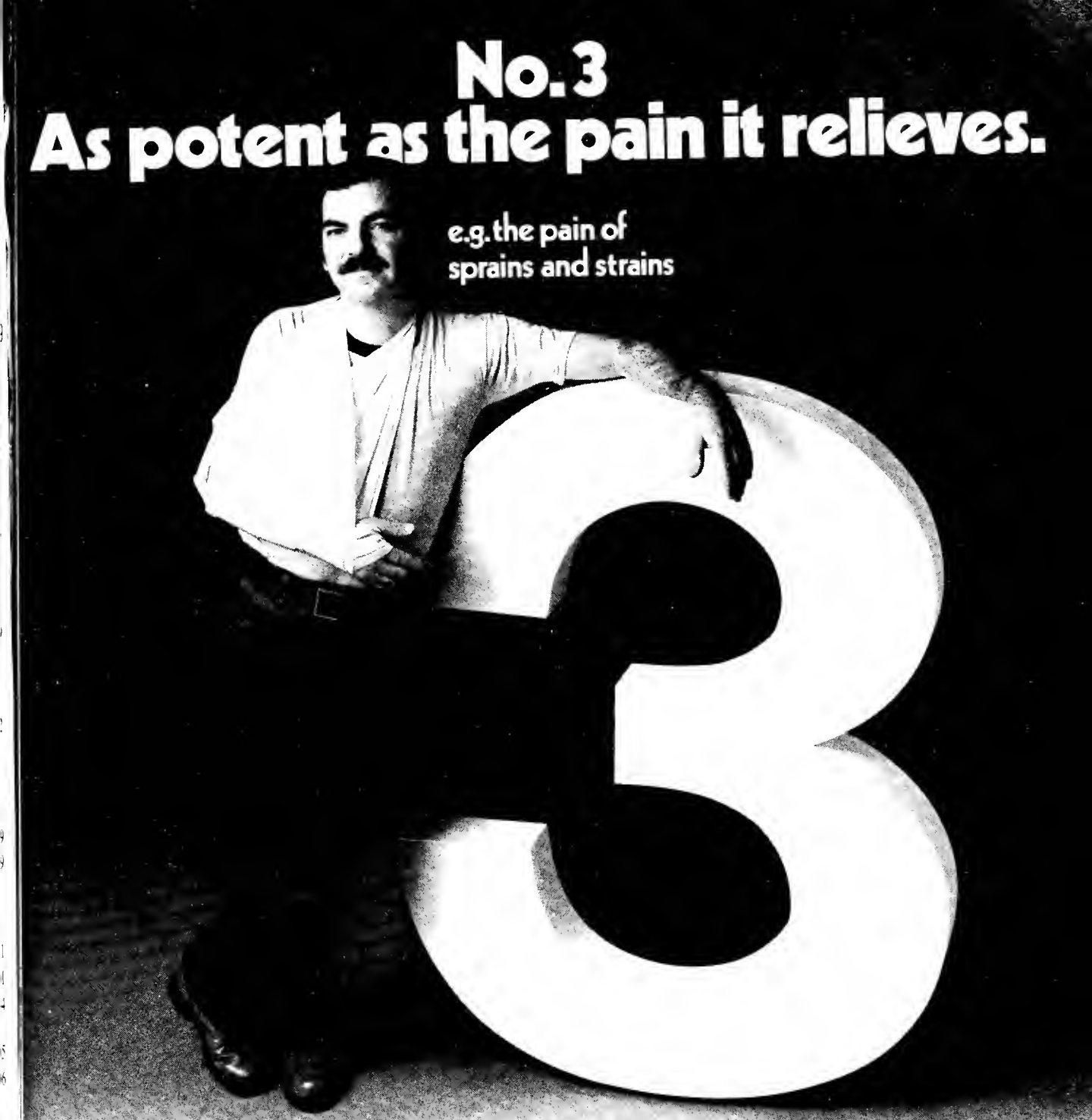
Contents listed in *Current Contents/Clinical Practice*

No. 3
As potent as the pain it relieves.



NOT TOO LITTLE

- as potent as the pain you need to relieve in patients with fractures, sprains, strains, wounds, contusions, and the pain of surgical convalescence
- unlike acetaminophen/codeine combinations, it does not sacrifice anti-inflammatory action

NOT TOO MUCH

- potent—yet not excessive
- addiction liability low

NOT TOO EXPENSIVE

- brand-name quality, yet reasonable in cost
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codeine phosphate* 32.4 mg gr ½
Each tablet also contains aspirin gr 3 phenacetin gr 2½ caffeine gr ½ *Warning – may be habit-forming

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PLAN B $300 DEDUCTIBLE	Under 40	$ 50.00	$114.00	$150.00
	40-49	76.00	176.00	212.00
	50-59	118.50	254.00	290.00
	60-64*	180.00	402.00	438.00
PLAN C $500 DEDUCTIBLE	Under 40	$ 31.50	$ 69.00	$ 91.50
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	65-69**	58.00	170.00	192.50
PLAN D $1,000 DEDUCTIBLE	Under 40	$ 23.50	$ 51.50	$ 68.50
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40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

All Children—$12 annually. $2,500 after age 6 months

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Of all menthols:

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See how Carlton stacks down in tar.
Look at the latest U.S. Government figures for:

The 10 top selling cigarettes

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Brand C Non-Filter	24	1.5
Brand W	19	1.3
Brand S Menthol	19	1.3
Brand S Menthol 100	19	1.2
Brand W 100	18	1.2
Brand M	18	1.1
Brand K Menthol	17	1.3
Brand M Box	17	1.0
Brand K	16	1.0

Other cigarettes that call themselves low in "tar"

	tar mg / cigarette	nicotine mg / cigarette
Brand D	15	1.0
Brand P Box	14	0.8
Brand D Menthol	14	1.0
Brand M Lights	13	0.8
Brand W Lights	13	0.9
Brand K Milds Menthol	13	0.8
Brand T Menthol	11	0.7
Brand T	11	0.6
Brand V Menthol	11	0.8
Brand V	11	0.7
Carlton Filter	***2**	***0.2**
Carlton Menthol	***1**	***0.1**
Carlton 70	***1**	***0.1**

(lowest of all brands)
*Av per cigarette by FTC method

No wonder Carlton is the fastest growing of the top 25 brands.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Menthol: 1 mg. "tar", 0.1 mg. nicotine; Filter: 2 mg "tar", 0.2 mg. nicotine, Carlton 70's: 1 mg "tar", 0.1 mg. nicotine av. per cigarette by FTC method.

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DYAZIDE®

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Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F CO., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

When Big Ben looks "a little off"...

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

■ **Most Widely Prescribed**—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

■ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo.*

■ **Dosage for Vertigo***—The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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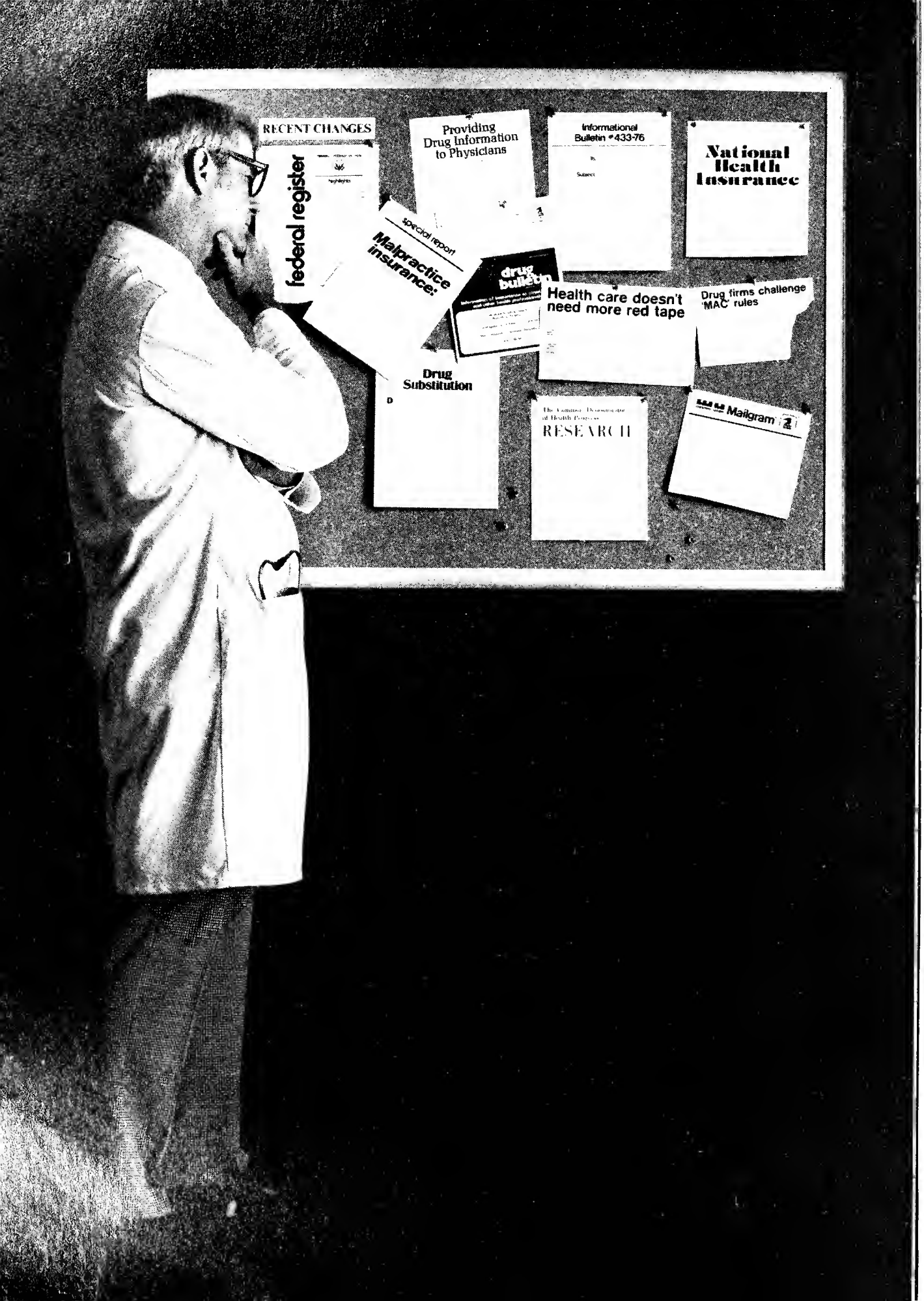
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Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

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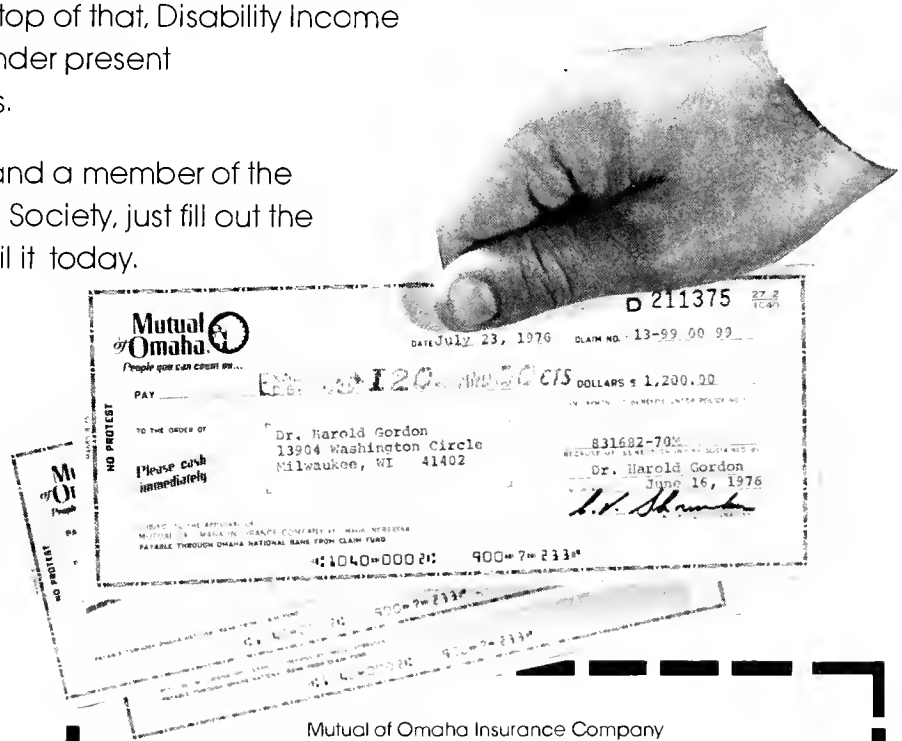

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DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

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INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.

Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates mean (range)	68% (61-75%)	98% (91-100%)	96% –	95% (90-100%)
egg reduction mean (range)	93% (70-99%)	99.7% (99.5-100%)	99.9% –	– –

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE The drug has not been extensively studied in children under two years, therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. For the control of pinworm (enterobiasis) a single tablet is administered orally one time.

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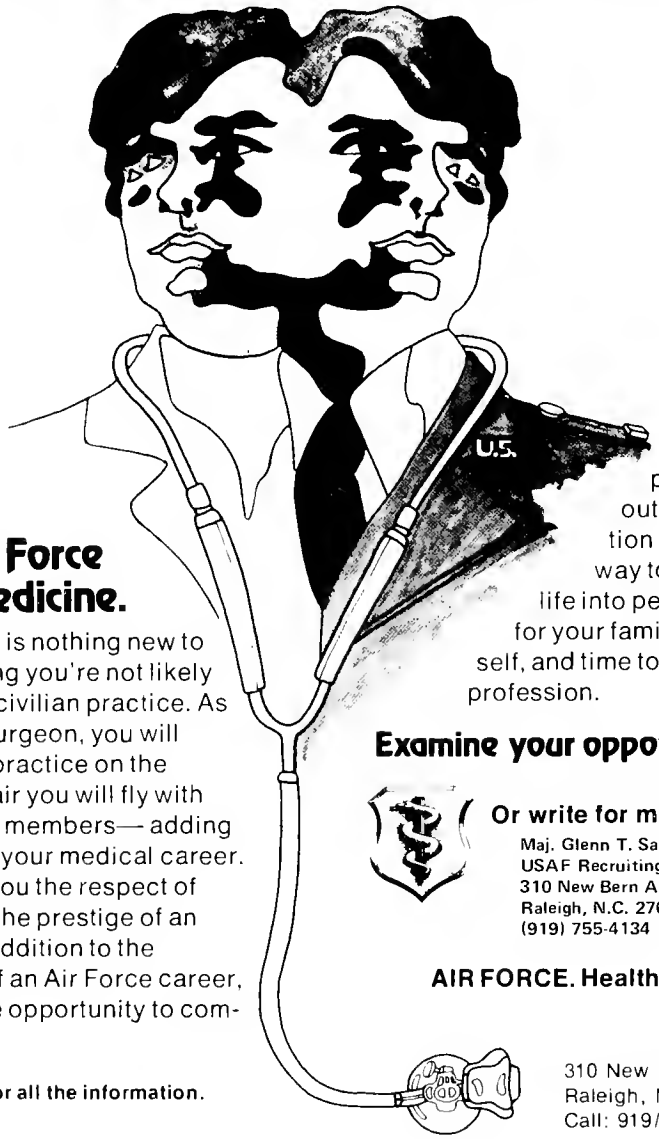

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REFERENCES

1. McColl, J. D., et al.: **J. Pharm. & Exp. Therap.** 116:343, 1956
2. Quevauviller, Par Andre, et al.: **Presse Med.**

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This advertisement appeared in North Carolina newspapers.

Ampicillin-Resistant Strains of *Haemophilus influenzae* Type B in North Carolina

Edwin L. Anderson, M.D., Edward W. P. Smith, M.D., and Samuel L. Katz, M.D.

THE introduction of ampicillin in 1961 gave the physician a single antibiotic effective against the three main etiologic agents of bacterial meningitis in infants and children, namely *Neisseria meningitidis*, *Haemophilus influenzae* type B and *Streptococcus* (Diplococcus) *pneumoniae*. Ampicillin was especially effective against *H. influenzae* type B, the most common cause of bacterial meningitis in young children and a leading cause of other forms of invasive disease such as septic arthritis, pneumonia, cellulitis, bacteremia and epiglottitis. Ampicillin was also free of both the common, reversible, hematopoiesis-depressing effect and the rare idiosyncratic marrow aplasia of chloramphenicol, previously the drug of choice in childhood meningitis.

In December of 1973, the first documented cases of invasive disease due to ampicillin-resistant *H. influenzae* type B were detected in the United States.[1] The organisms were isolated from the cerebrospinal fluid (CSF) of two children with meningitis who failed to respond clinically to ampicillin. Shortly thereafter other reports of ampicillin-resistant isolates of *H. influenzae* type B appeared and confirmed the presence of these strains throughout the United States.[2–4]

In January of 1975, ampicillin-resistant *H. influenzae* type B were isolated from two children with meningitis hospitalized simultaneously at Fort Bragg.[5] These were the first reported cases in North Carolina. No epidemiologic connection could be established between the two patients. The same report[5] described the failure to detect ampicillin-resistant *H. influenzae* in a survey of the Chapel Hill area.

Since September of 1975, an effort has been made in North Carolina to obtain isolates of *H. influenzae* thought to be resistant to ampicillin.[6] The results of this survey, shown in Table 1, confirm the statewide presence of ampicillin-resistant *H. influenzae*. Initially, only isolates from blood and CSF were requested but it soon became apparent that ampicillin-resistant strains, both typable and nontypable, could also be isolated from the respiratory tract.[7]

The presence in our state of *H. influenzae* strains which are resistant to ampicillin raises the question of what constitutes appropriate initial therapy in bacterial meningitis in children older than two months. Chloramphenicol is highly active against ampicillin-resistant strains of *H. influenzae* type B, reaches high CSF concentrations and is established as clinically effective in invasive disease caused by this organism. Chloramphenicol should be reserved, however, for serious infections by susceptible organisms when a safer agent is not available. With the presence of ampicillin-resistant *H. influenzae* documented throughout North Carolina, chloramphenicol plus a penicillin are the drugs of choice in the initial therapy of bacterial meningitis in children older than two months.[8,9] To continue both chloramphenicol and a penicillin for the full course of therapy once the bacterial species and its antibiotic sensitivity have been determined is not necessary and may theoretically be contraindicated.[10] If the infecting organism is susceptible to ampicillin, the physician may wish to discontinue chloramphenicol. If it is ampicillin-resistant, chloramphenicol alone should be continued.

Management of disease due to *H. influenzae* (both typable and non-

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TABLE 1

Ampicillin-resistant *H. influenzae* strains in North Carolina

Case No.	Geographic Location	Organism recovered from	Diagnosis
1	Raleigh	CSF	Meningitis
2	Raleigh	CSF	Meningitis
3	Charlotte	Sputum	Pneumonia
4	Winston-Salem	Blood	Pneumonia
5	Charlotte	CSF	Meningitis
6	Chapel Hill	NP	Otitis Media
7	Rutherfordton	NP	Otitis Media
8	Fort Bragg	CSF	Meningitis
9	Fort Bragg	CSF	Meningitis
10	Greensboro	CSF	Meningitis
11	Fort Bragg	CSF	Meningitis
12	Durham	CSF	Meningitis
13	Charlotte	NP	Pneumonia
14	Durham	CSF	Meningitis

CSF = cerebrospinal fluid
NP = nasopharynx

typable) which is not life-threatening is less clear. To use chloramphenicol as the initial drug in otitis media is not justifiable. A reasonable approach to noninvasive disease would appear to be ampicillin or the combination of a sulfonamide and penicillin. If the child fails to respond, an effort should be made to identify the infecting organism (by tympanocentesis and other appropriate cultures). Chloramphenicol should be used only when a suitable alternative is not available. Other therapeutic regimens have been used in noninvasive *H. influenzae* disease. Tetracyclines have shown clinical efficacy but use is restricted by their toxicity to developing dentition. Although erythromycin is frequently used, it has not been shown to be clinically effective,[11] probably due to inadequate serum levels. The cephalosporins, though highly promoted, are not indicated in *H. influenzae* infection because of poor CSF penetration and peak serum levels which barely exceed the mean inhibitory concentrations (MIC) for the organism.[12]

Susceptibility testing of *H. influenzae* by the disk method is fraught with error and the definitive procedure remains the broth dilution technique.[5] Fortunately, the disk method of testing errs on the safe side and may indicate that a susceptible isolate of *H. influenzae* is resistant rather than the reverse. If the susceptibility of an isolate is in doubt, it should be sent to a laboratory experienced in broth dilution testing.

In summary, isolates of *H. influenzae* which are resistant to ampicillin have been documented throughout North Carolina. Chloramphenicol, therefore, should be included in the initial therapy of children older than two months with bacterial meningitis or other life-threatening infection possibly due to *H. influenzae*. In addition, continued surveillance for ampicillin resistance is essential to define more clearly the extent of this problem.

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In civilized society, indeed, what with ennui and dissipation in the higher ranks — anxiety of mind, arising from business, in the middle classes — and poverty, bad food, bad air, bad drink, and unhealthy occupations among the lower classes, there is scarcely an individual in this land of liberty and prosperity — in this kingdom of "ships, colonies, and commerce," who does not experience more or less of the "English malady" — that is to say, a preternaturally irritable state of the nervous system, connected with, or dependent on, MORBID SENSIBILITY of the stomach and bowels.†

†There are but few who have led an early active life, whether in the army, the navy, the colonies, or in commercial pursuits at home, who are capable of enjoying the anticipated pleasures of retirement afterwards. We, therefore, find a great proportion of these in a state of hypochondriacism, more or less prominent. Exercise, whether of body or mind, is the great antidote, when in moderation, to this state — but few will take regular exercise, mental or corporeal, without some distinct pursuit, which those who are retired have not. Besides, as it is only the wealthy who voluntarily retire, they think one great object of their remaining days is to live well; and this very indulgence leads to more misery than they ever experienced in the pursuit after riches. Thus the *physique* poisons their *morale*. Those, on the other hand, who are forced to retire from military service, in consequence of their services being no longer wanted, become discontented as well as idle — and a state of hypochondriacism very generally succeeds. Of these we see daily instances, since the conclusion of the long and disastrous war with France. —*An Essay on Indigestion, or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 63-64

Management of Streptococcal Pharyngitis by North Carolina Physicians

Donna Upson, M.S.P.H., Robert A. Greenberg, M.D., Dennis B. Gillings, Ph.D., Thomas Nolan, M.D., and Michel Ibrahim, M.D.

DESPITE the declining incidence of rheumatic fever in favorable socioeconomic environments,[1] approximately 100,000 new cases of rheumatic fever and rheumatic heart disease occur each year in the United States.[2] A recent survey of physicians conducted by the North Carolina Heart Association suggests that the incidence of acute rheumatic fever in North Carolina is 38 per 100,000 population per year, a rate similar to that of the United States as a whole.

Proper management of streptococcal pharyngitis can prevent almost all cases of rheumatic fever.[3] While a health care provider may not see asymptomatic or minimally ill patients with pharyngitis or those symptomatic patients without access to health care, studies show that physician error in diagnosis or treatment of streptococcal pharyngitis is a significant reason many cases of rheumatic fever are not prevented.[4–6]

One way to reduce the incidence of rheumatic fever is the development of an educational program for practicing physicians in the management of streptococcal pharyngitis. In 1973, in order to develop an appropriate educational program to correct deficiencies in present practice, the Acute Rheumatic Fever Work Group of the North Carolina Heart Association surveyed a sample of North Carolina physicians to determine how they diagnosed and treated streptococcal pharyngitis.

METHODS

The work group designed a questionnaire and mailed it to a 10% stratified random sample of general practitioners and pediatricians from a list of all North Carolina physicians. The determination of the adequacy of antibiotic therapy for streptococcal pharyngitis was based on recommendations of the American Heart Association Committee on Prevention of Rheumatic Fever.[7] The evaluation of regimens not included in the Heart Association recommendations was based on current medical literature.

RESULTS

The questionnaire was completed and returned by 64 general practitioners and 25 pediatricians for an overall response rate of 72%. The response rate was about the same for general practitioners and pediatricians.

A tabulation of the replies (See Table 1) indicates that only 20% of physicians routinely cultured sore throats and that 35% rarely took a culture. However, only one pediatrician out of 25 (4%) rarely cultured sore throats compared to 30 out of 64 (47%) of the general practitioners.

Thirty percent of general practitioners processed cultures in their offices compared to 80% of pediatricians. The state laboratory was used by only 12% of physicians, all of them general practitioners. Of those physicians processing cultures in their offices, 88% cultured frequently or routinely compared to 60% of those sending their cultures elsewhere. This difference was significant ($p<0.01$).

Sheep blood agar was used to identify beta hemolytic streptococci by 82% of all physicans processing cultures in their offices. However, only 32% used bacitracin disks to differentiate group A from non-group A beta hemolytic streptococci. General practitioners and pediatricians did not differ significantly in their use of sheep blood plates or bacitracin disks.

The treatment regimens of 15% of all the physicians were inadequate

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TABLE 1

Results of North Carolina Heart Association Streptococcal Pharyngitis Questionnaire

	General Practitioners No.*	%	Pediatricians No.	%	Total No.	%
Frequency of obtaining Throat Cultures						
Rarely	30	47	1	4	31	35
Frequently	28	44	12	48	40	45
Routinely	6	9	12	48	18	20
Processing Laboratory for Throat cultures						
Office	18	30	20	80	38	45
Hospital	28	48	5	20	33	39
State	10	17	0	0	10	12
Other	3	5	0	0	3	4
Primary Treatment of Streptococcal Pharyngitis						
Adequate	46	81	24	96	70	85
Inadequate	11	19	1	4	12	15
Alternate Treatment of Streptococcal Pharyngitis						
Adequate	36	64	21	84	57	70
Inadequate	20	36	4	16	24	30

*In several instances individual questions were not answered by a respondent or an incomplete answer was given which could not be evaluated

to prevent rheumatic fever. Four percent of pediatricians and 19% of general practitioners listed inadequate regimens. This difference was not statistically significant. Seven of the 12 inadequate regimens were characterized by prescribing fewer than 10 days of an appropriate dose of oral penicillin. Three physicians gave an inadequate dose of benzathine penicillin and two used tetracycline as the drug of choice.

Intramuscular benzathine penicillin was the treatment of choice of only 24% of the physicians who prescribed an adequate regimen.

If the patient was allergic to the first drug used for streptococcal pharyngitis, 30% of the physicans prescribed inadequate alternate regimens. The difference between general practitioners and pediatricians was not significant. Although they used an appropriate drug, usually erythromycin, 12 physicians prescribed for fewer than the recommended 10 days. Twelve physicians selected tetracyclines or sulfonamides, which are not recommended.

COMMENTS

Although the diagnosis of streptococcal pharyngitis is suggested by certain clinical situations, failure to take a throat culture can result in significant misdiagnoses, unnecessary treatment and unnecessary exposure to the risk of rheumatic fever.[8] It is therefore disturbing that only 20% of the physicians in this study routinely cultured sore throats.

In a similar survey from Colorado[9] physicians gave the expense of cultures processed by private and hospital laboratories and the delayed reporting and absence of weekend services in health department laboratories as reasons for not culturing routinely. At the present time the state laboratory in North Carolina is encouraging the development of local health department laboratories to overcome delays in a mail-in service. This may increase laboratory use if combined with an educational program stressing the importance of culturing. Since 96% of the pediatricians in our survey cultured throats frequently or routinely and 80% processed cultures in their offices, promotional programs to encourage the use of throat cultures should be designed primarily to reach the general practitioner.

Although laboratories are available in most areas, there may be practical and intellectual advantages for a physician to process throat cultures in the office. Office bacteriology may also serve as a stimulus to take throat cultures since there was a significant association between processing cultures in the office and culturing frequently or routinely. The consultative service for office laboratories operated by the state health department could be expanded and combined with an educational program to encourage culturing.

Most of the pediatricians and general practitioners who processed cultures in their offices recognized the importance of using sheep blood agar to differentiate beta hemolytic streptococci from other organisms. However, 62% of the pediatricians and 61% of general practitioners did not use bacitracin sensitivity testing to identify the 10-20% of patients with non-group A beta hemolytic streptococci in their throats[8] who are not at risk for developing rheumatic fever and would represent cases of unnecessary antibiotic therapy. It is possible but not likely that many physicians sent all the cultures with beta hemolytic streptococci to another laboratory for grouping.

Commenting on the development of streptococcal control programs in Wyoming, Phibbs et al[10] observed that better training in the treatment needed to eradicate group A beta hemolytic streptococci was the "greatest present gap in the application of scientific knowledge to prevent first attacks of rheumatic fever." Their conclusion is further supported by the finding that only 13% of a sample of recent medical school graduates serving as house officers in 23 hospitals in the United States were able to identify acceptable forms of treatment for a 7-year-old child with streptococcal pharyngitis.[11] In view of the great frequency with which streptococcal pharyngitis occurs, it is significant that as many as 15% of North Carolina respondents used an inadequate treatment regimen and 30% used an inadequate alternate regimen if the patient was allergic to the drug of choice.

The American Heart Association recommends intramuscular benzathine penicillin G as the treatment of choice for streptococcal pharyngitis because it ensures treatment for a sufficient length of time.[7] With special counseling on the importance of taking oral medication for 10 days, Colcher and Bass[12] were able to achieve results equal to those obtained with appropriate in-

tramuscular therapy. However, they reviewed numerous studies involving private practices as well as hospital outpatient clinics which document treatment failures and relapses due to inadequate patient compliance with the oral regimen. Only 24% of the North Carolina respondents prescribing adequate regimens used intramuscular benzathine penicillin as the treatment of choice. This may imply a lack of appreciation of the role of patient noncompliance in treatment failure. It is also possible that physicians may not be aware of the extremely low risk of a serious allergic reaction to intramuscular penicillin in children,[13] the group most susceptible to streptococcal pharyngitis.

CONCLUSIONS

The results of this study indicate that the educational needs of the general practitioner are somewhat different from those of the pediatrician. Although neither used the laboratory to the fullest extent for identifying patients who require treatment, the general practitioner needs more basic clinical information about diagnosing streptococcal pharyngitis. There also seems to be a general need for continuing education on the treatment of this problem.

Since the care of 75% of the children of the United States is shared almost equally by general practitioners and pediatricians,[14] Heart Associations and those responsibile for child care training and continuing education programs should be certain that their efforts are not confined to pediatricians but directed to the needs of all groups of physicians who care for children.

ACKNOWLEDGMENT

The author would like to thank Drs. Floyd Denny and Frank Loda for their review of the manuscript and suggestions.

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Thus we see people, who have once suffered from ague, relapse occasionally for years afterwards, from causes which are often incognizable by the senses. Can we wonder, then, that when the nervous system of an individual has once received a severe shock, he should be liable to temporary relapses of despondency and irritability for a long time afterwards? In these cases, the nervous system is to be strengthened by every possible means, short of irritating the digestive organs. The sulphate of quinine will be found a valuable medicine in such cases. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 68.

The Autumnal High: Jimsonweed in North Carolina

Don W. Moore, M.D.

THE return to nature advocated by the counter culture has been characterized by a lack of oral discrimination. Besides drugs, glue and a number of non-medical organic compounds, nutmeg, catnip, cherry bark and a host of seeds and weeds have been used, often with disastrous results, by a new generation of experimentalists. Since toxicity of plants may be seasonal depending on what part is poisonous, varying quarterly incidences of poisonings may be expected. Because *Datura stramonium* is ubiquitous in North Carolina and goes to seed in the fall,[1] the jimsonweed high could become an annual autumnal problem. As this report indicates, and as Mahler and others[2,3] have emphasized, adolescents have been quick to appreciate the psychedelic potential of this solanaceous plant. Among college students, interest has probably also been intense if the popularity of Carlos Castaneda's paean to *Datura*, peyote and mushrooms in the trilogy, *The Teachings of Don Juan, A Separate Reality* and *Journey to Ixtlan*[4] is an accurate indicator. The following case reports show that high school students in this state have also been seeking new sensations.

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CASE REPORTS

Case 1

A 15-year-old white junior high school student complained of nausea and dizziness before fainting. When seen a short time later in the emergency room, he was responsive to pain but not command, was combative and disoriented. His face was red, his skin and mucous membranes dry and his pupils dilated and unreactive to light; gaze was disconjugate. The precordium was hyperactive and the heart rate was 160 per minute. Deep tendon reflexes were overly brisk and Babinski's signs were present. The blood pressure was 130/30 mm Hg, the temperature 102.5° F. After it was reported that a schoolmate had given the patient "gypsum plant," seed of which he had ingested a teaspoonful, gastric lavage was done with recovery of a few seeds. Physostigmine, 2 mg, was then given intramuscularly with improvement of central nervous system signs and symptoms; mydriasis and tachycardia persisted. When incoherence with hallucinations occurred and the temperature reached 105° F, physostigmine, 1-2 mg, intramuscularly, was continued every two hours as needed. By the third hospital day, after 18 mg physostigmine had been administered, the patient was mentally clear and afebrile and no abnormalities were found on physical examination.

Case 2

A 16-year-old schoolboy, a friend of the first patient, was reported to have taken a like quantity of jimsonweed seed at noon the same day. By the time he reached the emergency room, his conversation had become rambling and incoherent and he had experienced visual hallucinations. He was not oriented to time or place, was hyperirritable and extremely agitated. The blood pressure was 140/70 mm Hg, the pulse rate 112 per minute. The skin was red, the mucous membranes dry and the pupils dilated and unreactive to light. Babinski's sign was present bilaterally. During the next 36 hours, mental and physical signs cleared and the patient was discharged; physostigmine, 2 mg, was sufficient to counter the effects of jimsonweed.

COMMENT

Datura stramonium, known as jimsonweed, Jamestown weed, thorn apple or stinkweed and a member of the potato family (solanaceae) which includes the potato, tomato, petunia, ornamental tobaccos, green and red peppers and eggplant as well as the toxic henbane, Jerusalem cherry and deadly nightshade,[5] is common in the United States in cultivated fields, barnyards, dung heaps, garbage dumps and along roadsides. An annual with large whitish roots and a stout stem, simple below and dichotomous above, it grows to a height of three to six feet and exhibits eight inch leaves, dark green on top, pale beneath and having alternating uneven wavy and sharply pointed margins as well as a rank odor. It produces solitary trumpet-shaped, five-pointed white or purple flowers, three to four inches long. The dried seedpods pop open dispersing up to 500 dark brown, 2-3 mm tough kidney-shaped seeds which can survive for decades in the soil.[1,6]

History — Ancient and Modern

Because *stramonium* contains hyoscyamine, atropine and scopolamine, extracts ingested can lead to prominent symptoms; young plants contain more hyoscine while atropine is dominant at flowering. Hence, *stramonium* has been used as the treatment for a number of ailments and as a "spring tonic." Because of its hallucinogenic effects, it has been employed for centuries as a mind-expanding agent, assassins in the 12th Century grinding the seeds to a powder and taking them to stimulate them to commit their crimes. Its present name, jimsonweed, dates to its use in early Virginia as a potherb. In 1676, a group of British soldiers, sent to quell Bacon's rebellion against the colonial government of Virginia, ate the plant in a salad and as a result behaved bizarrely for several days, running naked and playing silly games, "and after 11 days, return'd to themselves again, not remembering anything that had pass'd."[7] More than 200 years ago, a child in Pennsylvania accidentally ingested *stramonium* seeds and became ill with delirium, tremor and a skin eruption; her doctor "gave her a puke every day for nearly a week until her symptoms finally abated."[8] More recently, a family in east Tennessee required hospitalization after becoming severely intoxicated from eating cold-resistant tomatoes which they had produced by grafting jimsonweed roots to tomato plants.[9] There have also been many reports of individuals abusing *stramonium*, especially leaf extracts which have been marketed over-the-counter for a variety of complaints. These preparations have included Asthmador, Brater's powder, Kinsman's asthmatic powder, Green Mountain asthmatic compound and Haywood's powder.[10] More recently, teenagers and college students have taken powder in a variety of beverages in addition to using inhalant capsules which contain 150 to 200 mg of powder. When the sale of proprietary preparations was discontinued, the drug set, perhaps encouraged by Castaneda's enthusiasm,[4] discovered that hallucinogenic effects could be obtained by ingesting different parts of the plant, particularly seeds.

In 1974-75, at least 80 cases were observed in North Carolina (Osterhaut S, personal communication); 53 have been recorded in Statesville since August, 1974, (Hay L, personal communication) and many other cases have undoubtedly not been reported. Grocery bags filled with seedpods have been found in this state suggesting commercial exploitation. A white coarse powder with tiny black specks has also been prepared from seed and sold as "organic acid" and "organic mescaline."

Pharmacology and Symptoms

Atropine and scopolamine are anticholinergic agents which compete with acetylcholine for postjunctional cholinergic receptors.[11] The latter agent exerts a stronger action on the iris, ciliary body and salivary, bronchial and sweat glands, whereas atropine has a more potent and prolonged effect on the heart, intestine and bronchial musculature.[11] Atropine causes excitation, restlessness, irritability, disorientation, hallucinations, mania and delirium and may even lead to coma, respiratory paralysis and death. Other effects include slurred speech, drowsiness, euphoria, amnesia, dreamless sleep, photophobia, blurred vision, tachycardia, fever, dry skin and dilatation of cutaneous blood vessels. Thus, intoxicated persons may be described as being "hot as a hare," "blind as a bat," "deaf as a bone," "red as a beet" and "mad as a wet hen." The compounds are easily absorbed from the skin, mucous membranes and small bowel and about half the atropine alkaloid circulates freely in the blood undergoing enzymatic hydrolysis in the liver while the remainder is free in the blood and is excreted unchanged in the urine usually within 24 to 48 hours.[11]

Jimsonweed intoxication must be differentiated from other hallucinogenic intoxications, alcohol abuse and schizophrenia. Because drug mixtures containing belladonna alkaloids are available in most cities, diagnosis may be difficult. The absence of alcoholic breath, low concentration or absence of blood alcohol, detection of atropine in the urine and presence of dilated pupils with fever help distinguish these processes in a patient exhibiting ataxia and aggression. Although tactile hallucinations may occur in both schizophrenia and atropinism, schizophrenia can be excluded because of the characteristic parasympathetic inhibition manifested by fever, flush, tachycardia and dilated pupils. In jimsonweed intoxication, hallucinations seem to involve simple objects in their natural colors and abusers display aggressive and violent behavior; with lysergic acid disulfide, there is more interplay of brilliant colors and passivity is quite common.

TREATMENT

Physostigmine, because of its competitive inhibition of cholinesterase, is an effective therapeutic agent in the treatment of poisoning caused by ingestion of belladonna alkaloids.[11] It may be given intramuscularly, 1-2 mg, at two hour

intervals; the total dose required depends on severity of intoxication and response. If necessary, ice packs, sponging or a hypothermic blanket can be used for high fever and fluid balance maintained intravenously. When patients are not unruly or comatose, gastric lavage may be helpful particularly if the time since ingestion is short; otherwise, the risk of aspiration is excessive. Recovery from acute intoxication is usually complete within 24-28 hours although mydriasis may continue for as long as a week.

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The real and efficient remedies are very few in number; and, in this respect, they form a striking contrast with the innumerable forms and phenomena of the disease for which they are prescribed. Speaking generally, I verily believe there is more harm than good done by the farrago of medicines which are eagerly swallowed by the dyspeptic patient, at a time, too, when his stomach will scarcely digest the lighest food. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 69.

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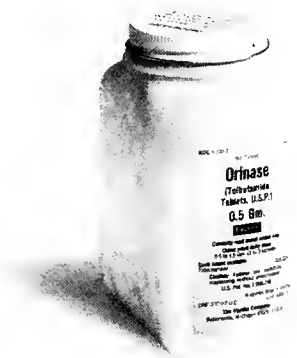

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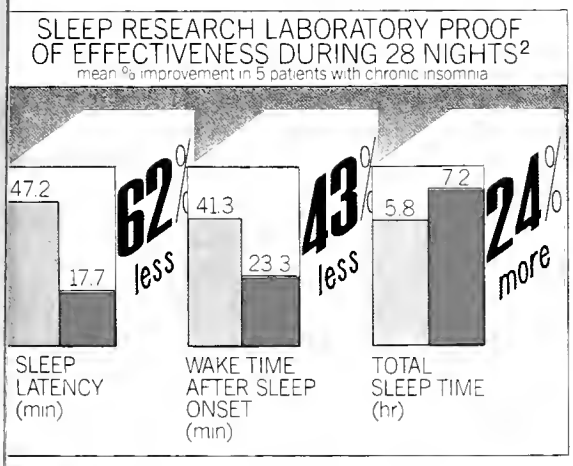
Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But when insomnia is a chronic or recurring problem, continued effectiveness is as important as initial effectiveness. Results of a recently published sleep research laboratory study[1] demonstrated that, while pentobarbital lost effectiveness within two weeks, Dalmane maintained effectiveness for 28 consecutive nights. Similar 28-night results with Dalmane, displayed below, were obtained by a second sleep research group.[2] In previous studies,[3] both chloral hydrate and glutethimide began to lose effectiveness after several nights, while Dalmane maintained effectiveness throughout the 14 medication nights. Whether the problem is difficulty falling asleep, staying asleep or sleeping long enough, consider these results when selecting a sleep medication.



Patient benefits include relative safety, infrequent morning "hang-over"

Dalmane is well tolerated, seldom causing morning drowsiness or grogginess.[4] No increase in dosage is required for continued effectiveness from night to night.[1-3] Should Dalmane be used repeatedly, periodic blood counts and liver and kidney function tests should be performed. The usual adult dose is 30 mg *h.s.*, but 15 mg may suffice for some patients and is recommended as a starting dose for the elderly and debilitated to help preclude oversedation, dizziness or ataxia.

Continued relief of insomnia: One more good reason to specify

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients)
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

whenever a hypnotic is needed

ROCHE

Please see following page for a summary of product information.

New objective proof: continued insomnia relief without increasing dosage...[1,2]

Dalmane® (flurazepam HCl) Ⓒ IV

Objectively proved in the sleep research laboratory...

during 28 consecutive nights of administration:

- ☐ **effectiveness with a single 30-mg *h.s.* dose, maintained**
- ☐ **rapid sleep induction, maintained**
- ☐ **sleep for 7 to 8 hours, on average, maintained**
- ☐ **less time awake during the night, maintained**

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

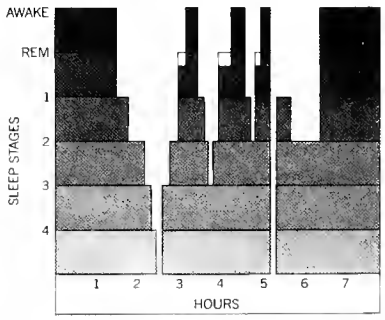
Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

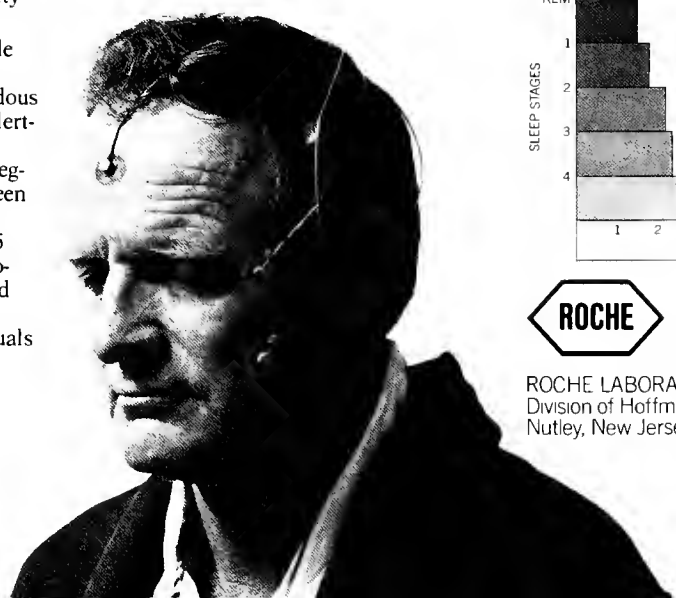
Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Kales A, *et al*: *Clin Pharmacol Ther* *18*:356-363, Sep 1975
2. Dement WC, *et al*: Long-term effectiveness of flurazepam 30 mg *h.s.* on chronic insomniacs. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, Jun 30-Jul 4, 1975
3. Kales A, *et al*: *Arch Gen Psychiatry* *23*:226-232, Sep 1970
4. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

For all common types of insomnia





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ROCHE LABORATORIES
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Nutley, New Jersey 07110

Editorials

AMPICILLIN-RESISTANT *Haemophilus influenzae*

Dr. Anderson et al have reviewed the problem of ampicillin-resistant *Haemophilus influenzae* type B infections as it relates to North Carolina physicians. Ampicillin replaced chloramphenicol in the 1960s as the treatment of choice for *H. influenzae* meningitis and for acute pyogenic meningitis awaiting culture results. It minimized the risk of aplastic anemia and gave complete coverage for pneumococcal, meningococcal and *H. influenzae* meningitis. Its excellent record was marred only slightly by relapses attributed to inadequate dosage or occurring late in therapy despite adequate doses by intravenous administration. The latter cases were attributed to poor penetration by the drug into the meninges after the acute inflammatory response had subsided.[1,2] Now that ampicillin-resistant *H. influenzae* type B strains have emerged in significant numbers, this agent has been jarred from its position as the sole initial treatment of documented *H. influenzae* meningitis and of acute pyogenic meningitis with pending cultures.[3-5]

The Committee on Infectious Disease of the American Academy of Pediatrics recommends initiating treatment of documented or possible *H. influenzae* meningitis with a combination of ampicillin and chloramphenicol in areas where ampicillin resistance has been noted.[6] Two precautions should be considered. Since antagonism between these antibiotics could occur, the continued efficacy of this therapeutic regimen should be closely followed. The potential for emergence of chloramphenicol-resistant pneumococci, meningococci or *H. influenzae* must also be considered. Depending on the frequency of resistant pneumococci and meningococci, in the future combination therapy may or may not be justified.

In documented serious infections due to *H. influenzae*, treatment with chloramphenicol alone may constitute optimal therapy. Chloramphenicol has been shown to be comparable to ampicillin in terms of both morbidity and mortality. Bone marrow suppression has not been a significant problem[7,8] and the risk of aplastic anemia should be no greater than in the patient whose therapy was begun with both drugs and later reduced to ampicillin alone.[9]

The question of *in vivo* antagonism with chloramphenicol and ampicillin can be evaluated in the future by comparing current patients on both drugs with recent "historic" controls who were treated with ampicillin alone. *In vivo* antagonism has been demonstrated in the past when penicillin and a tetracycline or penicillin and chloramphenicol were used in the treatment of pneumococceal meningitis.[10] However, the therapeutic doses may not be comparable to those currently recommended. It is important to emphasize that the American Academy of Pediatrics recognizes the potential of antagonism between chloramphenicol and ampicillin and recommends changing to a single agent when ampicillin resistance or sensitivity is confirmed. Since the determination of the resistance of the organism may take from 48 to 72 hours, it will still be important to determine whether or not antagonism may occur during the very early phases of therapy.

We have learned from our experience that a constant spectre of antimicrobial resistance exists, and it is therefore possible that *H. influenzae* type B may become resistant to both ampicillin and chloramphenicol in the future. Once again, we have been roused from a relatively comfortable therapeutic situation to one requiring a constant vigil, looking for resistant bacteria and testing the efficacy of other drugs in the treatment of experimentally induced meningitis. For example, trimethoprim sulfasoxazole may have promise as an alternative if resistance to both ampicillin and chloramphenicol develops.[11]

WILLIAM J. SIMONS, M.D., and
CHARLES E. MCCALL, M.D.

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1. Green H: Failure of ampicillin in meningitis. Lancet 1:861, 1968
2. Coleman SJ, Auld EB, Connor JD, Rosenman SB, Warren GH: Relapse of *Haemophilus influenzae* type B meningitis during intravenous therapy with ampicillin. J Pediatr 74:779, 1969
3. Tomeh MO, Starr SE, McGowan JE, Terry PM, Nahmias AJ: Ampicillin-resistant *Haemophilus influenzae* type B infection. JAMA 229:295, 1974
4. Ampicillin-resistant *Haemophilus influenzae* meningitis. CDC Morbidity and Mortality Weekly Report 23:77, 1974
5. Ampicillin-resistant *Haemophilus influenzae* meningitis. CDC Morbidity and Mortality Weekly Report 23:259, 1974
6. Katz S, et al: Ampicillin-resistant strains of *Haemophilus influenzae* type B. Pediatrics 55:145, 1975.
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8. Schulkind ML, Altemeier WA, Ayoub EM: A comparison of ampicillin and chloramphenicol therapy in *Haemophilus influenzae* meningitis. Pediatrics 48:411, 1971.
9. Ersley AJ: Aplastic anemia, in *Hematology*, edited by Williams WJ, Beutler E, Ersley AJ, Rundles RW. McGraw-Hill, pp 209-211, 1972
10. Klein JO: Current usage of antimicrobial combinations in pediatrics. Pediatr Clin North Am 21:443, 1974
11. Farid Z, Girgis NI, Yassin W, et al: Trimethoprim sulfamethoxazole and bacterial meningitis. Ann Intern Med 84:50, 1976

JIMSONWEED INTOXICATION

Jimsonweed is a hardy plant and has a general distribution throughout the United States. It is especially prevalent throughout the eastern seaboard states. Wherever one is in the Carolinas and Virginia, it is likely that within a few minutes or a few miles' drive that the weed can be found: in fields, parking lots,

fallow gardens in the fall, along city streets and country roads.

Reports of jimsonweed intoxication have appeared occasionally in the medical literature for a very long time. Usually these have been reports of the accidental ingestion of some part of the plant (leaves, seed) by young children. The wide range of symptoms has been noted, and deaths have occurred.

In contrast to these earlier reports, those of the past few years have been about adolescents, or young adults, who have deliberately ingested the seed of jimsonweed in search of altered states of consciousness. In one instance reported in the press in this state a year ago, a youth's death was attributed to an overdose of jimsonweed seed. There have been numerous cases requiring hospitalization for acute intoxication.

With many of the drugs used in recent years there has been the ever-present problem of quality control. Apparently this is also true with jimsonweed seeds in that the alkaloid content of the seeds may vary considerably from plant to plant and from locality to locality. In any case, the user gambles with high stakes in this game of biological analysis.

One youth known to the writer, after recovery from severe intoxication from the seeds, took it upon himself to destroy every plant he could find in the vicinity where he lived, a losing battle when one considers the multiple branches of the plant, each carrying several pods, and each pod containing hundreds of seed that are generously dispersed in the fall when the pods open. Thus, Jimsonweed has been around a long time and is likely to remain, even if the one-man vigilante committee were increased a thousand fold.

Although there are exceptions, the use of jimsonweed seed by adolescent experimenters appears to be a group phenomenon; no different from the pattern which is common among the young in their use of other mind-altering substances. An example was reported in the lay press in November, 1975, when 45 students from a junior high school in western North Carolina were taken to the hospital after several became ill from eating jimsonweed seeds and three had to be admitted for observation. In addition to whatever sociological functions the group participation may serve for youth, such as membership, status, and loyalty, it may at least serve a protective function in that individuals with alarming symptoms are more likely to be brought to the attention of medical personnel more promptly than if the seeds were ingested as a solitary pursuit.

The group phenomenon also may serve as an immediate deterrent to further use of the seeds by those in the group or those peripherally related to the group. The witnessing of the behavior and general condition of an individual markedly toxic from jimsonweed is a rather frightening experience. This is not to suggest that another group in the same locale may not experiment with the seeds, but the same adolescent may occupy different positions in different groups, and the first-hand stories appear to depress enthusiasm some among adolescents.

It is indeed difficult, if not impossible, to assess with any degree of accuracy the impact of drug education for young persons. Yet we generally subscribe to the belief that the informed person is more likely to make a rational decision. Hence, with the upsurge of experimentation with such naturally occurring toxic substances, we would be remiss in our drug education efforts not to include information about the toxic and sometimes fatal effects of jimsonweed intoxication.

Meanwhile, the medical profession is aware of the not infrequent experimentation of adolescents and young adults with this substance. The article in this issue of the *Journal* details important information about signs and symptoms of jimsonweed intoxication, the differential diagnosis and treatment. Although the acute cases reported were treated successfully, this is potentially a very dangerous situation for the poisoned individual, from the physiological changes as well as the irrational behavior accompanying these changes.

DOUGLAS F. POWERS, M.D.

Bulletin Board

NEW MEMBERS
of the State Society

Califf, Robert McKinnon, (STUDENT) Box 2727, Duke Medical Center, Durham 27710
Dionne, William Eugene, MD, UNC-G Student Health Center, Greensboro 27401
Huffman, Allen Willia, Jr., MD, (OBG) 1205 N. Center Street, Hickory 28601
Krishingner, Gene Lavere, MD, (GS) Route 8, Westview Drive, Hendersonville 28739
Lafferty, John Morrison, (STUDENT) 12 Lanark Road, Chapel Hill 27514
Mason, William Terry, MD, (ORS) 102 Mocksville Avenue, Salisbury 28144
McAlister, James Allen, Jr., MD, (PTH) 3625 Windbluff Drive, Matthews 28105
Peters, Stanley, MD, 326 25th Avenue, N.W., Hickory 28601
Robbins, Jeffrey Philip, MD, (OTOL) 201 W. McDowell Street, Morganton 28655
Sirisena, Omatta Mudalige, MD, C-8 Sunset Avenue, West, Rocky Mount 27801
Stover, John Oliver, Jr., MD, (R) 145 Steeplechase Road, Rocky Mount 27801
Uribe, John William, (STUDENT) Carolina Apt. B-32, Carrboro 27510

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category I credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

October 1-2

Clinical Urology
Fee: $75
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 1-2

Helping Children Learn to Cope
Place: Willis Building, East Carolina University, Greenville
Sponsor: North Carolina Mental Health Association
Fee: $30
For Information: North Carolina Mental Health Association, 3701 National Drive—Suite 222, Raleigh 27612

October 1-2

Breast Cancer Seminar
Place: Holiday Inn, West, Hwy 19-23 at I-40, Asheville
Sponsors: Mountain Area Health Education Center, in cooperation with Duke University Breast Cancer Detection Demonstration project.
Fee: $10; enrollment limited to 500
Credit: 4 hours; AAFP approval requested
For Information: Henry S. M. Uhl, M.D., Director, Mountain AHEC, 509 Biltmore Av., Asheville 28801

October 2

New Developments in the Control of Sexually Transmitted Diseases
Place: Berryhill Hall
Sponsors: U.N.C. School of Medicine, Department of Medicine, American Social Health Assoc., American Venereal Disease Assoc., and North Carolina Medical Society
Fee: $25; registration limited to 200
For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, U.N.C. School of Medicine at Chapel Hill 27514

October 6

The Role of the Medical Director in the Skilled Nursing Facility
Place: Royal Villa Hotel, Raleigh
Sponsors: North Carolina Medical Society, American Medical Association and North Carolina Health Care Facilities Association
Fee: $25
For Information: Mr. Gene L. Sauls, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

October 6-7

Sixteenth Annual Charlotte Post Graduate Seminar
Place: Charlotte Memorial Hospital and Medical Center Auditorium
Sponsors: Mecklenburg Chapter North Carolina Academy of Family Physicians; Mecklenburg County Medical Society
Credit: 12 hours; AAFP approved
For Information: David S. Citron, M.D., 1012 Kings Drive, Suite 1024, Charlotte 28283

October 8

Diabetes Symposium
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

October 14-17

Annual Fall Meeting of the North Carolina Society of Internal Medicine
Place: The Homestead, Hot Springs, Virginia
Fee: $25
Credit: CME approval requested
For Information: Ms. Jackie Cutrell, North Carolina Society of Internal Medicine, P.O. Box 27167, Raleigh 27611

October 22

The Eighth Annual Duke Orofacial Symposium
For Information: Galen W. Quinn, D.D.S., M.S., P.O. Box 3806, Duke University Medical Center, Durham 27710

October 22

Twenty-Seventh Annual Winston-Salem Heart Symposium
Place: Babcock Auditorium, Bowman Gray School of Medicine
Fee: Physicians $20, Nurses $10, Interns and Residents no charge
Credit: AAFP approval requested
For Information: Mrs. Elizabeth Cauther, Executive Director, Forsyth County Heart Association, 2046 Queen Street, Winston-Salem 27103

October 27

Treatment of Acute Alcoholism, Including DT's
Place: Country Club of Southern Pines (Elks Club) (Dinner 6:30; speaker 8:15)
Sponsors: Moore Memorial Hospital and UNC Office of Continuing Education
Fee: $11.50 (includes dinner)
Credit: 2 hours; AMA category 1: AAFP approved
For Information: C. H. Steffee, M.D., Moore Memorial Hospital, Pinehurst 28374

October 27-29

Mental Health for the Convicted Offender-Patient and Prisoner
Place: Sheraton Motor Inn, Crabtree Valley Mall, Raleigh
Sponsors: North Carolina Department of Correction and North Carolina Medical Society
Fee: $50
Credit: AAFP approval requested
For Information: Mr. Richard A. Kiel, Chief, Health Services, North Carolina Department of Correction, 831 West Morgan Street, Raleigh 27603

October 28-31

North Carolina Orthopaedic Association and South Carolina Orthopaedic Association Annual Meeting
Place: Mills-Hyatt House, Charleston, South Carolina
Fee: To be determined
For Information: Cecil H. Neville, Jr., M.D., Secretary-Treasurer North Carolina Orthopaedic Association, Pinehurst Surgical Clinic, Pinehurst 28374

October 29-30

Alumni Meeting Scientific Session
Credit: 5 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

October 29-30

Anesthesiology Fall Seminar—"Safe Anesthesia"
Place: The Sheraton Center, Charlotte
Sponsors: Department of Anesthesiology, Charlotte Memorial Hospital; Department of Anesthesiology, North Carolina Memorial Hospital, Chapel Hill; North Carolina Society of Anesthesiologists
Fee: Physicians $55; Nurse Anesthetists $45; Residents and Nurse Anesthetists in training $30; registration for one day only, $30
Credit: 10 hours; AMA Category 1
For Information: H. A. Ferrari, M.D., Chairman, Department of Anesthesiology, Charlotte Memorial Hospital, Charlotte 28234

October 30-31

Practical Dermatology for the Non-Dermatologist
Place: Blockade Runner, Wrightsville Beach
Fee: $50
Credit: 7 hours; AAFP approved
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

October 31-November 2

North Carolina and South Carolina Society of Ophthalmology and Otolaryngology Annual Meeting
Place: Pinehurst Hotel, Pinehurst
For Information: William M. Satterwhite, Jr., M.D., 1420 Plaza Drive, Winston-Salem 27103

November 5

Third Annual Arthritis Symposium: Therapy of the Rheumatic Diseases
Fee: $35
Credit: 7 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

November 18-20

North Carolina Academy of Family Physicians, Annual Scientific Program
Place: Royal Villa Hotel, Raleigh
Fee: $30 members, $40 non-members
Credit: 24 hours
For Information: Mr. Edwin P. Davis, Executive Director, North Carolina Academy of Family Physicians, 1002 Wake Forest Road, Raleigh 27604

November 19

Fall Meeting, North Carolina Academy of Preventive Medicine
Place: Carolina Inn, Chapel Hill
For Information: William L. Fleming, M.D., U.N.C. School of Medicine, Chapel Hill 27514

December 3-4

Second Annual Family Medicine Workshop
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 12

First District Medical Society Postgraduate Course in Medicine (the first of six weekly sessions)
Sponsors: First District Medical Society and the Office of Continuing Education, UNC School of Medicine
Fee: To be determined
Credit: 12 hours
For Information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932

January 21-22

Current Surgical Problems
Fee: $100
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 26-28

Alcoholism—The Search for the Sources
Place: Governors Inn, Research Triangle Park
Sponsors: North Carolina Alcoholism Research Authority and North Carolina Medical Society
Fee $30
Credit: 16½ hours approval requested

For Information: John A. Ewing, M.D., Executive Secretary, North Carolina Research Authority, 623 E. Franklin St., Chapel Hill 27514

February 16

Wingate Johnson Memorial Lecture
Speaker: Eugene Braunwald, M.D., Harvard Medical School
Credit: 2 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 23-26

Workshop: Electrolyte and Acid-Base Disorders
Fee: $150
Credit: 21 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 26-March 5

Caribbean Cruise, Seminar on Alcoholism
For Information: John A. Ewing, M.D., Executive Secretary, North Carolina Research Authority, 623 E. Franklin St., Chapel Hill 27514

March 12-13

Second Annual Radiology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 18-19

Frank R. Lock Obstetrics and Gynecology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 28-April 1

Radiology of Bones and Joints
Place: Downtowner Motor Inn, Durham
Fee: $300; registration limited to 100
Credit: 30 hours
For Information: Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham 27710

ITEMS OF SPECIAL INTEREST

October 18

Nursing and Allied Health Aspects of Care
Place: Elks Club, Southern Pines
Sponsors: North Carolina Heart Association, Inc.; Fayetteville Area Health Education Center; Moore Memorial Hospital, Inc.; Kate B. Reynolds Health Care Trust; North Carolina Regional Medical Program
Fee: $8.50; pre-registration required
Credit: 6 continuing education credits applied for
For Information: Moore Memorial Hospital, P.O. Box 3000, Pinehurst 28374, Attention—Beverly Graham, R.N.

October 25-29

New Concepts in General Radiology
Place: Southampton Princess Hotel, Bermuda
Fee: $250
Credit: 25 hours
Program: The scientific program will take place from 8:00 A.M. to 1:00 P.M. each day, and will be organized around a disease oriented format. Subject areas and guest faculty who will address these include: chest — Robert Heitzman, M.D., Syracuse, New York; gastro-intestinal tract — Roscoe E. Miller, M.D., Indianapolis, Ind.; genito-urinary — John A. Evans, M.D., New York, N.Y.; nuclear medicine — Alexander Gottschalk, M.D., New Haven, Conn.; pediatric radiology — J. Scott Dunbar, M.D., Cincinnati, Ohio; skeletal system — Elias G. Theros, M.D., Washington, D.C.
For Information: Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham 27710

January 2-15

Second Medical Refresher Cruise Seminar — (Yucatan Peninsula, Coast of Guatemala — Colombia, Montego Bay)
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
Fee: Tuition $200; other fees dependent upon accommodations
Credit: 21½ hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

Instructional Materials Available on Problem-Oriented Medical Records

As part of a two-year project financed by the North Carolina Regional Medical Program, the UNC School of Nursing at Chapel Hill has developed two manuals designed to assist health personnel with implementation of the POMR system. These are:

—a Self-Instructional Manual on the Basic Components of POMR, designed for nurses (46 pages)
—Guidelines for Implementation of the POMRS (53 pages), which includes a bibliography on POMR, a section on obstacles to implementation, and questions

The manuals are available for $1.00 each plus postage. A variety of videotapes, demonstrating the use of POMR to nurses, slides, and a film produced by Lawrence Weed, M.D. and associates, on POMR, may be borrowed for training.
For more information contact: Ruth J. Harris, Assistant Professor, School of Nursing, UNC-CH, Chapel Hill 27514

Courses In Ultrasound

The last two of a series of three ten-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category 1.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem 27103.

PROGRAMS IN CONTIGUOUS STATES

October 18-20

Cancer Concepts 1976
Place: Gatlinburg, Tennessee
Sponsors: East Tennessee Cancer Research Center, Knoxville Academy of Medicine and University of Tennessee Center for the Health Sciences/Knoxville
Program: "Using three types of cancers as focal points, breast, lung and gastrointestinal, topics such as xeromammography, sputum cytology, hormone receptors and adjuvant therapy will be explored."
For Information: Muriel B. Levin, Associate Director for Education and Community Programs, East Tennessee Cancer Research Center, IBM Building/Suite 201, 9040 Executive Park Drive, Knoxville, Tennessee 37919

October 20-23

Telecommunications and Rural Health
Place: Kiawah Island Inn, Charleston, South Carolina
Program: " . . . to present the problems of rural health delivery and to investigate and discuss ways by which professional services and care can be augmented, especially in the area of modern communication methods including the use of satellites."
Sponsors: International Tele-Health Planning Group and the Division of Continuing Education, Medical University of South Carolina
Fee: $75
For Information: Vince Mosely, M.D., Director, Division of Continuing Education, Medical University of South Carolina, 80 Barre St., Charleston, South Carolina

October 24-28

Annual Meeting, American College of Chest Physicians
Place: Atlanta, Georgia
For Information: American College of Chest Physicians, 911 Busse Highway, Park Ridge, Illinois 60068

November 15-18

61st Annual International Scientific Assembly of Interstate Postgraduate Medical Association
Place: Atlanta Marriott Hotel, Atlanta, Georgia
Program: " . . . major emphasis in family practice, internal medicine, obstetrics and gynecology and psychiatry."
Sponsors: Interstate Postgraduate Medical Association of North America; Georgia Academy of Family Physicians; Emory University School of Medicine; Medical College of Georgia
Fee: $50 in advance or $75 at the meeting; open to any licensed physician in the U.S. or Canada
For Information: Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, Wisconsin 53701

November 19

Fifth Symposium in Internal Medicine
Place: University of Tennessee Hospital, Knoxville
Program: "The one-day symposium will place specific emphasis on new treatment regimes and current controversies in Internal Medicine."
Sponsors: Knoxville Society of Internal Medicine, Department of Medicine of the University of Tennessee Clinical Education Center
Credit: AMA Category 1 approved
For Information: The Continuing Medical Education Center, Drawer 116, 1924 Alcoa Highway, Knoxville, Tennessee 37920

December 7-10

Structure-Function Correlations in Cardiovascular Disease
Place: Williamsburg Lodge, Williamsburg, Virginia
Fee: Members $100; non-members $150
Credit: AMA category 1
For Information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

The items listed in the above column are for the six months immediately following the month of publication. Requests for listing should be received by "WHAT? WHEN? WHERE?", P.O. Box 27167, Raleigh 27611, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

Inaugural Remarks

This year as never before the auxiliary has been accepted as an extension of the Medical Society. Under the leadership of Dr. Jesse Caldwell, the society is expecting great things of us in co-sponsored endeavors and we cannot let them down.

Priority will continue to be given to legislation, AMA-ERF, our student loan fund and membership. Although our membership has increased every year, we must work at keeping members. I asked each county president to contact personally during the summer any doctor's spouse who did not renew membership. All of us are aware of changing times and that continuing re-evaluation is a must for our projects to be meaningful and relate to today's modern auxiliary member. Women have almost "arrived" in today's world. The transition is startling when viewed in the light of ancient history. The ancient Greek, Hippocrates, gives a picture of the physician which is applicable today. But no where does he mention a physician's wife. Another Greek, Homer, tells about the tribulations of Ulysses, who was delighted to return to Ithaca because he could see his land, his cows, and, finally, his wife Penelope — in that order. Today, we have one-upped the cows; you've come a long way, baby!

Seriously, after Dr. Harvey Estes' speech on "The Fifteen-Year Syndrome," someone asked if patients came first and continuing education next, how far down the line should spouses be. My question for each of you to ask yourselves is just where in the line of priorities do your husband and family come? I ask each of you to be an auxiliary of one during the year to make your home a haven for your spouse and family.

Our theme for the year will be "Child Health Advocacy" and the challenge is out to you to improve the health of North Carolina children. Working with your society, promote improved school health education; promote programs on safety and first aid (such as the Heimlich maneuver), immunization, infectious diseases including venereal disease, parenthood and nutrition. We must reach our teen-agers with the facts of good health because already one of ten 17-year-old girls in North Carolina is a mother.

To help implement projects, your state and national auxiliaries furnish excellent, validated material through package programs and the project bank. Another resource is the newly formed Film Bank which Mrs. Philip Russell will head. An invaluable tool of information continues to be our *Tarheel Tandem*.

For community service in health related areas, the

N.C. Medical Society has asked that local societies and their auxiliaries work together to help people locate doctors who can accept new patients.

We can also help with the handicapped and the elderly by encouraging equal transportation, modified housing and barrier removal — both in architecture and attitude.

I would like to close with a poem written by a member of the Gaston County Medical Auxiliary, Kay Bonnin.

Bloom Where You're Planted

Like posies we're planted in one certain spot
In soil unchosen; like it or not
The spot that we're given — and it may not be grand —
Has been granted to each by God's unseen hand.

But unlike the roses and bright daffodils
Our blossoms and flowers depend on our wills.
We can stretch to the sun, open and wide
Or shrink to ourselves and wither inside.

We can learn from the flowers the lesson to grow
Onward and upward in the place that we know;
Or we can long for the pleasures of time far away
And forget about growing and blooming today.

So bloom where you're planted;
Get those green leaves unfurled.
You're a prize-winning blossom
In God's garden world.

Do your own thing in your own community. But remember, "we can do more together."

Mrs. E. H. Martinat

News Notes from the—

UNIVERSITY OF NORTH CAROLINA
DIVISION OF HEALTH AFFAIRS

Dr. William E. Bakewell, Jr. has been appointed Associate Dean of the School of Medicine of the University of North Carolina at Chapel Hill. His responsibilities will include chairing the educational policy committee and the admissions committee.

In announcing the appointment, effective July 1, Dean Christopher C. Fordham III said, "I am very happy that Dr. Bakewell has agreed to expand his leadership role in the school. I am confident that he will do an exceptionally fine job of facilitating the work of the faculty and the students in the vital areas of curriculum and admissions."

Bakewell, who joined the UNC-CH faculty in 1965, has been professor of psychiatry since 1971. He has been a member of the educational policy committee, the body that governs curriculum decisions at the medical school, since its inception ten years ago. He has also served on the admissions committee for six years.

A graduate of the University of Northern Iowa, he holds the M.A. degree from the University of Iowa and the M.D. and C.M. degree from McGill University.

* * *

Dr. T. Kenney Gray has been named director of the Clinical Research Unit at the University of North Carolina School of Medicine at Chapel Hill.

The appointment, effective July 1, was announced by Dean Christopher C. Fordham III. He said, "The Clinical Research Unit, since its inception, has had strong leadership and stewardship by its previous directors, Dr. Walter Hollander and Dr. William Blythe. I am delighted that Dr. Gray has agreed to assume these responsibilities. He is very well qualified for this important role in the school of medicine and the university."

Dr. Gray, associate professor of medicine and assistant professor of pharmacology, has been assistant director of the Clinical Research Unit since 1974. He is also a Jefferson-Pilot Fellow in Academic Medicine and an attending physician at The N.C. Memorial Hospital.

* * *

Researchers at the University of North Carolina School of Medicine at Chapel Hill have been awarded a $2 million grant to study the relationship between common respiratory infections in children and chronic lung diseases in adults.

The grant from the National Heart, Lung and Blood Institute of the National Institutes of Health will enable the medical school to establish a Pediatric Pulmonary Specialized Center of Research to conduct the study. Dr. Wallace A. Clyde, professor of pediatrics, is the principal investigator and director of the five-year project.

"A number of factors are known to aggravate serious lung problems in adults," says Dr. Clyde, "but the basic causes of diseases such as chronic bronchitis and emphysema are largely undetermined."

The 18 researchers involved in the project will examine the theory that the origin of these diseases may be in infancy and early childhood. That is when the lungs undergo rapid development and when respiratory infections are the most common.

* * *

Dr. Charles W. Carter, Jr. has been named the Jefferson-Pilot Fellow in Academic Medicine for 1976-77. The award, established in 1971 by the Jefferson-Pilot Corporation, provides the recipient with $2,000 per year for four years.

Dr. Carter, assistant professor of biochemistry and nutrition at the school of medicine, was selected for the fellowship by a distinguished committee of medical faculty.

The program is designed to attract and hold young faculty to the school of medicine by enabling them to "explore new ideas, new ways of teaching students,

treating patients or investigating biological problems."

A graduate of Yale University, Dr. Carter received the M.S. degree in chemistry and the Ph.D. degree in biology from the University of California at San Diego. He joined the UNC-CH faculty in 1974.

* * *

Dr. Paul L. Munson, Sarah Graham Kenan Professor and chairman of the department of pharmacology at the University of North Carolina School of Medicine at Chapel Hill, has been awarded the Koch Medal of the national Endocrine Society.

The medal, the highest honor bestowed by the society, is presented annually to an individual judged to have completed work of special distinction in endocrinology.

* * *

Robert W. Heins has been named executive director of the Private Patient Service of the University of North Carolina School of Medicine at Chapel Hill.

His appointment, effective July 1, was announced by Dean Christopher C. Fordham III.

Heins, a native of New York, comes to UNC from the University of Michigan Medical School, where he was for one year director of the Medical Service Plan Office.

From 1973 to 1974 he served as director of fiscal services at The N.C. Memorial Hospital. His experience in hospital financial management began in 1963 with a four-year stint as patient accounts manager at the Children's Hospital of Los Angeles. Heins has held similar positions at the UCLA Health Sciences Center and the UCSF Hospitals and clinics.

* * *

Dr. Robert G. Faust, professor of physiology at the University of North Carolina School of Medicine at Chapel Hill, started leave for a year beginning Aug. 1 to study at the Max Planck Institute for Biophysics in Frankfurt, West Germany.

Beginning Jan. 1, Dr. Kenneth Sugioka, professor and chairman of anesthesiology at the UNC-CH School of Medicine, will conduct research on oxygen electrodes at the Max Planck Institute in Dortmund, West Germany. He will return June 30, 1977.

* * *

The Upjohn Company of Kalamazoo, Mich., has pledged $237,500 to endow a chair in obstetrics and gynecology at UNC-CH.

Announcement of the award was made by Dr. Christopher C. Fordham, III, dean of the UNC-CH School of Medicine. The Upjohn Company has deposited $47,500 with the Medical Foundation of North Carolina, Inc., as the first of five annual gifts to endow the chair.

Upjohn president, Dr. W. N. Hubbard, Jr., said, "The income from the endowment is to be made available for expenditures to support the Upjohn Professorship in the department of obstetrics and gynecology.

News Notes from the— DUKE UNIVERSITY MEDICAL CENTER

An additional hyperbaric chamber is being added to the F. G. Hall Laboratory for Environmental Research that will allow Duke researchers to simulate undersea depths down to 3,500 feet, the deepest capability of any chamber in the country.

The $340,000 for the chamber is coming from the Richard King Mellon Foundation ($100,000), the Department of the Navy ($150,000), two commercial diving contractors ($40,000) and the National Oceanic and Atmospheric Agency through the N.C. Sea Grant Program ($50,000).

The greatest depth capability in the Duke chambers now is 1,000 feet.

* * *

Medical center employees, all black men, served as a control group in July for a study conducted by the National Institute for Occupational Safety and Health (NIOSH).

It was a lung-function and health study known officially as the N.C. Brick Industry Study and centered on black employees at Duke of comparable age with persons in the brick industry who already had been tested.

Dr. Nicholas G. Georgiade, professor and chief of the Division of Plastic, Maxillofacial and Oral Surgery, is the new president-elect of the American Association of Plastic Surgeons.

Georgiade, who has specialized in facial and breast reconstruction since joining the faculty in 1953, will assume the presidency of the world's oldest society of plastic surgeons next year.

For the past 12 months, the Lowell, Mass., native has served as vice president of the organization, and from 1972 to 1975, he held the office of secretary.

* * *

Dr. David W. Scott, an associate professor of immunology, has won a $5,883 grant from the American Cancer Society — Eleanor Roosevelt International Fellowship program to do research in Australia.

Scott began a year-long study in September at the Walter and Eliza Hall Institute of Medical Research in Victoria. The grant covered round-trip air fare for himself and his family.

* * *

The continuing development of a computerized textbook of medicine here has received support from the William Randolph Hearst Foundation.

The foundation has awarded Duke $51,000 to help finance the project.

The computerized textbook program is aimed at accumulating and storing in data banks patient information from the time of patients' initial medical attention through their follow-up care.

The first chapter of the textbook, covering the care of heart patients, already is in operation at Duke. Yet to be developed are chapters on gastroenterology, endocrinology, kidney disease and cancer.

As information accumulates, a physician will be able to compare the cases of hundreds or thousands of other patients with that of the patient he is treating at the moment.

* * *

Dr. Eric Pfeiffer has begun a year's sabbatical leave to serve as acting director of the new Davis Institute for the Care and Study of Aging in Denver, Colo.

Pfeiffer is associate director for programs in the Center for the Study of Aging and Human Development and project director of the Older Americans Resources and Services (OARS) Division. His sabbatical began July 1 and will extend through June 30, 1977.

Dr. George L. Maddox, director of the Center for the Study of Aging and Human Development, said that during Pfeiffer's absence his responsibilities will be assumed by Dr. Dan Blazer, who is returning to Duke on completing a fellowship in liaison psychiatry at Montefiore Hospital in New York City.

* * *

Construction has started on a new $280,000 hemodialysis building here.

The new facility, to be completed by December, will bring together for the first time in many years all of the outpatient renal dialysis services offered by Duke Hospital, according to Dr. Roscoe R. Robinson, chief executive officer of the hospital and head of the Division of Nephrology.

Located on Morreene Road about 200 yards west of its Erwin Road intersection, the Hemodialysis Center will be a one-story, 3,787-square-foot wooden structure of contemporary design. It will include eight dialysis stations, dressing and waiting rooms, a reception area and offices.

* * *

The federal government has tapped a medical center expert on poisons, Dr. Jay Arena, to be a consumer representative on its Technical Advisory Committee on Poison Prevention Packaging. The committee is an arm of the U.S. Consumer Product Safety Commission.

While still a young faculty member at Duke in the 1930s, Arena began collecting information on poisons and indexing the potentially poisoning ingredients in household products. Out of his work grew the Duke Poison Control Center, which treats or consults on about 200 poisoning cases a month throughout the Southeast.

* * *

The Board of Directors of the Muscular Dystrophy Association, Inc. recently awarded medical researchers at Duke University grants and fellowships totaling $87,595 to be used for research in finding a cure for muscular dystrophy and other related neuromuscular disorders. In the past ten years MDA's Scientific and Medical Research Advisory Committee has awarded Duke scientists more than $300,000 to finance the search for causes of and cures for the 35 neuromuscular diseases covered by the association.

The doctors at Duke University Medical Center receiving grants and fellowships are Stanley H. Appel, M.D., Allen D. Roses, M.D., Michael K. Reedy, M.D., Richard Marchase, Ph.D., Pierre Wong, Ph.D., Richard C. Carlsen, Ph.D., and Lorne Mendell, Ph.D.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Dr. Marvin B. Sussman, professor of sociology at the Bowman Gray School of Medicine, has been named chairman of the school's Department of Medical Social Science and Marital Health.

He succeeds Dr. Clark E. Vincent, who asked to be relieved of his administrative responsibilities as chairman in order to devote more time to his position as director of the department's Marital Health Clinic. Vincent will continue as professor in the department, with responsibilities in teaching, counseling and writing.

Sussman, the former Selah Chamberlain Professor of Sociology at Case Western Reserve University, was appointed to the Bowman Gray faculty in January, 1976.

An internationally recognized sociologist, Sussman's field of special interest include family theory and research, population studies, sociology of medicine and sociology of rehabilitation, aging and organization of human service systems.

He was director of the institute on the Family and the Bureaucratic Society at Case Western for eight years before joining the Bowman Gray faculty. He formerly held faculty positions at Union College and Yale University.

Sussman is a past president of the Groves Conference on Marriage and the Family. He also has served as president of the Society for the Study of Social Problems and the Ohio Council on Family Relations.

* * *

The Bowman Gray School of Medicine has been designated a National Cerebrovascular Research Center and has received a $1.2 million grant from the National Institute of Neurological and Communicative Disorders and Stroke.

The school is one of 15 such centers devoted to stroke, head injuries or spinal cord diseases.

The three-year grant is intended to promote research and better techniques for handling victims of stroke and transient ischemic attacks (TIAs).

About a third of all patients who suffer a TIA later have a stroke.

The grant basically is divided into two parts — one dealing with the diagnosis, treatment, rehabilitation and long-term followup of patients who suffer a TIA or stroke and the other dealing with basic research to better understand the brain's blood circulation and how it is affected by disease and therapeutic drugs.

Though the cerebrovascular disease program is administered by Bowman Gray's Department of Neurology, the program actually involves the efforts of people throughout the medical center.

The grant provides funds for psychological studies of patients with TIAs to determine the extent of their neurological damage. Researchers in comparative medicine will be looking for a primate model in which to study stroke. Physiologists will further explore the blood circulation in the brain and the effects of drugs on that circulation.

The grant also makes possible bringing to the medical center doctors from Australia, Japan, Canada and Spain who will expand their studies of cerebrovascular disease in the research center.

The grant is an outgrowth of a decade of cerebrovascular research and patient care at the medical center with funds from NINCDS. Since 1966, the medical center has strengthened its stroke diagnostic

capabilities in radiology, formed a multidisciplinary team of basic researchers and clinicians for stroke and TIA work, established ultrasound as an integral part of the stroke program and developed models for the medical surgical treatment of stroke which have influenced the management of stroke nationwide.

The stroke program has led to the development of an automated tilt table to monitor patients and correct for variations in the blood pressure of stroke victims and brought intracranial pressure monitoring to the medical center to help doctors keep track of and treat pressure in the brain.

* * *

Three Bowman Gray faculty members have been given travel awards to support special study and attendance at international meetings in their respective fields.

The recipients are Dr. Inglis J. Miller, assistant professor of anatomy; Dr. Stephen H. Richardson, professor of microbiology and immunology; and Dr. B. Moseley Waite, professor of biochemistry.

The International Travel Awards Program was established by the medical school four years ago to further the career development of outstanding young faculty members.

The awards are made on the basis of the scientific merit of the faculty member's work and the potential of his proposed travel for career development. Each award provides a maximum of $500 for travel expenses.

* * *

John E. Lynch, chief executive officer of North Carolina Baptist Hospital, has been elected to the Board of Trustees of Blue Cross and Blue Shield of North Carolina.

He was elected to a three-year term on the board by the North Carolina Hospital Association.

Lynch, a member of the Board of Trustees of the N.C. Hospital Association, recently was appointed to the newly established North Carolina Health Coordinating Council.

The board of Blue Cross and Blue Shield of North Carolina is composed of 13 public representatives, six hospital administrators and six physicians.

* * *

Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology and Immunology, has been elected to a three-year term as a member of the Infectious Disease Advisory Committee of the Gulfsouth Research Institute.

Dr. Jimmie L. Pharris, administrative director of the Physician Assistant Program, has been appointed to the Government Relations Committee of the Association of Physician Assistant Programs.

* * *

Dr. Marvin B. Sussman, professor and chairman of the Department of Medical Social Science and Marital Health, has been appointed to the Research Committee of the Society of Teachers of Family Medicine.

* * *

Charles Underdahl, research assistant in otolaryngology, received the Founders' Award from the North Carolina Heart Association for "distinguished service and leadership on behalf of the heart cause in North Carolina." He also has been selected as an instructor of esophageal speech by the International Association of Laryngectomees.

* * *

Dr. Hal T. Wilson, medical director of the Physician Assistant Program, has been appointed to the Curriculum and Testing Committee of the Association of Physician Assistant Programs. He also has been appointed to the Public Relations, Medical Education and Allied Health Manpower Committees of the North Carolina Medical Society.

AMERICAN BOARD OF EMERGENCY MEDICINE

Dr. George Podgorny of Winston-Salem was elected president of the American Board of Emergency Medicine at a meeting June 27 in Dallas, Texas.

Dr. Podgorny is director of emergency medicine at Forsyth Memorial Hospital in Winston-Salem and is assistant professor of clinical surgery at Bowman Gray School of Medicine. He is also a director of the American College of Emergency Physicians and chairman of its section on education. He is a delegate of the Emergency Medicine Section of the N.C. Medical Society and an appointee to the State Health Coordinating Council.

AMERICAN COLLEGE OF RADIOLOGY COMMISSION ON CANCER INTERIM STATEMENT ON BREAST CANCER DIAGNOSIS

1. *Introduction*

Mammography has proven to be the most effective diagnostic tool so far developed for the detection of breast cancer at an early stage before it spreads to regional lymph nodes. This early detection increases the probability of cure. Mammography at appropriate intervals in asymptomatic women over age 35 promises to reduce significantly the number of deaths from breast cancer.

Since there is now no definitive scientific evidence with regard to:

1. optimal age for the initial mammogram;
2. frequency of examination;
3. data on possible long term radiation risk;

this statement is being issued, as a summary of current informed opinion.

II. *Care of Women with Symptoms*

In women who have symptoms or physical findings suggestive of possible breast cancer, medical decisions must be individualized to fit the patient's needs. Under these circumstances, mammography is an integral part of the evaluation of the patient.

III. *Screening of Asymptomatic Women*

Recognizing that definitive data are not yet available that allow the establishment of firm criteria that define a protocol for the screening for breast cancer in asymptomatic women, the ACR recommends the following:

1. All women should have annual physical examination of the breasts and be taught breast self-examination.
2. For asymptomatic women the first, or baseline, mammographic examination should be performed between the ages of 35 and 40.
3. Subsequent mammographic examinations should be performed at one to three year intervals unless more frequent examination is medically warranted.
4. After age 50, annual or other regular interval examinations, including mammography, should be performed.
5. Although the carcinogenic effects of radiation at current levels of exposure are probably immeasurably small, continuing attempts to reduce exposure should be made. However, image quality must be preserved for accurate diagnosis to insure the best risk/benefit (cure) ratio.
6. Each radiologist should assure the periodic monitoring of his equipment and procedures to determine that the patient's exposure is being maintained at the lowest feasible level.

IV. *Research Programs*

The protocol currently being followed by the NCI/ACS sponsored "Breast Cancer Detection Demonstration Projects" should be pursued so that the data are as complete and accurate as possible in order that meaningful conclusions can be drawn. Follow-up of the patients must be carried out for a number of years to insure collection and evaluation of the data. Theoretical concerns of possible radiation induced breast cancer do not warrant change in the current protocol of the "Breast Cancer Detection Demonstration Projects." Estimates of risk that include a radiation carcinogenic effect are of dubious validity because of the lack of objective scientific evidence. Research must be continued and encouraged to:

1. improve methods for measurement of low level radiation;
2. further reduce the radiation dose in mammography consistent with good image quality;
3. determine the most appropriate age at which to begin screening for different risk groups;

4. define women of high risk;
5. define those mammographic findings that dictate re-examination at a shorter interval;
6. establish the appropriate intervals for re-examination; and
7. collect evidence of the benefits and risks of mammography.

V. *Future Statements*

Further statements will be issued when additional valid information permits.

PLEASE NOTE: If you wish to talk to a diagnostic radiologist about this position paper, please call or write to:

Gerald D. Dodd, M.D., M.D. Anderson Hospital, 6723 Bertner Dr., Houston, Tex. 77025. (713) 792-2700.

Richard G. Lester, M.D., Herman Hospital, University of Texas Medical School, Department of Radiology, Houston, Tex. 77025. (713) 797-3664.

Month in Washington

The Medicare-Medicaid cost containment bill proposed by Sen. Herman Talmadge (D-Ga.) could have harmful consequences on patients, the American Medical Association has told the Senate Finance Health Subcommittee.

The measure, introduced a year ago by Talmadge, was considered at a one-week hearing by the Subcommittee which the lawmaker heads. The wide-ranging bill contains scores of proposed changes in Medicare and Medicaid and calls for a major reorganization of the government's health programs.

"In view of the continuing inflationary pressures in our economy, we are indeed sympathetic with the intent of this legislation to seek limitations upon the increasing costs of these health programs," testified Edgar T. Beddingfield, Jr., M.D., chairman of the AMA's Council on Legislation. He added, however, that "arbitrary curtailments of increases in costs will have natural consequences with respect to maintaining quality and availability of care. Each element cannot be treated separately without expectation of impact on the others."

"Taken as a whole, the bill should not be enacted as it would not be in the best interests of Medicare-Medicaid patients," said Dr. Beddingfield.

HEW Secretary David Mathews, testifying earlier, had said he was not confident the overall bill would be as effective as its backers hoped. He said he had "preliminary reservations." HEW's formal position on the bill will not be made "until the next budget-legislative cycle," Mathews said, adding there isn't time this year for Congress to complete consideration of the measure.

While there is little chance of the bill advancing in this Congress, Talmadge declared in an opening statement he hoped the hearings would provide the basis "for timely Congressional action."

Various restrictions, limitations and changes in reimbursement for hospital and physician services are among the controversial features of the bill.

One provision calls for creation of a "participating physicians" category under Medicare which physicians would either accept on assignment all Medicare cases, or none. "Participating" physicians would be offered certain inducements such as simplified and speeded-up billing procedures. After asking why more efficient payment procedures cannot be put into effect regardless, Dr. Beddingfield said "the fact that inducements are necessary in order to buttress a sagging assignment rate should cause an examination" of the current "insufficient reimbursement rate (which) is the major deterrent to assignments."

The purpose of the disputed provision would be better accomplished by "making the reimbursement level under that system more acceptable and in accord with usual and customary practices," said the AMA official.

"The provision on 'hospital associated physicians' exceeds the proper bounds of federal action," Dr. Beddingfield said. "It is not the role of the federal government to specify elements which constitute the practice of medicine generally or in any of its specialty fields. Nor should federal legislation, by statutory definition, attempt to divide or specify the role of the physician in the practice of medicine. Accordingly, the provisions as to anesthesiology services and pathology services should not be adopted."

He added that the section entitled "hospital associated physicians" is "misleading" and would apply to the entire spectrum of physicians' services in the Medicare program. "We strongly object to any application of any provision which would limit recognition of what constitutes physicians' services in the communities across our nation. This section would disregard normal professional relationships and establish as the proper recognition of certain physicians'

income only that level which would be received by a salary. We find this premise untenable."

The bill's ban on certain contractual relationships between hospitals and professionals was opposed by the AMA. "While some individual contracts are not to be condoned," Dr. Beddingfield said, "hospital management and physicians should be free to enter into various arrangements in the interest of patient care." Hospital management and physicians must remain accountable to the public, but the action of prohibiting any percentage arrangement "should not be countenanced."

The AMA spokesman said the bill carries "a very strong potential for a continued shifting of segments of health care costs to private patients — costs which are properly the obligation of the federal program on behalf of its beneficiaries. When this shifting occurs, it not only has ramifications relating to availability of care for Medicare-Medicaid patients, but it also affects quality of care for all patients," he said.

* * *

Under new procedures announced by the Health, Education and Welfare Secretary, HEW must now consult broad segments of the public before it prepares controversial regulations mandated by Congress or for compelling administrative need.

The issuance of regulations by HEW over the past few years has become a subject of considerable dispute, with court challenges filed by the American Medical Association and others contending that the government had gone beyond the intent of Congress in carrying out the law.

"For far too long HEW has gone to the public in these situations only to tell them what it intends to do. From now on our first step will be to ask the people of this country what they think we should do," HEW Secretary David Mathews said.

The secretary said he believes strongly that the regulation process is HEW's "most intrusive channel into people's lives."

HEW will notify the public through town hall-type meetings, advertisements, public service announcements, news releases, professional and service organizations, mailings, the Federal Register, and HEW's 10 regional offices.

Following are the steps to be taken by HEW in drafting important regulations:

- Publication of a notice of intent to propose regulations which would place issues and options before the public and invites comment.
- If the department has a preference, it will be stated clearly at the outset — an innovation.
- Publication in the Federal Register of a notice of proposed rule-making— a proposed regulation — which takes into account the requirements of the law, Congressional intent, the

public's views, and the professional expertise of HEW.

The public normally will have 45 days to comment following publication of both HEW's intent to regulate and its proposed regulations. Each of these documents will include the name of a person in HEW who can be contacted for clarification or further information.

HEW also said it plans training sessions for department regulation writers so that regulations are written in clear, concise English.

* * *

The AMA has urged the House Commerce Committee to make major changes in legislation to bring the nation's clinical laboratories under tighter federal control.

One of the most controversial provisions of the Clinical Laboratory Improvement Act (CLIA) as approved by the Commerce Health Subcommittee prohibits Medicare reimbursement for labs under any rental or lease which involves a percentage arrangement. "We particularly object to this section because it was never discussed or considered during public hearings," the AMA said in a legislative alert to constituent bodies.

"This section has far reaching contractual considerations involving physicians and hospitals," the AMA said. "In the name of openness and fairness the matters covered in this section should be dealt with separately and we ask that this section be deleted."

This disputed provision, which also covers Medicaid and Maternal and Child Health reimbursement, is similar to a key section of the Talmadge bill in the Senate.

The AMA singled out two other provisions for special concern in the CLIA bill.

One allows an exemption for a laboratory in a physician's office but only where physicians actually perform all tests and procedures in connection with the treatment of their patients. "With such a restriction, laboratories operated in physicians' offices would be forced to close down," said the AMA. "Existing law exempts laboratories operated by physicians where tests are done personally or through employees solely as an adjunct to the treatment of their own patients. This exemption should continue."

The other provision deals with revocation of a license for a number of activities, one of which is finding that the owner or operator of a laboratory has engaged in a billing practice which creates a discriminatory effect between patients reimbursed, in whole or in part, under programs receiving federal funds and patients who are not so reimbursed. "This provision apparently seeks a uniformity of fees for services by the laboratory," said the AMA. "This provision could in fact require a raising of fees under federal programs and thus would increase federal program costs. Furthermore, any provision that would state that the prohibition would be against a charge higher for a federal program than for a non-federal program would still be objectionable.

"A dangerous precedent is established where the licensing authority (the HEW secretary) can revoke a license based on fees charged to programs administered by him."

* * *

House and Senate conferees have still not met to reach agreement on the crucial Health Manpower Bill.

The major issue to be resolved is federal controls over residencies. The House Manpower Bill approved last fall was stripped of a residency control feature on the floor of the House. A rigid and sweeping Senate control plan over allocation of residencies was watered down substantially on the floor of the Senate but the final Senate bill requires medical schools to set aside minimum percentages of residency programs for "primary care" slots.

Also important are the "payback" provisions for medical students. In this respect, the House bill is more stringent than the Senate bill. The House would require, starting in 1985, that medical students pay back, either in money or service in shortage areas, that portion of the individual student's yearly medical education subsidized by the federal government in the form of capitation subsidies to the medical schools. At present, this runs about $2,000 a year.

The comparable Senate provision requires medical schools starting in 1978 to assure that 35 percent of their first-year places are available for students who, prior to admission, have submitted applications for National Health Service Corps scholarships and have agreed to accept such scholarships.

Both bills contain provisions designed to reduce the inflow of foreign medical graduates.

The major new thrust in the two bills, in addition to the extension of capitation aid to medical schools, is to produce more physicians in the "primary care" category and to get more physicians into shortage areas.

The administration has had strong reservations about provisions in both bills, but as they stand now it appeared unlikely the legislation would encounter a presidential veto.

* * *

Food and Drug Commissioner Alexander Schmidt, M.D., believes Congress must shoulder much of the blame for the controversy swirling around his embattled agency. Dr. Schmidt, who is leaving the FDA in December to become Vice Chancellor for Health Services at the University of Illinois, made clear in an interview with *AM NEWS* that he believes the persistent critics of FDA on Capital Hill, in the press and television, and among consumer groups are unfair and damage the agency's morale and efficiency.

He told *AM NEWS* the FDA has been driven into a "conservative" position in approving new drugs because of the pressures from Congressmen who believe the agency isn't tough enough with drug companies. Congress never calls a hearing when a drug is rejected,

but always calls one when a drug is approved, he said, implying that a climate of fear of Congressional retaliation has pervaded FDA.

Dr. Schmidt also said he thinks the medical profession could be more supportive of FDA's position and verbally less critical.

* * *

Students receiving federal scholarships and loans should be given a tax break, the AMA has told Congress.

Failure of Congress to continue previous exemption of such aid from taxation is proving a financial hardship on students and threatening to discourage service to the public in areas where there are shortages of medical manpower and facilities, the AMA said.

The exemption lapsed on certain student loan programs in addition to scholarship aid from the Armed Forces and the Public Health Service including the National Health Service Corps.

In a letter to the Senate Finance Committee, AMA Executive Vice President James H. Sammons, M.D., noted that with the expiration of the tax exemption, about 5,000 students in the Armed Forces Health Professions scholarship program and about 2,700 students currently in the National Health Service Corps scholarship program are now required to pay income tax on their scholarship funds, which may include tuition, educational fees and stipends.

"The imposition of the tax on such financial assistance will impose a significant financial burden for many students now receiving such scholarships and act as a deterrent to acceptance of scholarships which carry a service commitment," Dr. Sammons said.

He pointed out that the AMA "has long advocated the use of financial incentives to encourage the development of an adequate supply of physicians to provide needed health care services."

To impose a tax on scholarships under such circumstances would defeat the purpose of the scholarship, Dr. Sammons said. "Financial obstacles should not be placed in the path of assisting those who, being qualified for medical education, have accepted a scholarship and agreed to a service commitment."

"This situation deserves the immediate attention of Congress," Dr. Sammons said.

In Memoriam

Howard Montfort Starling, M.D.

A great loss was suffered in March 1976 not only by the physicians of this State of North Carolina but by the many patients and friends of Dr. Howard Montfort Starling of Winston-Salem.

Doctor Starling was born in Hubert, North Carolina, on November 19, 1907, and had all his premedical education in his home state. Having been graduated from the University of North Carolina, he entered medical training at the University of Virginia, where he received the degree of Doctor of Medicine in 1931.

Doctor Starling continued his medical studies, completing a year of internship at the Medical College of Virginia from 1931 through 1932, followed by a residency for one year at the Medical College of Virginia. He then went to Lenox Hill Hospital in New York City for two years of further residency training, completing that program at City Memorial Hospital in Winston-Salem from 1935 through 1936.

After entering the practice of surgery in Winston-Salem in 1936, he was certified by the American Board of Surgery in 1941, after he had become a Fellow of the American College of Surgeons in 1940.

Doctor Starling served as Chief of Surgery at City Memorial Hospital in Winston-Salem for many years, and was Chief of Staff at that hospital for several years. When the Bowman Gray School of Medicine of Wake Forest College was established in Winston-Salem in 1941, he became an Assistant Clinical Professor of Surgery, and was very active in teaching house staff and students for many years.

He was beloved, respected, and honored by all of those who knew him and were exposed to his gentle manner, great breadth of knowledge in the field of surgery, and his true interest in the care of patients.

During his long years of active practice and service to mankind as a surgeon in Winston-Salem and Forsyth County, he was a member of the staffs of City Memorial Hospital, Kate Bitting Reynolds Memorial Hospital, North Carolina Baptist Hospital and Forsyth Memorial Hospital.

Through his interest in organized medicine as it pertained to improvement of medical care for the ill, he was a member of the Forsyth County Medical Society, the North Carolina Medical Society and the North Carolina Surgical Society, of which he was a Founding Member in 1948.

Doctor Starling was blessed with a long and happy marriage to the former Mary Brantley Foscue, who died several years before him. Their two lovely daughters are Mrs. Richard (Mary Elizabeth) Inman of New York City, and Miss Susan deMontfort Starling of Chapel Hill.

It is with great sorrow that we recognize the passing of this outstanding man, a warm and understanding medical leader, teacher and beloved surgeon.

FORSYTH COUNTY MEDICAL SOCIETY

David Russell Perry, M.D.

David Russell Perry was born February 27, 1893. He died April 22, 1976, in Durham.

Dr. Perry received his early education at Buies Creek Academy, now Campbell College. He graduated from Wake Forest College in 1917, receiving the A.B. and B.S. degrees. In 1919 he received his M.D. from Jefferson Medical College. He served his residency training at Jefferson Medical College Hospital from 1919 to 1921.

From 1921 to 1923 Dr. Perry was health officer of Davidson County. He was clinic physician for the North Carolina State Tuberculosis Association and Extension Department of North Carolina Sanitorium from 1922 to 1923. In 1925 he entered the private practice of internal medicine in Durham. He was actively engaged in the practice of medicine at the time of his death.

During his long career in medicine Dr. Perry was dedicated to his patients and to the community. He was appointed Durham County coroner in 1968 and later became physician for the Durham County Jail and physician for the N.C. State Prison. He was a member of the Durham City Council from 1937 to 1941. He was also team physician for the Durham High School football team for a time.

Dr. Perry was fiercely loyal to Wake Forest University and his church. He was lifetime deacon of Temple Baptist Church and served on the board of trustees of Wake Forest University, N.C. Baptist Hospitals, Inc., and Wake Forest Medical Alumni. In 1966 he was presented a certificate of appreciation for his service on the board. Dr. Perry was also a member of the board of trustees of Campbell College and was named distinguished alumnus of the college in 1972.

Dr. Perry was very active in the American Legion. He was Commander of American Legion Post 7 in 1937 and served as a national Vice-Commander in 1950. He was a member of the Durham-Orange County Medical Society, the North Carolina State

Medical Society and the American Medical Association.

Dr. Perry married Sara Othella McIntosh in 1917. She died in 1951. Dr. Perry later married Mary Gertrude McIntosh, his late wife's niece.

Surviving are his wife; two daughters, Mrs. Beth P. Upchurch of Durham and Mrs. Frances P. Aaroe, of Richmond; a son, David Russell Perry, Jr., a physician in Winston-Salem; a sister, Mrs. Lucy P. Yeargin of Creedmoor; seven grandchildren and a great-grandchild.

DURHAM-ORANGE COUNTY MEDICAL SOCIETY

Cecil Lawrence Johnson, M.D.

Dr. Cecil Lawrence Johnson died at the age of 47 in the Wayne County Memorial Hospital at Goldsboro on May 7, as a consequence of carcinoma of the lung.

He was born in Goldsboro and reared in Johnston County, graduating from Princeton High School. After finishing his undergraduate studies at the University of North Carolina he obtained his medical degree from the University of North Carolina School of Medicine and interned at Bellevue Hospital. Returning to North Carolina Memorial Hospital he completed a residency in internal medicine and then spent a year as a fellow in cardiology. Upon completion of his training in 1960 he began practice in Goldsboro.

Dr. Johnson was a member of the Wayne County Medical Society, North Carolina Medical Society, American Medical Association, North Carolina Society of Internal Medicine, American Society of Internal Medicine and the Staff of the Wayne County Memorial Hospital. He was a diplomate of the American Board of Internal Medicine.

A studious, energetic individual, he devoted much time and effort to improving the care of those persons suffering from cardiac disease. Dr. Johnson was the driving force behind the development of the Cardiac Care Unit in the Wayne County Memorial Hospital. He assisted in the design and organization and personally trained the original cadre of personnel to meet the high professional standards required.

The practice of medicine was Dr. Johnson's vocation and avocation and he thrust himself totally into his profession. He was respected by his colleagues and beloved by his patients for each of whom he exhibited a genuine concern.

He is survived by his wife Margaret Rose, two sons, a stepdaughter and his mother.

Cecil Johnson was a dedicated and devoted physician who will be sorely missed by the society and those to whom he ministered.

WAYNE COUNTY MEDICAL SOCIETY

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NORTH CAROLINA
Medical Journal

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY ☐ ☐ ☐ October 1976, Vol. 37, No. 10

IN THIS ISSUE: The President's Address, Jesse Caldwell, M.D.; Microsurgical Cerebral Anastomosis for the Prevention of Stroke, Larry A. Rogers, M.D.; Stop, Look and Listen. A Visit with Public Health Leaders of the Past, Ronald H. Levine, M.D., M.P.H., Lynn G. Maddry, Ph.D., and Elnora H. Turner

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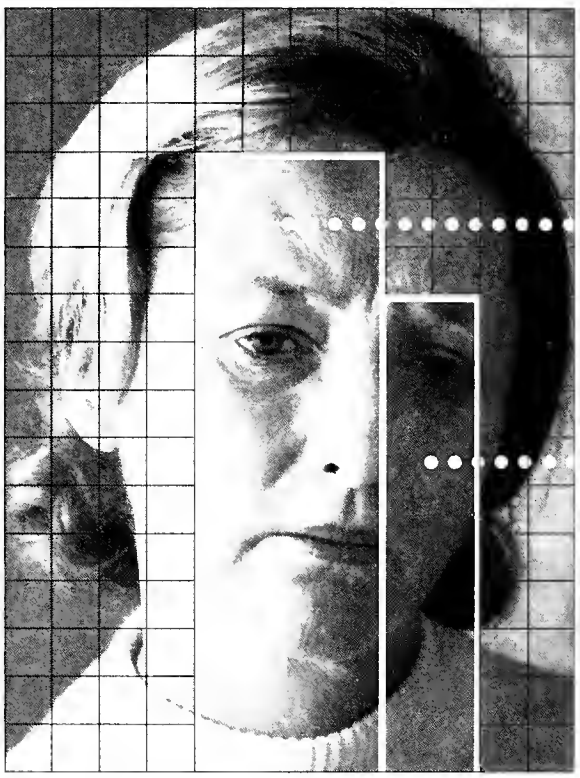

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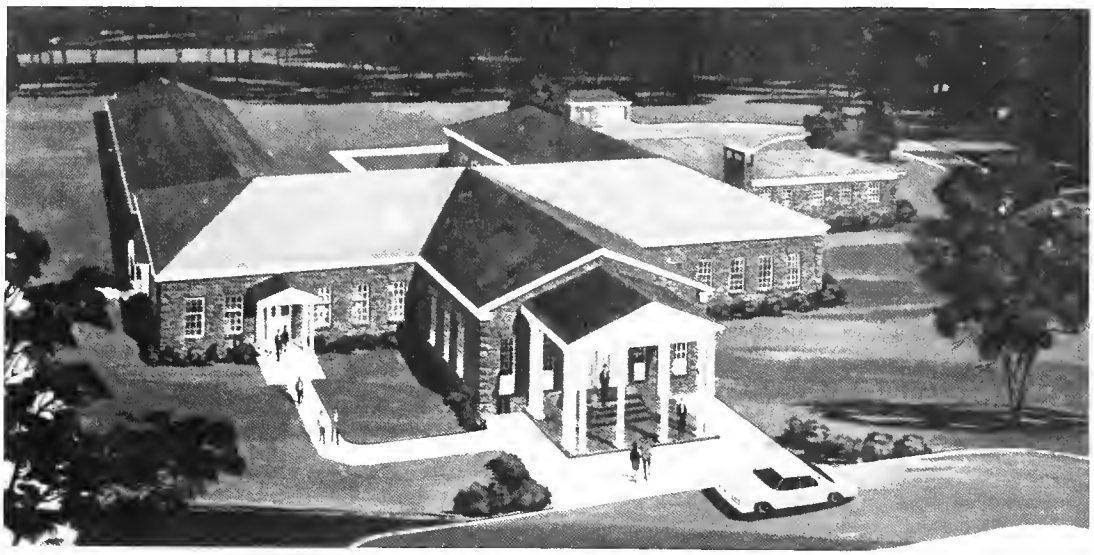

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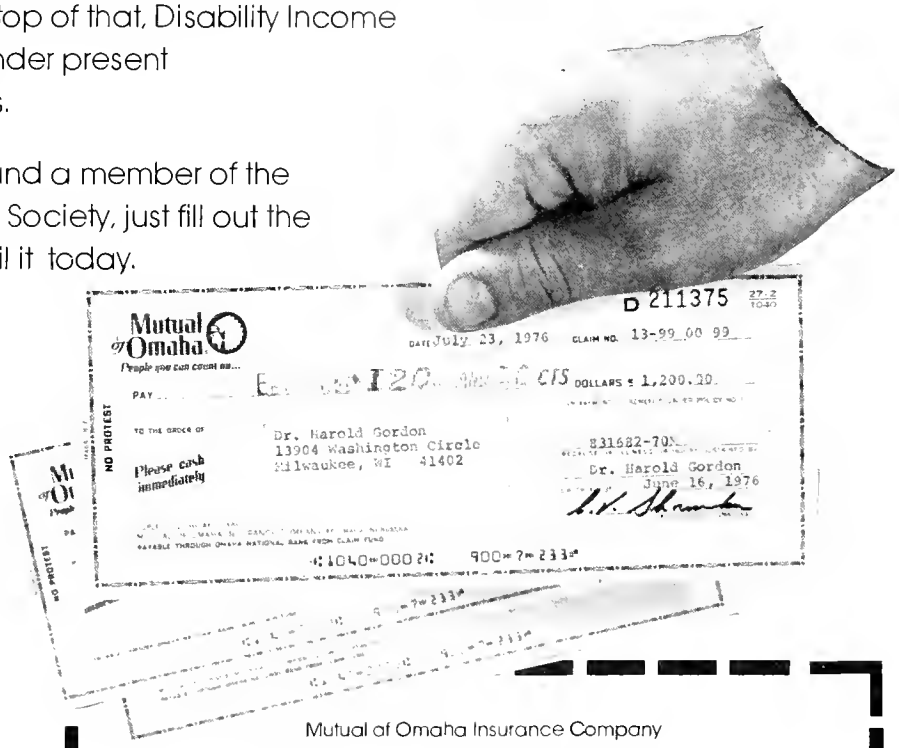

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OCTOBER 1976, Vol. 37, No. 10

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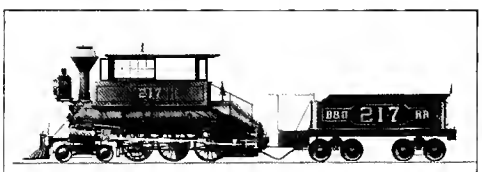

The Davis Camel (1873)

OUR PHOTO Norfolk & Western Branch Train No. 202 west bound near Alvarado, Va (Oct , 1956) This line reaches the highest point of any railroad East of the Rockies (elevation 3,577 ft) with a minimum grade of 3%. It crosses 108 bridges, some 700 ft. long! Photo by O. Winston Link

A·H·ROBINS

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Additional 20% Bonus for insureds under age 50. 10% Bonus for ages 50-60. No extra premium. Effective October 8, 1975 for one year.

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Estradiol Receptor Assay
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The results of steroid receptor assays have been found to be advantageous in planning therapy for cancer patients. Patients whose breast cancers have negative estradiol receptor assays rarely respond favorably to additive or ablative forms of endocrine therapy. Conversely, the majority of the patients whose breast cancers have positive estradiol receptor assays do respond favorably to this type of therapy.

If a patient is premenopausal or if she is postmenopausal and treated with estrogens, then estrogen receptor sites may be already bound giving rise to a low or negative estradiol receptor assay study. An estradiol receptor exchange assay may be advisable in these patients.

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☐ A Copy of Your Professional Services Manual
☐ Steroid Receptor Assay Request Forms and Mailing Containers

NAME

ADDRESS

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Most Widely Prescribed—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

Relief of Nausea and Vomiting—Antivert/25 can relieve the nausea and vomiting often associated with vertigo.*

Dosage for Vertigo* —The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows

Effective. Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective Management of vertigo associated with diseases affecting the vestibular system

Final classification of the less than effective indications requires further investigation

CONTRAINDICATIONS Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate Congeners of meclizine have caused cleft palate in species other than the rat

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it

WARNINGS Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery

Usage in Children Clinical studies establishing safety and effectiveness in children have not been done, therefore, usage is not recommended in the pediatric age group.

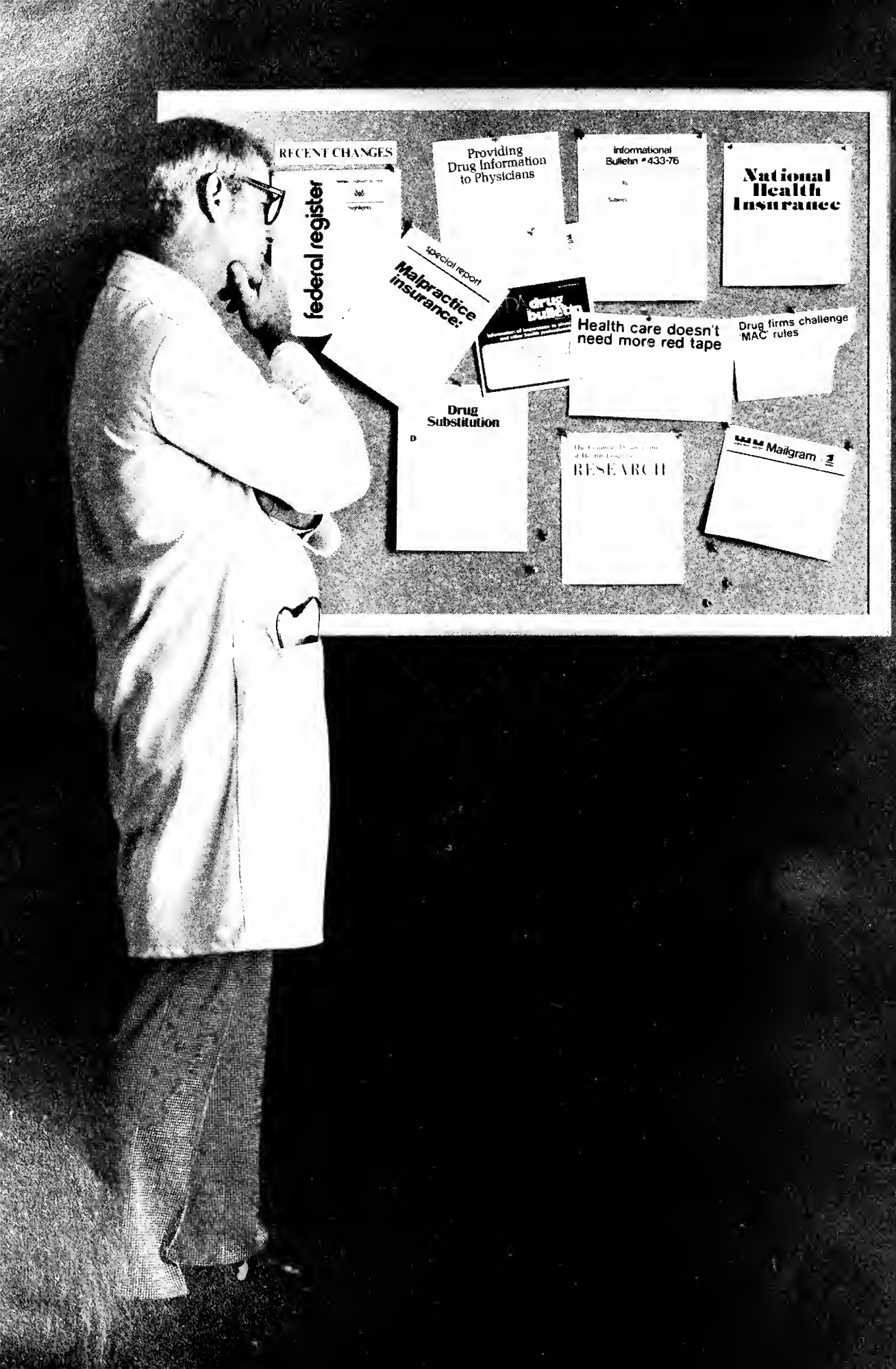
Usage in Pregnancy See "Contraindications"

ADVERSE REACTIONS Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*


RECENT CHANGES
federal register
Providing Drug Information to Physicians
Informational Bulletin # 433-76
National Health Insurance
special report
Malpractice insurance:
drug bulletin
Health care doesn't need more red tape
Drug firms challenge 'MAC' rules
Drug Substitution
RESEARCH
Mailgram

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.

Pharmaceutical Manufacturers Association
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A fully accredited private multi-disciplinary psychiatric hospital, partial care and out-patient clinic for the acutely ill to the mildly distressed. Children, young people, adults, couples or entire families may enter the treatment programs.

A modified form of the therapeutic community, a full spectrum of treatment modalities are used. The services consist of individual, couple, group and family psychotherapies; sexual and marriage counseling; pastoral counseling; vocational guidance and rehabilitation; alcohol and drug counseling; psychological testing, chemotherapy, electrotherapy and other somatic therapy services.

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	Member's Age	Member	Member and Spouse	Member, Spouse & All Children
PLAN A $100 DEDUCTIBLE	Under 40	$ 82.50	$206.00	$288.00
	40-49	125.00	302.50	384.50
	50-59	182.50	417.00	499.00
	60-64*	286.50	640.00	722.00
PLAN B $300 DEDUCTIBLE	Under 40	$ 50.00	$114.00	$150.00
	40-49	76.00	176.00	212.00
	50-59	118.50	254.00	290.00
	60-64*	180.00	402.00	438.00
PLAN C $500 DEDUCTIBLE	Under 40	$ 31.50	$ 69.00	$ 91.50
	40-49	51.50	118.50	141.00
	50-59	82.50	182.50	205.00
	60-64*	138.50	308.00	330.50
	65-69**	58.00	170.00	192.50
PLAN D $1,000 DEDUCTIBLE	Under 40	$ 23.50	$ 51.50	$ 68.50
	40-49	38.50	89.00	106.00
	50-59	62.00	137.00	154.00
	60-64*	104.00	231.00	248.00
	65-69**	43.00	127.00	144.00

*** Shown for renewal only. Enrollment limited to members under age 60.**
****Integrates with Medicare at age 65.**
Premiums apply at current age on entry and attained age on renewal. Semi-annual premiums are one-half the annual plus 50 cents.

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Member's Age	$10,000	$20,000	$30,000	$40,000	$50,000	Spouse's Age	$5,000
Under 30	$ 27	$ 54	$ 81	$ 108	$ 135	Under 30	$ 11
30-34	29	58	87	116	145	30-34	12
35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

All Children—$12 annually. $2,500 after age 6 months

The above plans quality for use in the Professional Association.

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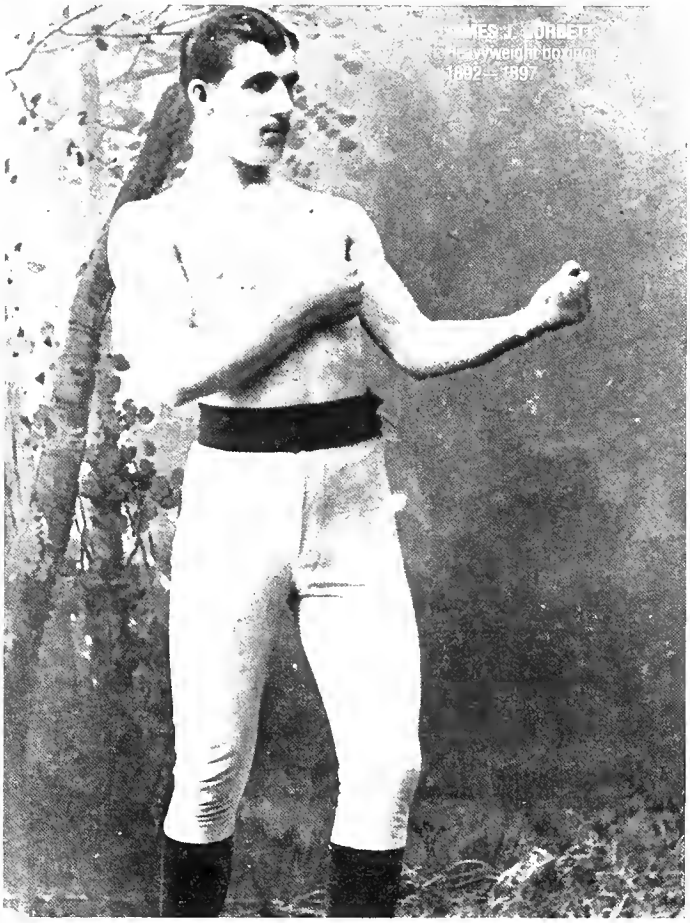
Famous Fighters



NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

Wellcome

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The President's Address

Jesse Caldwell, M.D.

ASSUMING the chair of your presiding officer in the Bicentennial year of our country is considered a double honor and, as I mentioned last evening, I pledge to do my best to carry on the objectives of this society and to represent its membership to the best of my ability.

One can go no further in his first address without paying thoughtful tribute to the immediate past officers of the society and especially to the past president, James E. Davis. I have known Jim Davis for almost 40 years from the time that he was a cotton-topped political leader on the campus of the university at Chapel Hill as well as a champion miler on the track team. To my knowledge we have not had a president of the society who has been faced with such critical problems and who has handled them so efficiently and successfully. We are all sincerely grateful to you, Dr. Davis, and those of us who were closely associated with you last year have learned a lot. We would do well to try to emulate your dedication and performance although this will be an impossible task.

Regarding the Bicentennial, and trying to get some medical item of significance to mention, it was in 1776 that Lazzaro Spallanzani (1729-1799), an Italian scientist in northern Italy, disproved the concept of spontaneous generation of bacteria. It was 100 years later on April 22, 1876, that Robert Koch (1843-1910) at the age of 34 wrote a letter to the professor of botany at the University of Breslau and explained his findings, concluding that the bacillus anthrax was the cause of "splenic fever" in human beings. This was the beginning of our knowledge of bacteria as the cause of certain diseases. In a few years Koch's celebrated work on tuberculosis began.

Also, in 1876 our medical society held its annual convention in Fayetteville. Dr. Peter E. Hines was president. The society had 157 members and 33 were present at the convention. There were over 1,200 practitioners in the state at that time.

Prior to World War II and shortly after, our society was important in providing continuing education and its conventions were filled with scientific papers which were of practical use to the physicians of our state. I recall the first convention I attended in 1947 at Virginia Beach. It was about this time that the society employed its first fulltime headquarters' employees.

In the past several decades we have seen a considerable *change* in the activities of our society. Essentially, we have gone from one which was a scientific postgraduate continuing education vehicle to one which offers many services which I will not enumerate at this time. The scientific aspects of modern day medicine are now mostly carried on by specialty organizations and by special continuing educational courses sponsored by medical schools and teaching hospitals. The activities of our society are numerous and its staff has continued to grow requiring us to build a handsome new headquarters building a few years ago in order to efficiently serve our membership.

LIABILITY INSURANCE CRISIS

One hesitates to speak about the medical liability insurance crisis which is upon us since so much has already been said. The General Assembly in session at the present time is considering some tort changes which were recommended by a special commission. It was the privilege of our society to have the

Given before the North Carolina Medical Society, Pinehurst, May 9, 1976.

Reprint requests to Dr. Caldwell, 114 W. 3rd Avenue, Gastonia, N.C. 28052

opportunity to have considerable input into these deliberations. It is difficult to understand just why this bad situation has mushroomed in just a few years. The basic causes are not entirely clear. However, the causes of the increased cost in the liability insurance coverage can be identified. They include: (1) the multiplying malpractice action suits which are occurring; (2) the skyrocketing malpractice insurance premiums to provide reserves for claims incurred but not reported; (3) the diminishing availability of insurance coverage for various reasons; (4) the escalating cost of medical care for patients which does include many questionable so called diagnostic tests; (5) the astronomical awards made by some juries in cases which seem to be out of line with compensation made for similar cases which occur in industry, automobile accidents, etc.

Not all medical or surgical procedures have a 100% desired result. It appears that the public may think it is entitled to compensation for the misfortunes which do occur in medical and surgical practices even though there was no incompetence or malpractice involved. We see cases now in which plaintiffs are seeking relief for results which were considered as accepted risks in the past. The cost of medical care is soaring and although compensation to the physician accounts for only 20% of the health bill, the physician is viewed by many to be responsible directly or indirectly for this rise. A radical change in the method of health care delivery may be upon us.

CHANGES IN MEDICAL CARE DELIVERY SYSTEM

We are seeing and hearing more about changes in the delivery of medical care. One observes in many areas the gradual demise of the solo practitioner and the emergence of group practice in almost all of our disciplines. While it is possible now for a patient to have a daytime personal physician for 4½ days a week, the other time is usually covered by an associate of equal competence but certainly not as familiar with the patient.

The phenomenal growth of medical care provided by the emergency departments of hospitals is being accepted by the public and the profession. This group of physicians not only handles real emergencies but also manages the common everyday illnesses of patients who cannot obtain the service of a personal physician. One can easily foresee the time when this situation will make available an easy merger between the emergency departments and groups of physicians and specialists organized and known as Health Maintenance Organizations.

In North Carolina at the present time, there is funded a program to be administered by the School of Medicine at the university at Chapel Hill to assist in the development of primary care group practices serving up to 25 small towns across the state. The Johnson Foundation grant to the university for the administration of this model program is in excess of $2,000,000. In order to provide more primary care, the Johnson Foundation has made a grant to the Duke University's Department of Community Services to prepare a faculty in the specialty of family practice. This program would offer advance training in a variety of disciplines important to family practice and would conduct research relevant to family practice and health manpower utilization, etc.

As many of you know, a Health Maintenance Organization in Winston-Salem is scheduled to begin operation in the next few months.

CONTINUING EDUCATION

In 1973 our society adopted measures which would require continuing education for membership in the society. Our Committee on Medical Education has been actively working on guidelines for this program and in a year or so a well conceived and efficient operation should emerge. Some say that it is entirely likely that the lifetime licensure to practice medicine is unlikely to continue and that continued medical education and/or recertification may be necessary for a physician to maintain his license. It will be up to the medical profession to oversee the practice of its members and to evaluate their competence. The county and state organizations as well as the AMA are becoming more involved in evaluation programs but it remains to be seen whether or not the voluntary re-education programs will succeed.

Along this line there is at least one state which has a law which allows the Board of Medical Examiners to keep records of all liability claims made against any licensee. In instances where there are two or more final judgments or settlements in the amount of more than $100,000, or if during a three-year period there have been at least four or more final judgments or settlements in malpractice litigation, the board shall review these cases for the purpose of determining whether or not the agency should take disciplinary action against the provider. The law in Alabama states that it shall be grounds for revocation of a license if either of the above occurs, except in cases where the examiners shall determine that there was no error, omission or negligibility in the cases.

THE SOCIETY'S INTERNAL OPERATION

Having served a year in training as president-elect, I must reiterate one of the comments of my predecessors. I recall that one said that he seemed to be busier during his year as president-elect than he was as president.

It is true that we have a large organization which is faced with problems and decisions in a great variety of fields. We are blessed with competent members who willingly give their time and money to participate in committee activities. They carefully consider questions which arise and make considered recommendations to the society. We are fortunate that we have committees in the society which closely parallel each of the health service agencies in the State of North Carolina. These agencies call on our committees for advice and guidance from time to time and the continuation of such communication can only result in a

higher quality of medical care sponsored by these agencies.

A number of our committees sponsor and produce special programs both scientific and administrative for the benefit of our members and the public. It is hoped that this practice will continue. Other committees may also come up with similar programs if funding may be found in future budgets.

Speaking of budgets, I know that all of you realize that the time has come when the dues of the society will have to be increased. Since the completion of our headquarters building, we have done well to keep the budget close to and not far above the half-million-dollar level. However, in order to balance the present budget it was necessary to use as operating expenses some of the income previously allocated to strengthening the reserves. We cannot continue to do this. To continue services at the present level will call for an increase in dues. To initiate other worthwhile new programs it will be necessary to increase dues. Your officers will welcome your recommendations on this matter.

The duties of the president-elect are considerable but may not equal that of the president. However, since someone is taken out of the crowd and thrust into this office it may be necessary that he have more time for preparation. Therefore, I wish to suggest that our society consider changing the steps leading to the presidency to include another year of training. This could be done by changing our constitution and by-laws to allow that the first vice-president would ascend to president-elect and then to president of the society. It may have been that during the past year or so we have had an abnormal number of crisis situations and this suggestion may not be necessary in the next few years. However, should the requirements of the job increase, then certainly consideration should be given to some change.

Also, one is impressed by the devoted service to the society given by the members of the Executive Council, both voting and nonvoting. We have now for a number of years been giving special awards to physicians who have been members of the society for 50 years. It would be my suggestion that we also award some type of tangible recognition to members of the Executive Council at the end of their tenure.

In studying the transcripts of the Executive Council, the transactions of the House of Delegates, the constitution and by-laws of the society and the reasons for and the duties of the various committees, it became apparent that there was no one document from which a person could obtain all the pertinent information about the society. A few years ago a great step toward correcting this situation was taken when Dr. Ron Davis researched and published data about the various committees of the society. This large volume is known as *Committee Guidelines*. In a number of instances it was necessary for him to call on the chairman of the committee to find out just what the committee was authorized to do.

In order to have a document which would contain all of the relevant laws, authorities and guidelines, I would like to propose that our society proceed with the compilation of an all inclusive document which would be known as "The Administrative Code of the North Carolina Medical Society." In addition to an explanatory foreward in the document it would be composed of a number of chapters such as:

(1) The North Carolina Medical Society as a legal entity in which the General Statutes creating the society would be given.

(2) The revised and updated Constitution and By-laws of the North Carolina Medical Society.

(3) The responsibilities and duties of the principal officers of the society not provided for under chapter 2.

(4) Purpose and function of the committees of the society including those provided for under the constitution and by-laws.

(5) The stated policies of the North Carolina Medical Society not previously provided. These would include the official endorsements, etc. made by the House of Delegates and the Executive Council.

(6) The administrative policies of the headquarters' staff which would include employment practices, employee benefits, etc.

Much of this material is available in various places but for the benefit of those coming on in the years ahead a single volume would be of great value.

CONCLUSION

And now as I leave this rostrum to begin a year of service to you, I ask your cooperation and guidance, I beg your tolerance and forebearance and with the Almighty's blessing we will improve the health and lives of the people we serve.

Microsurgical Cerebral Anastomosis For the Prevention of Stroke

Larry A. Rogers, M.D.

ISCHEMIC injury to the brain resulting from occlusion of a major cerebral vessel is a leading cause of death and disability throughout the world. Nearly 400,000 new cases of occlusive stroke are reported in the United States each year with a mortality greater than 20%.[1,2] More than two million Americans are disabled and unemployed because of stroke, and the majority of these depend on public funds for survival.[3] A particularly tragic aspect is that about two-thirds of strokes occur during the productive years, or under age 65.[3]

Since little can be done to influence neurologic recovery among patients with cerebral infarction, major emphasis must be placed on identifying stroke-prone people so that medical and surgical measures may be taken in prophylaxis. The earliest warning sign of stroke is usually a transient ischemic attack,[4] which takes the form of temporary visual impairment, extremity weakness or numbness, or speech difficulty.[5] Current statistics suggest that 20-25% will have a major stroke within 18 months of their first transient ischemic attack.[6,7] In addition, it has been reported that at least 60% of stroke victims had transient cerebral symptoms well in advance of their strokes.[8,9]

From the medical viewpoint, considerable progress has been made in the recognition and treatment of hypertension, diabetes mellitus and hyperlipidemia — all important factors in the profile of the stroke-prone individual. Similarly, the development of carotid endarterectomy has focused attention on the significance of extracranial atheromatous disease. It has been estimated that approximately two-thirds of occlusive strokes are due to an extracranial lesion and that nearly 80% of these are amenable to carotid endarterectomy or vascular graft.[2,10]

In a significant proportion of patients, however, extracranial surgery can offer little benefit either because the offending lesion involves an intracranial vessel or because of the nature of the extracranial lesion. Until recently, intracranial vascular obstructions have been considered inaccessible to surgeons. In a recent study of patients having either transient ischemic attacks or mild complete stroke, 6% had an intracranial lesion.[11] In the same study 33% had surgically treatable extracranial lesions but were not considered for surgery because of an inaccessible intracranial stenosis, the so-called "tandem lesion." Another 16% were found to have complete occlusion of the internal carotid artery to account for their symptoms.

Total occlusions of the internal carotid artery constitute a perplexing problem. Unless rare circumstances exist, the surgical restoration of flow in such vessels is impossible. The importance of these lesions in patients having transient ischemic attacks, even if there is no existing neurologic deficit, is well-established; approximately 45% can expect to have a major stroke within three years.[12] As early as 1951 Fisher suggested that an operation which could divert blood from a scalp vessel to a small vessel on the surface of the brain might be effective in bypassing such major obstructions.[13]

Developments in the past decade have led surgeons to re-examine lesions previously thought inoperable. The operating microscope and microvascular techniques have resulted in successful operations involving intracranial vessels as small as 1 mm in diameter. In 1967 Yasargil and Donaghy independently performed extracranial to intracranial vascular bypass operations by anas-

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tomosing the superficial temporal artery to a branch of the middle cerebral artery (STA-MCA).[14,15] Since then more than 1,000 similar operations have been performed in neurosurgical centers around the world not only for total occlusion of the cervical internal carotid artery but also for stenosis of the intracranial internal carotid artery and middle cerebral artery. That these operations can be performed with low mortality and low morbidity has been established.[16] Two cases are reported here as examples of types who will benefit from these operations and the kind of clinical results which can be expected. The operation has not been reported previously in North Carolina.

CASE 1.

A 49-year-old man was seen initially on March 11, 1975. He gave a history of transient left hemiparesis occurring seven weeks before examination and from which he recovered within a week. Subsequent symptoms were limited to occasional dizziness and rare, transient numbness of the left arm. Examination revealed bilateral carotid bruits but no detectable neurologic deficit.

Angiography revealed total, complete occlusions of the cervical internal carotid arteries at their sites of origin (Fig. 1 and 2). The only cerebral blood flow of significance was through a dilated right vertebral artery, and plaque formation could be seen at the origin of this vessel. There was also an occlusion of the subclavian artery near its origin with retrograde flow in the left vertebral artery.

Because of the lateralizing nature of his symptoms, attempts at cerebral revascularization were directed toward the right cerebral hemisphere. On March 18, a right STA-MCA anastomosis was accomplished. A month later a branch of the right occipital artery was successfully anastomosed to the angular branch of the MCA. A week after the second operation both anastomoses were demonstrated by carotid angiography to be patent. For eight weeks after the first revascularization operation, the patient experienced no cerebral symptoms. On June 24, he underwent correction of the subclavian steal syndrome by a left carotid-subclavian bypass (Doctor W. F. Pharr). A week after this operation, the final stage of cerebral revascularization was accomplished with a left STA-MCA anastomosis. Postoperatively, he experienced mild, transient dysphasia without extremity weakness. In November, eight months after the first intracranial operation, the patient returned for evaluation. He had had no cerebral symptoms and his neurologic examination was normal. Bilateral carotid angiography at that time confirmed that all three intracranial anastomoses were patent (Fig. 3, 4 and 5).

CASE 2.

A 68-year-old man seen August 23, 1975, reported four episodes of numbness involving the left side of his face and his left arm, progressing to weakness of the left arm and leg, aphasia and blurred vision. All of

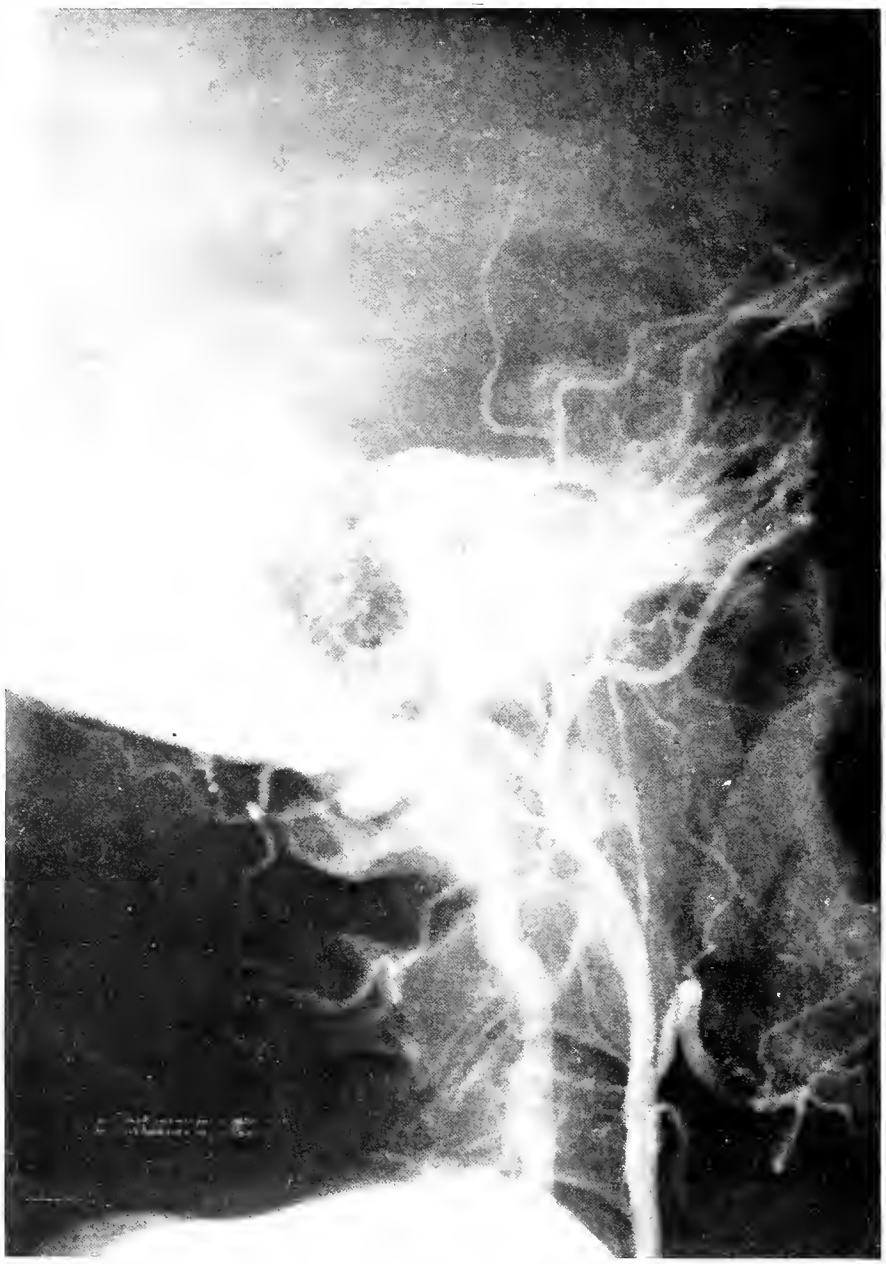

Fig. 1. Preoperative right common carotid arteriogram in CASE 1. Note that the internal carotid artery does not fill despite good opacification of the major branches of the external carotid artery.

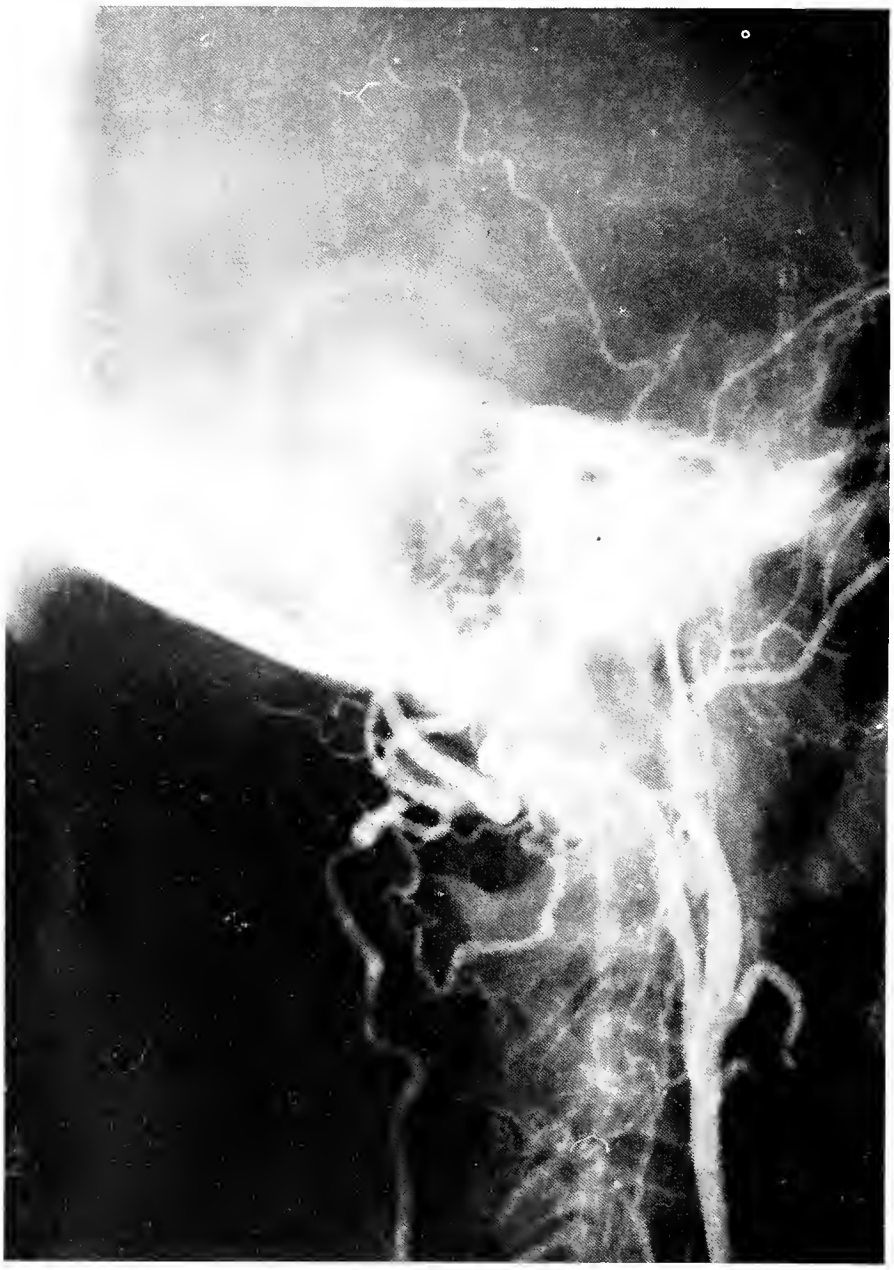

Fig. 2. Preoperative left common carotid injection in CASE 1. Note the good filling of the external carotid artery but the absence of intracranial blood flow via the internal carotid artery.

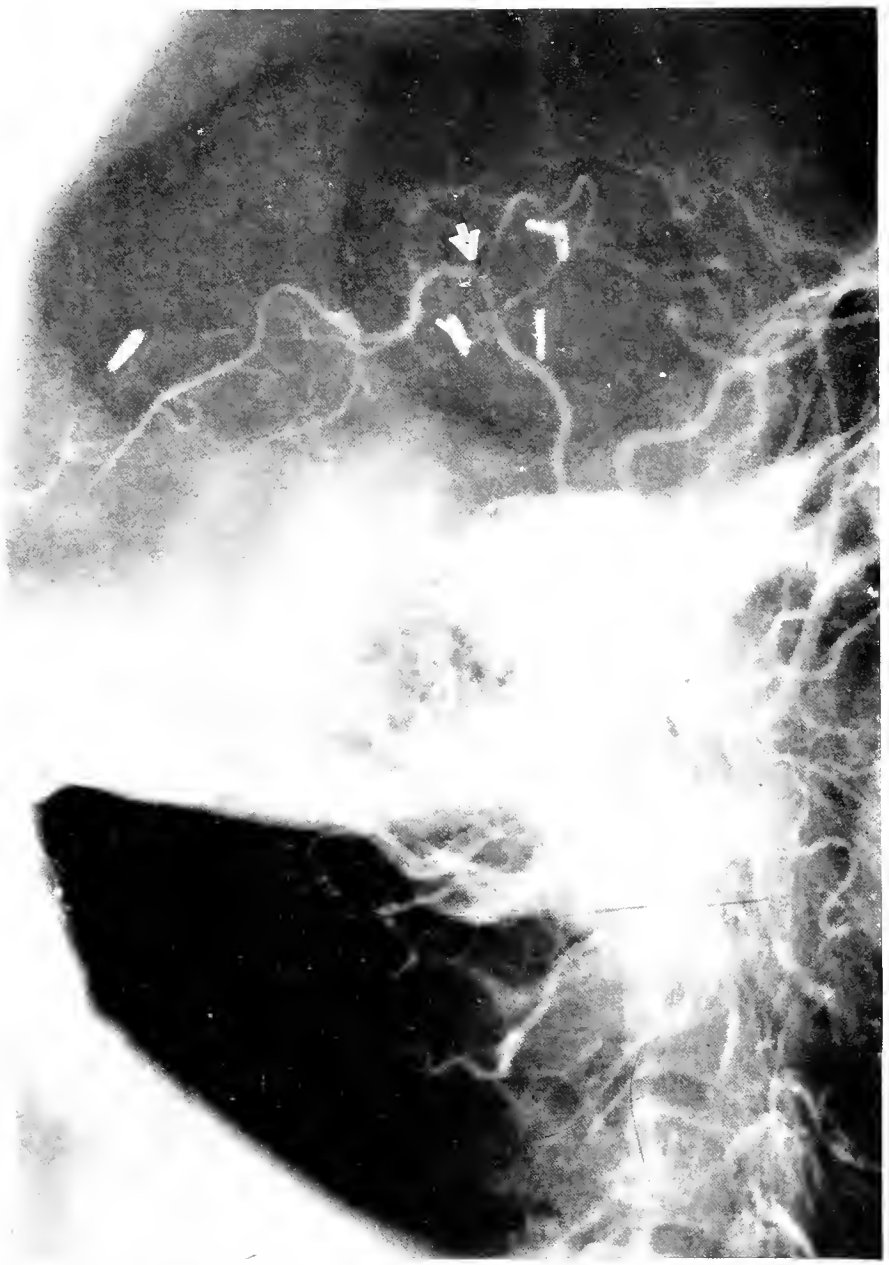

Fig. 3. Postoperative right common carotid arteriogram in CASE 1. An arrow indicates the site of anastomosis between the posterior branch of the superficial temporal artery and a parietal branch of the middle cerebral artery. Note that the major portion of the middle cerebral artery is opacified.

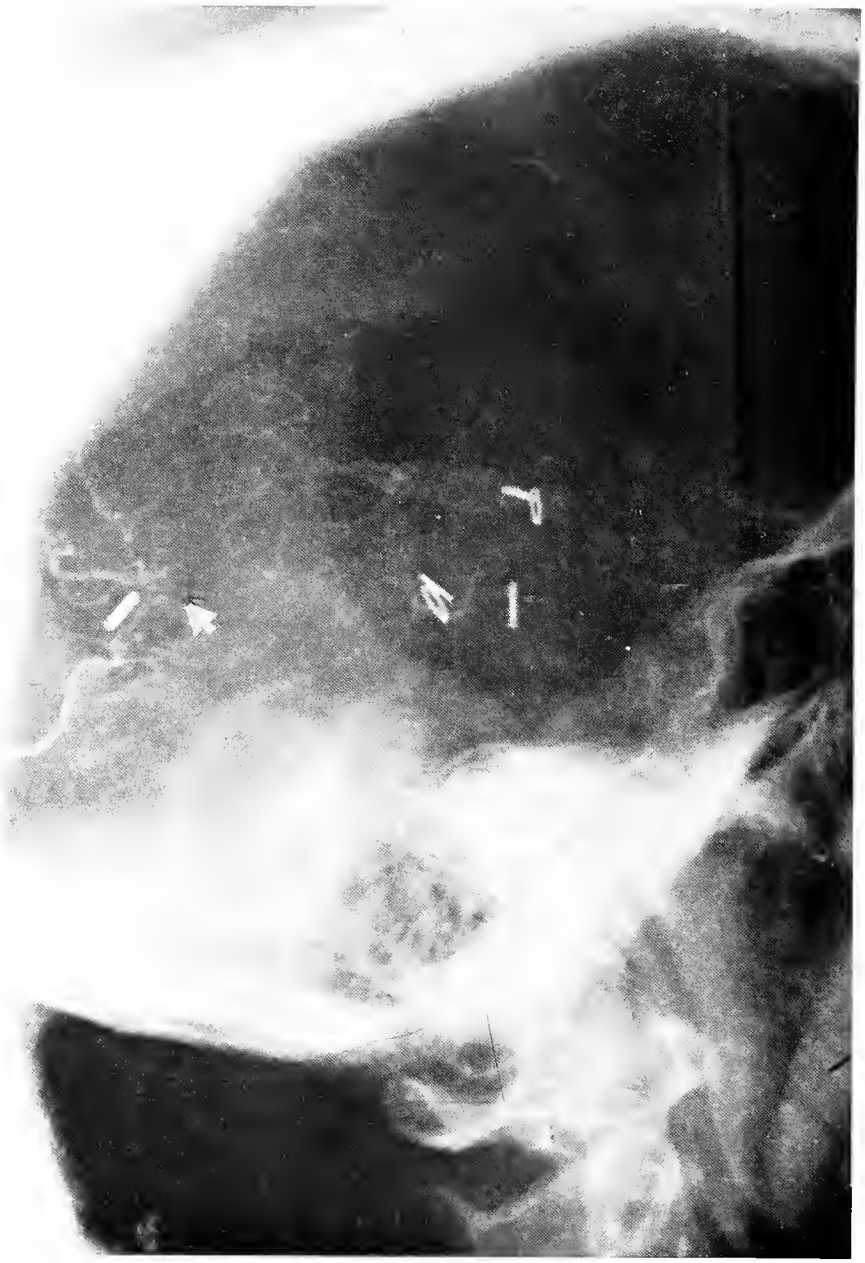

Fig. 4. Right common carotid arteriogram in CASE 1 following surgery. An arrow indicates the point of anastomosis between the occipital artery and middle cerebral artery. The occipital artery had become opacified much later than the superficial temporal artery, but some middle cerebral artery opacification via the STA-MCA anastomosis is still present.

Fig. 5. Left carotid angiogram following surgery in CASE 1. An arrow indicates the point of anastomosis between the posterior branch of the superficial temporal artery and a temporal branch of the middle cerebral artery. Note that good opacification of the middle cerebral vessel occurs via the anastomosis.

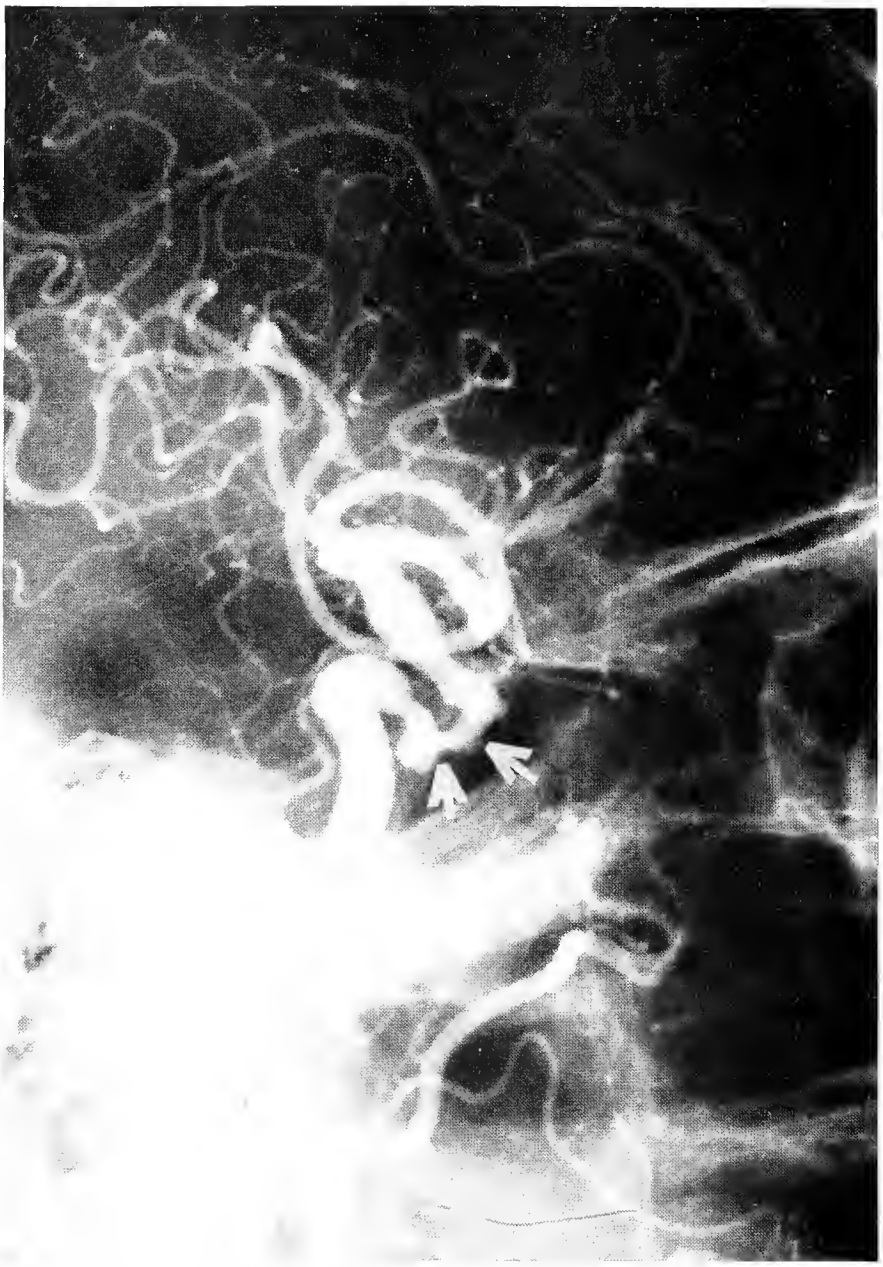

Fig. 6. Right internal carotid arteriogram in CASE 2 prior to operation. Arrows indicate marked stenoses of the intracavernous portion of the internal carotid artery.

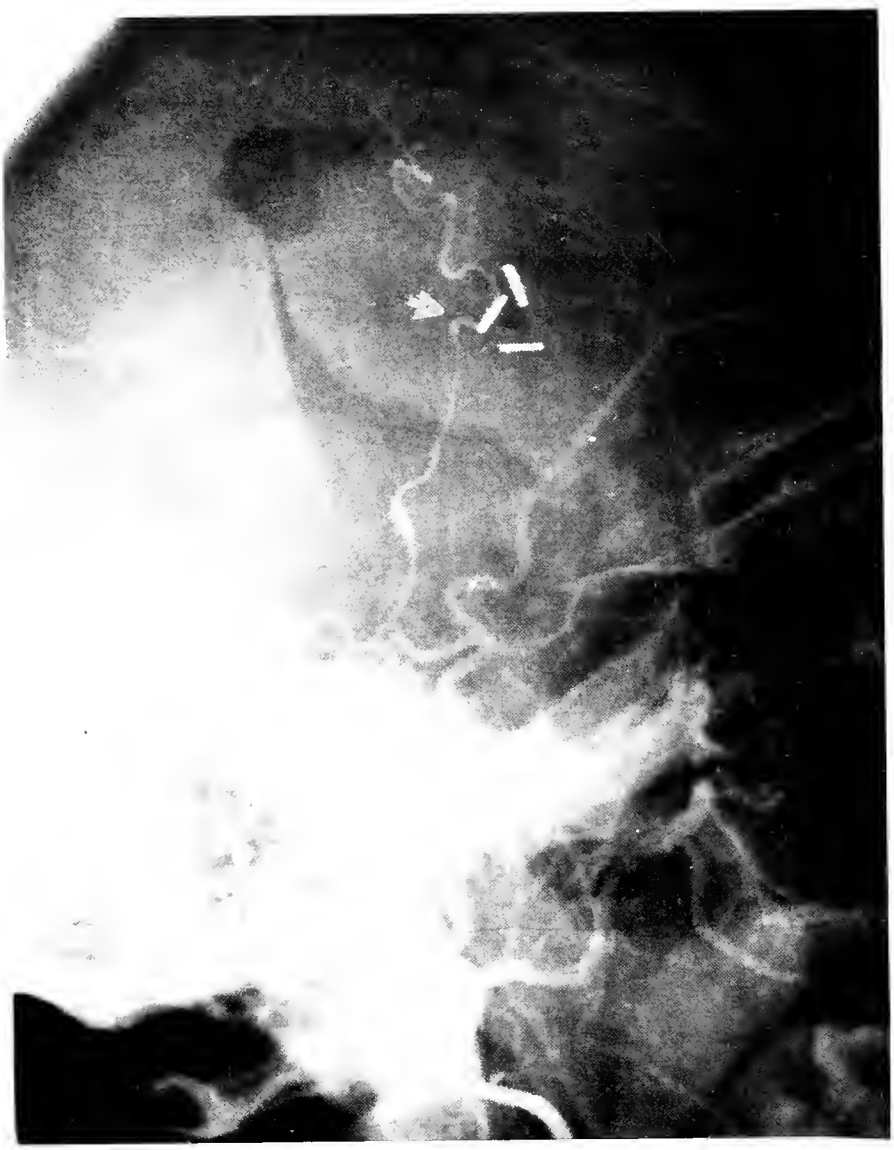

Fig. 7. Postoperative selective right external carotid arteriogram in CASE 2. An arrow indicates the point of anastomosis between the superficial temporal artery and a parietal branch of the middle cerebral artery. Note that the STA is quite narrowed, quite possibly the result of arterial spasm since the arteriogram was done in the immediate postoperative period. Our experience and that of others indicates that the temporal artery increases dramatically in size within several months of operation.

these episodes occurred in the three weeks prior to admission and each cleared completely within 10 minutes to two hours. He was left-handed and had a history of chronic hypertension. Examination revealed a blood pressure of 140/80 and a murmur of aortic stenosis. Neurological examination was normal. A cardiac consultant did not feel that the valvular disease was of hemodynamic significance.

Cerebral angiography revealed marked stenosis of the intracavernous portion (siphon) of the intracranial internal carotid artery (Fig. 6). There were no significant extracranial vascular lesions. On August 29, the patient underwent anastomosis of the posterior branch of his right STA to an ascending fronto-parietal branch of the MCA. There were no postoperative complications, and two weeks after surgery patency of the STA-MCA anastomosis was confirmed by selective right external carotid angiography (Fig. 7).

This patient was followed for five months and has had no subsequent transient ischemic attacks.

DISCUSSION

Case 1 represents a rare example of severe atherosclerotic cerebral vascular disease in which the patient was spared devastating neurologic deficit only by a patent circle of Willis. Because the right vertebral artery was the only remaining source of significant intracranial blood flow, and there was evidence of potential compromise of this vessel, a means of developing new channels of collateral blood flow to the brain seemed desirable. In planning such a cerebral revascularization, correction of the subclavian steal syndrome was considered as a possible first stage but was rejected because of the localizing nature of his symptoms. In terms of *total* cerebral blood flow, however, reversal of flow in the left vertebral artery by the carotid-subclavian bypass operation likely provided the greatest, single immediate increase in cerebral blood supply.

Both anastomoses to the right MCA had increased in size by at least 50% at the time of the second postoperative angiogram. This phenomenon has been observed by others and reflects increasing blood flow dictated by metabolic demand[17,18] (Sternbergh WCA Jr, Samson D, personal communication).

The intracranial carotid artery stenosis seen in Case 2 is also quite uncommon. Such lesions cannot be attacked directly since they lie within the cavernous sinus. This case demonstrates that severe symptoms can be relieved by STA-MCA anastomoses and that the operation may be tolerated even by elderly patients with advanced generalized vascular disease.

Statistics indicate that patients with lesions which would benefit from an extracranial to intracranial bypass operation are relatively few. Whether the availability of a new form of treatment will cause a more careful appraisal of patients with cerebral vascular symptoms, and in turn result in a larger absolute population of such patients, remains to be seen. Blood flow studies confirm that the STA-MCA anastomosis operation is an efficient means of augmenting cerebral blood flow,[19] and there is little question that it can be performed with low morbidity and mortality.[16]

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There is a great error committed every day, in flying to strong medicine at once, when the functions of the stomach and liver are disordered — the secretions unnatural — and the food imperfectly digested. Instead of exhibiting purgatives day after day to carry off diseased secretions, we should lessen and simplify the food, in order to prevent the formation of these bad secretions. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 69.

Stop, Look and Listen— A Visit With Public Health Leaders of the Past

Ronald H. Levine, M.D., M.P.H., Lynn G. Maddry, Ph.D., and Elnora H. Turner

INTRODUCTION

"STOP, Look and Listen." This expression, a familiar one of bygone years, seems to have all but disappeared from the lexicon. Oh, one might still find these words inscribed on Clinchfield Railroad crossings, but the broader lesson they were intended to convey is frequently lost in this frantic world of ours.

The theme of the 64th annual meeting of the North Carolina Public Health Association asks us to stop and look at the essential issues and themes of concern to public health professionals. However, let us also listen to the words themselves from the lips and pens of some of the builders of the public health movement in North Carolina. The few brief utterances we have selected, even if directed to a state and nation now slipped 10, 20, 50, even 100 years into the past will, we believe, have relevance to the problems of our day and may provide a bit of a nostalgic frosting for consideration of public health essentials.

From the Division of Health Services
North Carolina Department of Human Resources
Raleigh, North Carolina 27602

Presented to the North Carolina Public Health Association, September 11, 1975.

Reprint requests to Dr. Levine

Dr. Thomas Fanning Wood

Dr. Thomas Fanning Wood, the originator, organizer and first director (then called secretary) of the North Carolina State Board of Health, was born in Wilmington in 1841. He had been one of the founders and leaders of the North Carolina State Medical Society, upon whose petition the legislature created the board of health, adding an annual appropriation of $100.

In his first report, dated May 15, 1878, he said: "At the Salem meeting of the Medical Society of North Carolina the bill creating a State Board of Health was accepted by the society, not because it was regarded of much advantage to *us*, but as the beginning of a good work which would someday resound to the honor and advantage of our commonwealth . . . ." Then, referring to the $100 appropriation, he tells us " . . . I am satisfied that nothing but a sincere desire to make a beginning in the great work of sanitary reform, and to put the ball in motion, could have induced this body to have accepted such a great work with such trifling means."

Dr. Wood's second report reveals his great insight. All health educators pay heed. "Is it not clear then, that the whole population is interested in the future of sanitary work in our State? It is not the physicians alone who are to inform themselves and take active measures for the mitigation of disease, the prolongation of life and the comforts of our surroundings, but every man, woman and child has some interest at stake. It must be almost of necessity that the doctors will take the lead in public and private sanitary matters, because, by their education, they are generally better fitted to advise, but it is just as great folly to leave it all for them to do as it would be for an intelligent community to entrust its religious duties to their pastors, ministers or priests. It is a common cause, and involves principles of self-protection — so much so that when one family neglects its hygienic duties, the errors do not fall alone upon the transgressors, but just as likely upon their unoffending neighbors. It is proper, therefore, that efforts should be made to teach the principles of hygienics in our schools — not so much by textbooks as orally, by the teachers who have studied and digested thorough systems of hygienics."

"We must insist that public hygienics belongs to the people, and those of us who know the principles must make it our duty to impart them, and I can assure anyone, be

he citizen or citizen doctor, that the State Board of Health stands ready to aid any effort, however humble, to improve the sanitary conditions of the people."

Dr. Richard Henry Lewis

Dr. Richard Henry -Lewis was born near Falkland, in Pitt County, in 1850. An eye and ear specialist practicing in Raleigh, Dr. Lewis rose to become president of the State Medical Society and in 1892 became state health officer, succeeding the late Dr. Wood. Under Dr. Lewis, the sanitary engineering program, the state laboratory and the first vital statistics program in the South were begun. In 1909, Dr. Lewis closed his career as secretary and sacrificed his own position by securing the passage of a law which provided for a fulltime state health officer.

In 1893, Dr. Lewis wrote the following letter to the physicians of North Carolina, almost 20 years before the establishment of the first local health department:

My dear doctor:

The State Board of Health is very anxious to have established in as many of our cities and towns as possible local boards of health for the twofold purpose of more effectively preventing disease and securing reliable vital statistics. To this end, I have prepared and sent to the Mayor of every town in the State of more than 500 inhabitants and to all county seats of less population a model ordinance in which is set forth, in addition to numerous sections relating to health preservation, the machinery necessary to the formation and operation of Local Boards; also a sample death certificate, burial certificate, birth certificate and instructions with sample blanks for sanitary inspection, which you can see at the Mayor's office.

If you have no Local Board of Health, will you not confer with your professional brethren and the municipal authorities and make an earnest effort to have one established at once?

If you already have one will you not compare the methods in use with those suggested that the best may be employed? If those suggested, particularly those relating to the collection of vital statistics, more especially the death-rate, are considered equally as good as those already in use, and it be agreeable to the authorities, I would be very glad to have the former substituted for the latter in order to the establishment of a uniform system throughout the State.

It is superfluous, if not insulting, in this day to argue to any well-informed physician the value and importance of sanitary regulations properly enforced, and the value of reliable vital statistics, from both a scientific and a material point of view. So, I assume that you are interested in the subject and hope you will lend a hand in advancing the good work.

Very truly yours,
Richard H. Lewis, M.D.
Secretary

Dr. Watson Smith Rankin

Dr. Watson Smith Rankin surrendered his post as dean of the Wake Forest Medical School to become North Carolina's first fulltime state health officer. The first local health departments in North Carolina were organized under his leadership.

Dr. Rankin gave some sound advice in an article written for the Health Bulletin some 64 years ago:

"We all recognize that the only way to handle anything effectively that affects the public is by law, but, before we can have laws protecting us against the forces of disease, we must have that out of which law is made, and by which law is enforced — an intelligent, interested public sentiment — and such public sentiment is the product of education. Ingersoll, regardless of how black his critics may paint him, showed a close acquaintance with the truth when he said, "The only sin is ignorance." This treatment — education — is a common necessity, that is, a requirement in all cases of disease politic; but, in addition to this, there is special treatment in the form of sanitary recommendations that vary with the individual case."

"Just as the treatment for a child two years old differs from the treatment of an adult, so does the treatment of a village of 500 people differ from the treatment of a city with a population of 10,000. Not only does size modify treatment, but a large number of varying local conditions make it necessary to adapt the treatment — the sanitary recommendations — to each individual community, town or city. To go to a small community or small town, or to any town or city where public health sentiment is weak, and make a large number of sanitary recommendations is about as wise as to administer an adult dose of medicine to a child of a few years of age, or as to give a patient in a few days the medicine that should be administered in several weeks. In each of the latter cases the stomach is upset and the treatment rejected; in the former, effort is discouraged in the beginning and nothing is done. Never give more medicine than can be kept on the stomach; never make more sanitary recommendations than you can have accepted. Get one thing done, then return and persuade the people to take an additional step."

Dr. George M. Cooper

Dr. George M. Cooper was one of the truly great early county health officers, serving his native Sampson County after several years in general practice. In his later career with the State Board of Health, Dr. Cooper inaugurated the maternal and child health and the school health programs in North Carolina.

The following quotation from the Health Bulletin of April, 1937, illustrates Dr. Cooper's broad view of Public Health:

"With better roads and longer days and more money to spend, those of us who are afraid to venture out on the roads, particularly Sundays and nights, and sit back and read the morning and evening papers giving the names of the casualty list these days, have plenty to read about. The editor of this family journal has always believed that high speed is the principal cause of

eath on the highways. If two cars re coming from opposite directions nd each one in the middle of the oad, and each driver is determined o remain in the middle of the road, nd each car is going at a speed not ess than 75 or 80 miles an hour, /hich about half such drivers main- ain, the newspapers are certain to arry a list of casualties next day. If ne two cars and the two fool drivers /ere going at a moderate rate of peed, they could at least stop and et out and argue which one could tay in the middle of the road with- ut committing homicide, as well as uicide."

)r. Charles O. Laughinghouse

Dr. Charles O. Laughinghouse, a iative of Greenville, a general prac- itioner and former president of the State Medical Society, succeeded Dr. Rankin as state health officer in 1926.

Dr. Laughinghouse, in his first nnual report, speaks almost long- ngly to his former colleagues:

"An intimate acquaintanceship with the problems, satisfactions, dissatisfactions, pleasures, pains, purposes and emoluments of medi- cal men, through the actual doing of their day's work, has begotten in the heart of your executive officer a deep regard, a sense of companion- ship in arms, a consideration, a re- spect for, and above all, a loyalty to the medical profession which will force him to keep an undivided faith with medical men in active practice in North Carolina. May he ask your assistance? May he depend upon your indulgence? May he feel the protection and the confidence which should abide with him through your patient cooperation? May he remind you now that the problems of infection and contagion are fairly well in hand; that the other diseases of infancy, childhood, youth, middle age and senility can be handled in no way save through the alliance of the Board of Health and the entire profession of the State. Medical advancement has brought us to where there can be no parting of the ways. Preventive medicine and curative medicine, public health workers and private practitioners must all hang together or they will hang separately."

Dr. James M. Parrott

Dr. James M. Parrott of Kinston, another former Medical Society president, succeeded Dr. Laughinghouse at his death. I believe it was Dr. George Cooper who spoke thus of "Doctor Jim," as he was known: "He has a high sense of duty and will not hesitate to cut to the bone when he thinks heroic measures are necessary for the best interests of the State Board of Health and the people of North Carolina."

The following statement by Dr. Parrott seems to bear out this impression of his vitality:

"Only the thoughtless would hinder and hamper public health work. If it collapses, many of our industries will be fatally injured, our economic structure seriously hampered and the living conditions of our people would become quickly intolerable. We spend six times as much for funerals and tombstones each year as we appropriate for our public health service. The man who strikes public health in North Carolina drives a dagger into the very vitals of our beloved state. The man that is a traitor now to the physical well-being of North Carolinians would turn this State over to an enemy that never has yet been conquered. It is absolutely impossible for us to build a Grade A commonwealth out of Grade C citizens."

Dr. Ernest A. Branch

The following is a brief lesson from the originator of the openly acknowledged number one preventive dentistry program in the nation, the late Dr. Ernest Branch:

"You remember when you were a child, your mother was constantly telling you not to touch the stove. You will also remember that the warning carried little weight with it until you learned once and for all and for yourself just why you must not touch it, and if touched what dire and dreadful results followed. That is the best way on earth to learn that fire burns, but costly — very costly.

"Public Health has a much harder time of it than a mother, and many of the evils and dangers against which it warns are not as sudden as getting burned. There is one thing to be said for fire: It burns immediately, and with one such experience that lesson is learned for life. With this as illustration, it is obvious that Public Health must warn and hope, and keep on warning and keep on hoping. With even more children than the Old Woman Who Lived in a Shoe, and a great number of them grown-up children, what is it to do except to keep after them?

"And it must teach them not just the simple lessons which carry with them so strong a moral, but must instruct them so as to live not merely longer lives, but more abundant lives, and teach them how to keep well, and by keeping well, being happy, instead of dragging around, half-sick and with a grouch. It must also teach that the effects of neglecting health are not so immediate, perhaps, as the pain of a burn, but are much more far-reaching and more crippling in the end."

Dr. Milton J. Rosenau

Dr. Milton Rosenau, a native of Philadelphia, came to North Carolina after a brilliant career as founder of the Harvard School of Public Health and former director of the U. S. Public Health Service's hygienic laboratory, which we now know as NIH. Instead of retiring and enjoying a well-earned rest, Dr. Rosenau took on the task of organizing a School of Public Health at the University of North Carolina.

The following is the entire text of Dean Rosenau's prose statement, which he called "Dreams" —

"Preventive medicine dreams of a time when there shall be enough for all, and every man shall bear his share of labor in accordance with his ability, and every man shall possess sufficient for the needs of his body and the demands of health. These things he shall have as a matter of justice and not of charity."

"Preventive medicine dreams of a time when there shall be no unnecessary suffering, and no premature deaths; when the welfare of the

people shall be our highest concern; when humanity and mercy shall replace greed and selfishness; and it dreams that all these things will be accomplished through the wisdom of man.'

"Preventive medicine dreams of these things, not with the hope that we, individually, may participate in them, but with the joy that we may aid in their coming, to those who shall live after us.

"When young men have vision the dreams of old men come true."

Dr. Carl V. Reynolds

Dr. Carl V. Reynolds served for several years as parttime health officer for Buncombe County and then succeeded Dr. Parrott as state health officer in 1934. Dr. Reynolds served in Raleigh for 15 years and many of our public health programs of today gained great impetus from his leadership. As still another former president of the State Medical Society, Dr. Reynolds returns to an oft-repeated theme in this comment:

"Curative medicine is necessarily individualistic in thought and administration.

"Preventive medicine is collectivistic in thought and administration.

"The two branches are didactically and idealistically the same, and are so interwoven and interlocking that the success or failure of one means the success or failure of the other. This is the period in our history and in the process of our advancement, if we are to advance as we should, when these two schools should not only fraternize but organize together and make this new era serve us rather than enslave us."

Dr. Edward McGavran

Dean Ed McGavran of the University of North Carolina School of Public Health described public health as follows:

"Public health has come from empiricism to scientific practice. We have grown through basic science and clinical science so that now the advance in health science makes possible the next step — the recognition of the community as a unit, as our new patient, an entity, not merely an aggregate of people. An entity different from every other community as every individual is different from his neighbor. Different in its physical makeup, its geographic and demographic limitation; different in its social structure, its power structure, its governmental and legal structure. Different in mental and emotional patterns, its ethnic groups, its mores, its religious and nutritional patterns. Different in its educational procedures, its institutions, its community organization.

"And yet, an entity with pride and prejudice, with wealth and poverty, with needs and accomplishment, with lacks and superfluity, with ignorance and wisdom, with weakness and with power, in illness and in health. This is our patient. And to this patient's health needs we dedicate our minds and hearts, our intellect, our lives. This is our patient for whom we must learn the art and the science of public health, upon whom we must practice the most modern and scientific diagnosis, in whose interest we must improve our methods, measure and evaluate our techniques, foster basic and applied research, and whose confidence, understanding, cooperation, and participation must be gained in each step and throughout the whole procedure.

"Public health emerges from the patient-centered to the community-centered science, just as clinical medicine emerged from bacterial-centered basic science to clinical patient-centered science. And here the major issue again is not new gadgets or new functions, but a new approach, a new focus, a new patient."

Dr. J. W. R. Norton

Dr. Roy Norton, a native of Scotland County, succeeded Dr. Reynolds as State Health Officer in 1948. He was described as a "big fellow with a ready smile and a brisk walk." The following were Dr. Norton's first words as State Health Officer:

"The administration of Public Health is a public trust, involving responsibilities to every individual, regardless of his or her station in life. Disease shows no favoritism; it asks no quarter in its destructive work. Neither should we who are charged with the eradication and control of those human ailments. We must fight each of these enemies of life and happiness with all the means at our command. We must attack them as a group as well as individually, throwing our main strength where resistance is most stubborn. By so doing with all the means at our command we will meet the responsibilities evolving upon us as Public Health Workers.

"We should strive toward a balanced program that will give all the people protection against all controllable and preventable diseases. We have won great victories in the past. Having set our hands to the plow, we cannot, we must not, we will not turn back."

Let us abandon neither the hopes nor the good counsel of these great men as we strive together to protect, preserve and promote the "public health" of the people of North Carolina.

Editorials

MAMMOGRAPHY IN THE DIAGNOSIS OF BREAST CANCER

Breast cancer is the most frequent cancer and the leading cause of cancer death among women today. It is estimated that this year about 90,000 new cases will be diagnosed; about a third of these will be in women under the age of 50; and approximately 33,000 women will die of it. It took 10 years of the war in Vietnam to produce the number of American deaths equal to the deaths caused in one year from breast cancer in the United States. It is the leading cause of death for women 40-44 years of age and the second leading cause of death in other age groups. It is the most feared and fatal cancer; the most treated cancer (surgery, radiation, hormones and chemicals); and the most costly cancer in terms of medical bills. Incidence and mortality rates have not changed in more than 40 years. However, it is known that detection and treatment of breast cancer at a minimal and localized stage offers the best possibility of cure.

Ninety-five percent of breast cancers are first detected by the patient. Self-examination and examination by a qualified physician remain the cornerstones of diagnosis. However, since the advent of mammography and its increasingly widespread use over the past 25 years,[1] it has become more routine and accumulating data show it to be the most important diagnostic procedure in the detection and management of breast cancer.[2] It is the only diagnostic procedure for the detection and management of clinically occult, non-palpable breast cancer. In symptomatic women as well as those at high risk, the use of mammography is universally accepted.

Mammography as a screening procedure in asymptomatic women has been tried several times in the past[3] to reach an earlier diagnosis and detect minimal breast cancer before it can be palpated or has spread beyond the breast. This could result in earlier treatment and should improve long term survival rates. The Hospital Insurance Plan (HIP) of Greater New York study[4] in the 1960s is the only controlled evaluation of mammography as a screening procedure. The results to date show significantly higher survival rates among those who had mammography as opposed to those who did not in women *over* 50. Mortality among the women *under* 50 is virtually identical for both groups.

In 1973 a Breast Cancer Detection Demonstration Program (BCDDP) was initiated and funded by the American Cancer Society and the National Cancer Institute. Twenty-seven projects were established throughout the United States to annually screen asymptomatic women by history, physical examination, mammography and thermography. Each project is committed to screen 10,000 asymptomatic women between 35 and 74 years the first year and once a year thereafter for five years — with five more years of statistical follow-up. A primary goal is to determine the effectiveness and practicality of these diagnostic procedures, independently and combined, in the early detection of breast cancer and their effects on management, prognosis and survival. Conceivably, high risk and/or pre-malignant factors could also emerge from this effort.

Preliminary data from these BCDDPs reveal that 258,713 women have been screened and 1,083 cases of breast cancer found. About half of the women screened are under 50 and about a third of the cancers were in this group. About 75% of all of these breast cancers were detected before they had spread to the examined regional lymph nodes in the axilla, and this predicts improved survival rates. Our experience at the Duke BCDDP with 50 breast cancers detected to date has been similar. About a third of the cancers (15) occurred in women under 50. Of considerable interest is the fact that more than half of these cancers (8) were detected by mammography *alone*, a detection rate more than twice as effective as physical examination alone (3). Over 80% of all of our breast cancers had not spread to the axillary lymph nodes, again indicating a favorable survival rate. Another potential fringe benefit from the BCDDPs is the application and assessment of Wolfe's method of classifying mammograms to determine women at higher risk to develop breast cancers.[5]

In October, 1975, the National Cancer Institute set out to (1) "estimate the gross and net benefits of adding mammography to history and physical examination in the HIP breast cancer screening project" of the 1960s; and (2) to evaluate the relation between benefits and risks in mammographic screening for the detection of breast cancer. It is important to realize that the HIP mammography in the 1960s was suboptimal if not sub-standard in terms of current standards. Furthermore, theoretical risks (I emphasize the word theoretical, since there is no proven risk) that mammography may induce breast cancer are based on: (1) the epidemiological study of women subjected to multiple fluoroscopic examination of the chest in the management of pulmonary tuberculosis with arti-

ficial pneumothorax;[6] (2) the epidemiological study of women given radiation therapy to the breasts for post-partum mastitis;[7] and (3) the epidemiological study of women surviving atomic bomb irradiation at Hiroshima and Nagasaki.[8] All of these studies involved much larger radiation doses to the breast. This is not to say that radiation exposure should not be kept to a minimum. In fact, extensive efforts are being made to further reduce dosage without sacrificing image quality and diagnostic information.[9]

These comparisons with current optimum mammography are tenuous at best.

It is premature, reckless and ill-advised to conclude unilaterally and publicly[10] and to recommend from these data, before scientific review or discussion with others including physicians concerned with patient care,[11]: (1) that there is no proven benefit from screening mammography of women under 50 years of age; (2) that the risk of inducing breast cancer under the same circumstances may exceed any benefit; and (3) that screening mammography of women under 50 should be stopped. How do we reconcile the fact that a significant percentage of women under 50 with breast cancer would go undiagnosed for up to 15 years without the use of screening mammography? How do we explain these conclusions and recommendations to the women under 50 with breast cancers detected by mammography alone at the BCDDPs? We realize that statisticians need controlled studies but, in the meantime, there are women, including those under 50, with breast cancer that can only be detected by mammography.

The evidence available to date favors the position that no proven hazards exist and that the benefits from mammography including the screening of women under age 50 far outweigh any theoretical risk.

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BICENTENNIAL THOUGHTS

Now that July 4, 1976, has passed it may be safe to comment on our bicentennial touched as it has been by self-consciousness, naiveté and presidential primaries. Celebrating bicentennials is a little like keeping Sundays: why restrict religion to Sunday in a sanctuary translates into why concentrate our patriotic efforts into a single year. Another name for patriotism, by the way, is nationalism which in one guise proposes to substitute worship of country for worship of God or, perhaps, as in Russia, to make the ideology the deity. Thus whatever government does is acceptable to some because it can do no wrong — built-in forgiveness for any action. But such a nation would demand undeviating loyalty from its subjects so that some of us would have to give up our affection for freedom and liberty and take lessons to prepare for the anthill where we can all be programmed and imprisoned within a world of necessity. This can hardly have been the intent of our founding fathers who were, among other things, overwhelmingly curious and curiosity cannot be tolerated in a fixed society. We need only list Franklin, Jefferson, Madison as curious and innovative and recall that Washington resisted all efforts to make him king or to gain from him the blessings of a monarchy, which like George III's could little tolerate "degrees of freedom," a phrase too appropriate to be monopolized by statisticians.

Recognizing that church and state give most to man when they are separate, our founding fathers took great pains to ensure such division after hesitant states, North Carolina among them, refused to ratify the constitution without a Bill of Rights which would provide perpetual protection of our degrees of freedom from the tyrannies of science, religion, law and custom. For we can make any of these autocratic, unyielding and unresponsive and at times must be protected from ourselves; as Oppenheimer has noted " . . . many developments in science that were to flower in the eighteenth and nineteenth centuries would soon moderate and complicate the harsh basic picture of the giant machine (the world) and the vast gulf between it and the knowing human mind that thought about it and analyzed its properties. This is true of the great development of statistics, which in the end made room for human ignorance as an explicit factor in estimating the behavior of physical forces."[1]

To be reminded of the sources of our creed and to reaffirm our faith, we can still within ourselves let church and state sit down at any feast we design and can take such mental nourishment as we see fit — an exercise of freedom of choice itself. It follows that just as religion requires sacred shrines so may secular shrines be needed to help us maintain the vital balance in our inward and outward behavior.

For the doctor a pilgrimage to Philadelphia as a secular Canterbury might be prescribed as a restorative or a reminder, for medicine was different in the eighteenth century and the scientific explosion of the past 30 years makes it hard enough to stay in the

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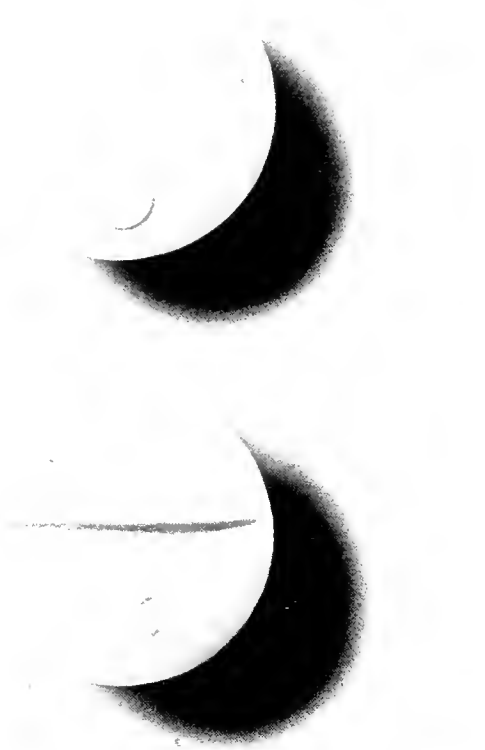

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present much less recognize where we stand in a great tradition. The eighteenth century was the century of the enlightenment, and of the polymath,[2] the many sided genius at home in all houses of knowledge. For example, Newton in 1702 was president of the Royal Society in England and in 1794 at the age of 21 the remarkable Friend, physician and mathematician, Thomas Young, was admitted to the Royal Society because of his astounding paper on the crystalline lens. In between, Joshua Reynolds, the painter, had become a member and in 1756 so had Benjamin Franklin whose energies and accomplishments were so great as to be almost beyond comprehension.[3] But it is not at Franklin's restored home or even at Independence Hall that the impulse of medicine in 1776 can best be felt in Philadelphia but at the home of its Horticultural Society on Walnut Street nestled between the homes of Mrs. Dolley Payne Todd, late of Guilford County, North Carolina, and not yet Mrs. James Madison, and the house of Bishop White of Christ Church, Episcopal, who presided at the organizational meeting of the Episcopal Church in the United States after it was sundered from its Anglican base and from the state. For at the Society's headquarters is an exhibit of books which highlights "the role of Pennsylvanians in the formative period of American horticulture."[4]

Fortunately the catalogue of this exhibit[4] offers a delightful essay about it which tells us of the intellectual life of the times and of the place of physicians in it. Many doctors were botanists and many botanists medical educators and friends of physicians. John Bartram, for example, knew Franklin, corresponded with the English Quaker physician, John Fothergill, traveled widely on the frontier and left us marvelous descriptions including one of that "most wonderful plant" observed near Cape Fear, the Venus flytrap.[5] His son William, also a botanist and also widely traveled, also earned the patronage of Dr. Fothergill[5] and likewise has left us extensive and delightful writings. Then there was Benjamin Schultz who wrote his doctoral dissertation on pokeweed including its medical aspects and, because of his passion for plants, couldn't make ends meet when he went out to private practice.[4] His teacher, Benjamin Smith Barton, had been a surveyor, a medical student in Edinburgh and finally professor of natural history, botany and materia medica at the University of Pennsylvania, and friend of William Bartram and Thomas Jefferson.[4] And Barton's nephew, William P. C. Barton, became professor of botany at Penn and taught at Jefferson Medical School.[4] For where were remedies to be found in those days but in plants? So the curious hunted, collected, observed and wrote and left us a priceless heritage all the greater because it was not confined to narrow subspecialties but extended to all branches of learning.

J.H.F.

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When a man has escaped the miseries of dyspeptic feelings, and brought the sensibilities of his stomach to a natural state, by great attention to diet, he should be careful how he deviates too soon from the rigid regimen by which he was restored to health. Nothing is so liable to relapse as dyspepsia — and indulgence in variety of dishes, or vegetables and fruit, with bad wines, will be almost certain of making the individual pay dear for the experiment. But it is of still more importance to keep to a low *quantity* of food. The least over-exertion of the stomach in mastering a larger proportion than it can easily digest, will be sure to rekindle the morbid sympathies of the body, and the wretched feelings of the mind. The patient must always balance between irritation and debility. When he feels irritation, he must lessen and simplify his food — when he experiences much debility, he must increase it. The false debility, or rather feeling of debility, already described, must not be confounded with real debility. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 76-77.

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2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

November 4-7

Basic Workshop on Clinical Hypnosis
Place: Downtowner East, Charlotte
Sponsor: North Carolina Society of Clinical Hypnosis
Fee: $70 members and interns/residents and students, $170 nonmembers
Credit: AMA Category 1; AAFP approval requested
For Information: Troy Sluder, D.D.S. 208 Brauer Hall, UNC School of Denistry, Chapel Hill 27514

November 5

Third Annual Arthritis Symposium: Therapy of the Rheumatic Diseases
Fee: $35
Credit: 7 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

November 11

Workshop in Cardiac Rehabilitation
Place: Bordeaux Motor Inn and Convention Center, Fayetteville
Sponsors: North Carolina Heart Assn., Inc., and Fayetteville AHEC
Fee: $15.00
Credit: 8 hours; AAFP approval requested
For Information: Judy B. McHugh, R.N., Assistant Executive Director, North Carolina Heart Association, Inc., 1 Heart Circle, P.O. Box 2408 Chapel Hill 27514

November 17

Liver Disease — What's New in Hepatitis
Place: Lee County Hospital, Sanford
Fee: None
Credit: 3½ hours, AAFP approval requested
For Information: Robert S. Cline, M.D., 106 Hillcrest Drive, Sanford 27330

November 18-20

North Carolina Academy of Family Physicians, Annual Scientific Program
Place: Royal Villa Hotel, Raleigh
Fee: $30 members, $40 non-members
Credit: 24 hours
For Information: Mr. Edwin P. Davis, Executive Director, North Carolina Academy of Family Physicians, 1002 Wake Forest Road, Raleigh 27604

November 19

Fall Meeting, North Carolina Academy of Preventive Medicine
Place: Carolina Inn, Chapel Hill
For Information: William L. Fleming, M.D., UNC School of Medicine, Chapel Hill 27514

December 1-2

Third North Carolina Postgraduate Course on Pulmonary Disease
Place: Velvet Cloak Motor Hotel, Raleigh
Sponsors: North Carolina Thoracic Society, North Carolina Lung Association and North Carolina Academy of Family Physicians
Fee: $25; Enrollment Limited
Credit: AAFP approval requested
For Information: C. Scott Venable, Executive Director, North Carolina Lung Association, P.O. Box 127, Raleigh 27602

December 3-4

Second Annual Family Medicine Workshop
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

December 4

Annual Staff Meeting, Department of Ophthalmology, McPherson Hospital
Place: McPherson Hospital, Durham
For Information: S. D. McPherson, Jr., M.D., Chairman, McPherson Hospital, 1110 West Main Street, Durham 27701

January 12

First District Medical Society Postgraduate Course in Medicine (the first of six weekly sessions)
Sponsors: First District Medical Society and the Office of Continuing Education, UNC School of Medicine
Fee: To be determined
Credit: 12 hours
For Information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932

January 21-22

Current Surgical Problems
Fee: $100
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Con-

tinuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 26-28

Alcoholism—The Search for the Sources
Place: Governors Inn, Research Triangle Park
Sponsors: North Carolina Alcoholism Research Authority and North Carolina Medical Society
Fee: $30
Credit: 16½ hours approval requested
For Information: John A. Ewing, M.D., Executive Secretary, North Carolina Alcoholism Research Authority, 623 E. Franklin St., Chapel Hill 27514

January 28-29

North Carolina Conference for Medical Leadership
Place: Royal Villa Hotel, Raleigh
Sponsor: North Carolina Medical Society
For Information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

February 5-6

Update in Clinical Anesthesiology
Place: Berryhill Hall
Sponsors: UNC School of Medicine, Department of Anesthesiology and Department of Continuing Education
Fee: $10
Credit: AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

February 11-12

American College of Physicians — North Carolina Society of Internal Medicine Annual Meeting
Place: Sheraton Inn, Crabtree Valley Mall, Raleigh
For Information: John T. Sessions, Jr., M.D., Department of Medicine, UNC School of Medicine, Chapel Hill 27514

February 16

Wingate Johnson Memorial Lecture
Speaker: Eugene Braunwald, M.D., Harvard Medical School
Credit: 2 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 23-26

Workshop: Electrolyte and Acid-Base Disorders
Fee: $150
Credit: 21 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 9-12

Internal Medicine Annual Symposium '77
Place: Berryhill Hall
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 11-12

Annual E. C. Hamblen Symposium in Reproductive Biology and Family Planning
Sponsors: Duke University Medical Center and the Department of Obstetrics and Gynecology
For Information: Charles B. Hammond, M.D., Box 3143, Duke University Medical Center, Durham 27710

March 12-13

Second Annual Radiology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 18

Myelodysplasia — Orthopedic Course
For Information: Robert J. Ruderman, M.D., Department of Orthopedics, Duke University Medical Center, Durham 27710

March 18-19

Frank R. Lock Obstetrics and Gynecology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 28-April 1

Radiology of Bones and Joints
Place: Downtowner Motor Inn, Durham
Fee: $300; registration limited to 100
Credit: 30 hours
For Information: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham 27710

April 1-2

Practical Pediatrics
Fee: $50
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 22-23

Third Annual Perinatology Postgraduate Course
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

ITEMS OF SPECIAL INTEREST

January 2-15

Second Medical Refresher Cruise Seminar — (Yucatan Peninsula, Coast of Guatemala — Colombia, Montego Bay)
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
Fee: Tuition $200; other fees, dependent upon accommodations
Credit: 21½ hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 26-March 5

Caribbean Cruise, Seminar on Alcoholism
For Information: John A. Ewing, M.D., Executive Secretary, North Carolina Alcoholism Research Authority, 623 E. Franklin St., Chapel Hill 27514

Instructional Materials Available on Problem-Oriented Medical Records

As part of a two-year project financed by the North Carolina Regional Medical Program, the UNC School of Nursing at Chapel Hill has developed two manuals designed to assist health personnel with implementation of the POMR system. These are:

—a Self-Instructional Manual on the Basic Components of POMR, designed for nurses (46 pages)

—Guidelines for Implementation of the POMRS (53 pages), which includes a bibliography on POMR, a section on obstacles to implementation, and questions.

The manuals are available for $1.00 each plus postage. A variety of videotapes, demonstrating the use of POMR to nurses, slides, and a film produced by Lawrence Weed, M.D. and associates, on POMR may be borrowed for training.

For more information contact: Ruth J. Harris, Assistant Professor, School of Nursing, UNC-CH, Chapel Hill 27514

Courses In Ultrasound

The last of a series of three ten-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category I.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem 27103.

PROGRAMS IN CONTIGUOUS STATES

November 15-18

61st Annual International Scientific Assembly of Interstate Postgraduate Medical Association
Place: Atlanta Marriott Hotel, Atlanta, Georgia
Program: " . . . major emphasis in family practice, internal medicine, obstetrics and gynecology and psychiatry."
Sponsors: Interstate Postgraduate Medical Association of North America; Georgia Academy of Family Physicians; Emery University School of Medicine; Medical College of Georgia
Fee: $50 in advance or $75 at the meeting; open to any licensed physician in the U.S. or Canada
For Information: Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, Wisconsin 53701

November 19

Fifth Symposium in Internal Medicine
Place: University of Tennessee Hospital, Knoxville
Program: "The one-day symposium will place specific emphasis on new treatment regimes and current controversies in Internal Medicine."
Sponsors: Knoxville Society of Internal Medicine, Department of Medicine of the University of Tennessee Clinical Education Center
Credit: AMA Category I approved
For Information: The Continuing Medical Education Center, Drawer 116, 1924 Alcoa Highway, Knoxville, Tennessee 37920

December 7-10

Structure-Function Correlations in Cardiovascular Disease
Place: Williamsburg Lodge, Williamsburg, Virginia
Fee: members $100; non-members $150
Credit: AMA category I
For Information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

The items listed in the above column are for the six months immediately following the month of publication. Requests for listing should be received by "WHAT? WHEN? WHERE?", P.O. Box 27167, Raleigh 27611, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

COMMUNICATIONS — PUBLIC RELATIONS

Communications: The exchange of meaning between people.

Public Relations: Doing the right thing — then communicating this with the public.

Members of the medical society and the auxiliary are doing much good for mankind. The amount of knowledge, information and ideas they could share with the public staggers the imagination.

Perhaps we need to examine the ways to communicate ideas. How do we share our thoughts with each other and the public? Do people really hear us? Are they receptive? Do we need to improve the ways we communicate? Do we lack skill in the natural language of human interaction?

A 1970 issue of the magazine "Psychology Today" reported on a study of communication. Psychologist Albert Mehrabian, after doing lab measurements on what happens when one person talks to another, found that only 7% of the message's effect is carried by words, while 93% of the total impact reaches the listener through nonverbal means — facial expressions, vocal intonation (tone of the voice) and enthusiasm. The following formula shows how much each of the components contributes to the effect of the message as a whole:

Total Communication: 7% verbal (words)
38% vocal (tonal expressions)
55% facial-body language

Other research has been done by the Socony-Vacuum Oil Company (now Mobil Oil Co.) which revealed how persons learn and how much of the knowledge they retain. Results indicated the following: We learn and retain approximately:

10-20% of what we hear,
50% of what we see,
70% of what we say,
90% of what we do.

Can we as members of the medical society and the auxiliary learn from these two studies?

In our approach to each other and to the public, we need to remember that our total being communicates, not just the words we speak. Despite the innumerable hours spent doing research, writing papers and articles — and even though people may want to hear the information — presenting the knowledge in an expressionless monotone is the least effective way to communicate. If only 7% of our words are communicated and people retain approximately 10% of those, then our time has not been wisely used.

In addition to words, we need to "show" our ideas through the use of things people can see — posters, graphs, slides, films, printed statements and

speeches, demonstrations, role play, objects, body language, use of hand movements. We need to have confidence in ourselves — to believe in ourselves and our ideas to the extent that we become enthusiastic and will cause others to believe in our ideas. We need to cause people to discuss ideas — to ask and answer questions. (This illustrates the 70% we retain). In order to be good communicators, we must get "listeners" involved and participating. This "doing" is what the people will learn and remember best, whether it applies to a speech or a project idea. We must challenge our "listeners" to follow up. Then, we communicators and promoters of good public relations need to evaluate the results. Thus, we too, learn through the ultimate joys and challenges of communication.

Communication, from spoken words to participation, means sharing at its best.

MRS. R. E. FRAZIER
Communications and Public Relations Chairman

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. Charles E. Llewellyn Jr. has been appointed acting head of the Division of Community and Social Psychiatry.

Llewellyn's previous position as head of the Adult Psychiatric Outpatient Division has been assumed by Dr. Jesse O. Cavenar Jr.

Both appointments were announced by Dr. Keith Brodie, chairman of the Department of Psychiatry, who said Llewellyn will administer the division while a search is under way for a fulltime head.

Llewellyn is an associate professor of psychiatry and has been at Duke since 1955. He is a former director of the Duke Drug Rehabilitation Center and for nine years he was director of the Student Mental Health Service.

Cavenar was an associate in the department here for three years prior to his faculty appointment as an assistant professor of psychiatry in 1974.

He earned his M.D. in 1963 at the University of Arkansas and served his psychiatric residency at N.C. Memorial Hospital in Chapel Hill. For the past year and a half he has been chief of the psychiatry service at the Durham VA Hospital.

* * *

Dr. John W. Everett, professor emeritus of anatomy, and Mrs. Everett have returned from the 5th International Congress of Endocrinology in Hamburg, Germany, where Dr. Everett was one of six persons voted to lifetime membership in the International Society of Neuroendocrinology.

Everett presided at one session and presented a paper written by Dr. William H. Fletcher, assistant professor of anatomy, Dr. J. David Robertson, chairman of the department, and himself titled, "Freeze-fracture Studies of Membrane Specializations in Rat Anterior Pituitary."

* * *

Dr. William G. Anlyan, vice president for health affairs, and Dr. David C. Sabiston Jr., chairman of the Department of Surgery, have been re-elected to five-year terms of membership in the Institute of Medicine of the National Academy of Sciences.

* * *

Students at the medical school have organized a new course for this year's freshman class, intended to stimulate imaginative thinking about alternative approaches to health care.

The course, "Medical Care and the Patient," supplements the intensive basic science offerings in the first year by providing a "time out" for reflection on the many different purposes for which a physician may use the technical skills he has learned, said Larry Wissow, one of the course organizers.

"Medical students should, from the outset of their training, start thinking about how doctors and patients relate, and what maintaining and restoring health is all about," Wissow said.

A major theme of the course is preventive medicine, working with the healthy to avoid the onset of illness. Well-child pediatrics and the identification of those at risk for heart disease serve as examples of fields in which the techniques of screening and preventive therapy may be applied.

A group of talks will focus on the doctor-patient interaction. The course will end with a consideration of who should make up the health care team and how care is provided in Durham.

Dr. Robert J. Sullivan of the departments of medicine and community health sciences, is serving as moderator for the informal, discussion-oriented sessions.

Faculty members participating include Dr. Michael A. Hamilton, director of the Physician's Associate Program; Dr. Siegfried Heyden, professor of community health sciences; David Hunter, associate director of the Family Medicine Program; Dr. George Maddox, director of the Center for the Study of Aging and Human Development; Dr. Shirley Osterhout, head of the Poison Control Center; Dr. Harmon Smith, professor of moral theology and professor of community health sciences; and Dr. Allen Dyer, assistant professor of psychiatry.

* * *

Dr. Peter C. Burger, assistant professor of pathology, and Dr. F. Stephen Vogel, professor of pathology, are authors of *Surgical Pathology of the Nervous System and Its Coverings*, a textbook published by John Wiley & Sons, Inc.

* * *

The physician's associate concept, which was originated at Duke by Dr. Eugene Stead, has marked

its 10th anniversary with the graduation of 28 men and 11 women in the 1976 class.

The training of PAs has now spread to more than 40 other institutions. Since the first three were trained here, 273 have graduated from the Duke program.

* * *

MOVING IN AND MOVING UP including the following:

Appointments — Dr. Richard H. Daffner, 35 (M. D. SUNY Buffalo '67), assistant professor of radiology; Dr. Howard C. Filston, 40 (M. D. Western Reserve '62), associate professor of pediatric surgery and associate professor of pediatrics; Dr. Stephen H. Gehlbach, 34 (M. D. Case Western Reserve'68), assistant professor of community health sciences; Dr. Michael Steven Hershfield, 34 (M. D. Univ. of Pa. '67), assistant professor of medicine; and Dr. Ziad Idriss, 31 (M. D. American University of Beirut '70), assistant professor of pediatrics.

Promotions — Dr. Robert E. Webster, to professor of biochemistry; Dr. Wesley A. Cook Jr., 40, to associate professor of neurosurgery; Dr. Stuart Handwerger, 37, to associate professor of pediatrics; Dr. Gerald A. Serwer, 30, to assistant professor of pediatrics; Dr. J. Bolling Sullivan, 36, to associate professor of biochemistry.

News Notes from the

UNIVERSITY OF NORTH CAROLINA-CHAPEL HILL SCHOOL OF MEDICINE AND NORTH CAROLINA MEMORIAL HOSPITAL

A molecular biologist at the University of North Carolina School of Medicine at Chapel Hill has been awarded a grant to study how genetic material is organized in mammals.

The $37,500 grant, awarded by the American Cancer Society, will be used to fund research by Dr. John E. Newbold, associate professor of bacteriology and immunology.

"Our basic objective is to understand how the genetic material DNA is organized in mammalian cells," Newbold said.

"This question is a fundamental one, he said. Before we can understand the role of genes in aberrant (cancerous) cells, we need to know how they are organized in normal cells."

Newbold said some cells have more DNA than others. He speculates that the extra, special piece of DNA at the beginning of a gene may represent a control that prevents a cell from becoming cancerous.

He plans to use a technique involving a class of enzymes — restriction enzymes — that have the ability to cut DNA molecules at unique sites. "This way we get a large number of DNA fragments that can be purified to determine what they do," Newbold said.

Dr. Roger E. Salisbury, a Pennsylvania plastic surgeon, has been named director of the N.C. Jaycee Burn Center at The N.C. Memorial Hospital in Chapel Hill.

Salisbury, who comes to Chapel Hill from Temple University Health Sciences Center in Philadelphia, has been appointed associate professor of surgery in the UNC-CH School of Medicine. He assumed his duties Sept. 1.

The 36-year-old physician will direct a 23-bed burn center, which will occupy the fifth floor of a $12.6-million patient support facility at N.C. Memorial Hospital. Construction of the addition will begin in January.

A graduate of Haverford (Pa.) College, Salisbury holds the M.D. degree from Albert Einstein College of Medicine. He has received training in general surgery, hand surgery and plastic surgery at Philadelphia's Thomas Jefferson University Hospital and Temple University Health Sciences Center.

* * *

The School of Medicine of the University of North Carolina at Chapel Hill has received a $23,741 grant to extend the Robert Wood Johnson Foundation Medical Student Aid Program through June 30, 1977.

The Robert Wood Johnson Foundation created the nationwide program in 1972 to help solve two problems — inadequate financial aid for medical students and unequal distribution of physicians in the U.S. — by supplying funds for loans and scholarships for needy women, members of designated racial minority groups and students from predominantly rural counties.

Of the original $10 million allotted to the national program, UNC received $94,966 in 1972. Records in the school's Office of Student Affairs indicate that this amount has since been disbursed in scholarships and loans to 65 students. Each school's award is based on the percentage of the student body eligible to benefit from the program. The extension granted this year is one-fourth of the initial award.

* * *

Sam W. Hitt became director of the Health Sciences Library at the University of North Carolina at Chapel Hill and adjunct associate professor of library science in the School of Library Science on Sept. 1.

Announcement of Hitt's appointment was made by Dr. Cecil G. Sheps, UNC-CH vice chancellor for health sciences.

Hitt succeeded Myrl Ebert, who retired earlier this year after 20 years as director of the Health Sciences Library.

The new director had been executive director of the Houston Academy of Medicine-Texas Medical Center Library, professor of library administration at the Baylor College of Medicine and adjunct professor of library science at the University of Texas Health Science Center at Houston.

Dr. James N. Hayward, a former professor of neurology at UCLA, had been named the first chairman of the Department of Neurology in the School of Medicine at the University of North Carolina at Chapel Hill.

The new department, which now has a faculty of six, combines the former divisions of neurology in the departments of medicine and pediatrics at UNC-CH. Dr. Thomas W. Farmer, who headed the neurology program and was acting chairman of the new department from January until June 1976, has been named Sarah Graham Kenan Professor of Neurology at Chapel Hill.

Dr. Hayward, a Medford, Mass. native and a 1964 graduate of the Tufts University School of Medicine, said the new department is one of a few in the country that is devoted to both pediatric and adult neurology.

* * *

Medical scientists at the University of North Carolina at Chapel Hill have found acupuncture anesthesia to be an ineffective way of relieving pain for a large number of persons.

Although acupuncture may change the point at which some people would normally feel pain, said Dr. Edward Perl, chairman of the department of physiology in the School of Medicine, the change in many persons is not enough to allow major surgery.

"We don't suggest it's not a useful manipulation for people suffering pain," he said, "but by and large it seems to work only in selected persons and then may be a form of attention diversion."

Experiments conducted in Perl's laboratory show that acupuncture produced an effect on the threshold of pain in roughly one-third of those tested. On the average this effect was small, Perl said, and for a large number of the subjects the effect was zero.

Perl and research associate Dr. Bruce Lynn, now a senior lecturer at University College, London, received a two-year grant in 1974 from HEW's National Institute of General Medical Sciences to assess the pain-relieving capabilities of acupuncture.

* * *

A Danish specialist in clinical chemistry has been named a visiting professor at the University of North Carolina School of Medicine at Chapel Hill.

Dr. Per Winkel, a member of the department of clinical chemistry at Rigshospitalet in Copenhagen, Denmark, joined the University's department of pathology for one year beginning Aug. 1. While here he will work with Dr. Bernard Statland, associate director of the clinical chemistry laboratory at The North Carolina Memorial Hospital and UNC-CH associate professor of pathology.

Winkel and Statland, who have collaborated on research for the past four years, will be studying inter- and intra-individual variations of various components that are analyzed in the body fluids of healthy persons. They are particularly interested in examining the individual as his or her own control.

"Classically we compare the values of an individual — for instance, the amount of cholesterol in the blood — with reference value established for an average person," Winkel said. "However, we have proposed studying the individual as his or her own referent — that is comparing the values of an individual with the values obtained when the person was in a documented state of good health."

Winkel, who has trained in statistics, computer technology and chemistry, received the M.D. degree in 1963 from the University of Copenhagen. He is the author of a number of articles on the statistical approach to problems of medical diagnosis and clinical chemistry. Since 1965 he has been a member of the Copenhagen Study Group for Liver Diseases and has been responsible for the data processing and statistical analysis.

* * *

Dr. Charles E. Morris, formerly professor of neurology and medicine at the University of North Carolina at Chapel Hill, has been appointed professor and chairman of the Department of Neurology at the University of Health Sciences/Chicago Medical School. He is also chief of the neurology service at the North Chicago Veterans Administration Hospital.

Before going to Chicago Medical School, Dr. Morris was director of Medical Student Teaching in neurology at the University of North Carolina and

director of the Neurology Outpatient Department at North Carolina Memorial Hospital.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Dr. David R. Mace, internationally known for his work involving marriage and the family, has joined the staff of North Carolina Baptist Hospital's Department of Pastoral Care.

He has been named director of marriage enrichment training in the Division of Human Enrichment and Development.

He will continue to serve as professor of family sociology with the Bowman Gray School of Medicine, a position he has held for the past nine years.

In his new postition, he will have the responsibilities for developing and conducting training programs in preparation for marriage, programs in marriage enrichment and the training of couples for leadership roles in the marriage enrichment field. He also will have teaching responsibilities in the School of Pastoral Care.

The Bowman Gray School of Medicine's largest entering class was enrolled in August.

The first-year class of 108 medical students is 10 students larger than last year's entering class and double the size of the entering class of 10 years ago.

The class includes students from 18 states. They received their undergraduate education at 48 colleges and universities. Sixty-five North Carolinians are in the class.

The class was selected from 5,715 applicants, and included 16 women students.

Total enrollment, also the largest in Bowman Gray's history, is 389 medical students and 80 graduate students. The school enrolled 22 new graduate students this year.

* * *

Dr. Frederick W. Glass, assistant professor of surgery, has been appointed a member of the Regional Emergency Medical Services Coordinating Advisory Committee of the Piedmont Triad Council of Governments.

* * *

Dr. Hyman Muss, assistant professor of medicine, has been named a contributing editor to the Fourth Edition of the Gould Medical Dictionary.

* * *

Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology and Immunology,

has been appointed chairman of the Publications Policy Committee of the American Thoracic Society.

* * *

Dr. Jimmie L. Pharris, administrative director of the Physician Assistant program, has been appointed to the Selection Committee of the Association of Physician Assistant Programs.

* * *

Dr. Horatio P. Van Cleve, associate professor of family medicine, has been elected to the Board of Directors of Forsyth Technical Institute.

* * *

Dr. Hal T. Wilson, medical director of the Physician Assistant Program, has been appointed to the Permanent Curriculum Committee of the Association of Physician Assistant Programs.

September was the appointed month for the Congress to make final deposition of a great deal of unfinished health legislation. The August doldrums saw little visible Congressional action on health business. But behind closed doors much work was performed by members and staff in committee and conference meetings. However, the final shape and form of legislation such as manpower, health maintenance organizations, clinical laboratories, Indian health, variable incentive pay, and emergency medical services will not be known until the last hectic days of the 94th Congress as it rushes to adjourn and go home for the autumnal election campaigns.

* * *

The Maximum Allowable Cost (MAC) drug program went into effect towards the end of August with little visible activity. First signs of life will probably appear in the late fall when MAC's advisory committee will meet to consider the initial prescription drugs for the program.

Court decisions in the various counter suits, including that of the American Medical Association, are not expected in the near future.

The three-year-old brainchild of former Health, Education and Welfare Secretary Caspar Weinberger, MAC sets price ceilings on certain widely used drugs in an effort to discourage prescription of brand name products. Physicians would have to stipulate that brand name drugs for Medicare-Medicaid ben-

eliminates Pinworms and Roundworms with a single dose

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eficiaries are medically necessary on the prescription in order to prevent the pharmacist from filling the order with the lower cost generic drug. In states with anti-substitution laws, patients would have to make up the difference in price if a brand name is ordered.

MAC had been scheduled to go into effect four month ago, but retail druggists joined drug manufacturers and the AMA in protest, causing the four-months postponement.

In a letter to HEW Secretary David Mathews, the Pharmaceutical Manufacturers' Association said the original postponement was to resolve "confusion and opposition" surrounding MAC. "It is our observation that such hopes have not been realized, and in fact, the situation is even more chaotic today," said PMA President C. Joseph Stetler.

The AMA and PMA have a consolidated suit against MAC pending in Chicago District Court. Other litigation has been launched by the National Association of Retail Druggists (NARD), the Private Medical Care Foundation, Inc., and Congress of County Medical Societies. Citing these, along with a petition filed with HEW on July 27 by the American Pharmaceutical Association (APHA), and the "continuing concern," and "growing dissatisfaction" of many individuals and organizations, Stetler said, "there is every reason to further delay . . . the MAC program."

The MAC proposal has many controversial aspects, not the least of which is the fact that it was an administrative decision without any legislative backing in the language of the Medicare and Medicaid laws. Thus, one of the criticisms is that it represents "government by regulation" and violates the Medicare law's prohibition against interference in the practice of Medicare.

Weinberger claimed MAC would save the government $60 million a year but another former HEW Secretary, Robert Finch, disputed the claim. Finch, now a private citizen in California, said the bureaucratic cost of running the program would offset any possible savings. In a letter to the *Wall Street Journal* last year, Finch also argued that bioequivalency cannot be demonstrated at present. The MAC regulations pose "the key question of whether the patient receives the exact prescription the doctor ordered," he wrote.

Physicians for the most part will be affected with Medicaid patients, since there is no substantial outpatient benefit for Medicare drugs.

In addition to the control program, HEW will send all physicians a list of most frequently prescribed drugs along with the prices community pharmacies pay for them.

No federal sanctions are provided for physicians who decide to write out the "medically necessary" prescription message.

Before a Maximum Allowable Cost can be established for drugs, the Food and Drug Administration must first indicate that there are no bioequivalence problems among its several brands. The HEW Pharmaceutical Reimbursement Board would then propose a MAC at a level equal to the lowest cost at which the drug is generally available to providers. Before the MAC can be established officially it must be reviewed by a non-governmental advisory committee and published in the *Federal Register* for comment.

The regulations establish both the Pharmaceutical Reimbursement Board and the five-member outside advisory group.

HEW said about one-fourth of commonly prescribed drugs are available from multiple sources. However, the number for which bioequivalence problems can be ruled out is smaller.

The reimbursement that a pharmacist receives for drugs he provides Medicare and Medicaid patients will be based on an estimate of his cost of buying the drug plus a dispensing fee, or on his usual charge to the general public, whichever is the smaller. Program agencies as the state Medicaid program would make the estimates according to price information supplied on a regular basis by HEW.

Druggists protested a HEW wholesale price list designed to guide state agencies which the druggists said contained "out-of-date" low prices.

John Ball, M.D., Assistant to the Director of FDA's Office of Quality Standards, recently said it may be as long as six months before the first small group of drugs has gone through the process for declaring them ready for MAC.

* * *

The Republican Party has gone on record against compulsory National Health Insurance. The platform plank on health adopted by the delegates at the convention in Kansas City was in sharp contrast to the Democratic plank endorsing a comprehensive national plan financed by regular and social security taxes.

The GOP statement on health supported extension of catastrophic protection "to all who cannot obtain it." The private health insurance system should be utilized to "assure adequate protection for those who do not have it," the platform said. "Such an approach will eliminate the red tape and high bureaucratic costs inevitable in a comprehensive national program."

The platform on health did not condemn outright any national health insurance program as a group of conservatives led by Sen. Jesse Helms (R-N.C.) had urged. The flat opposition to a "compulsory" NHI program, however, provided a sufficiently broad umbrella to mount an attack on many NHI proposals and specifically on the Kennedy labor bill. Some delegates interpreted the plank as opposition to any "comprehensive" national plan.

President Ford this year did not renew his previous endorsement of the Nixon Administration's NHI plan calling for employers to provide employees with comprehensive private health insurance, federalizing Medicaid, and subsidizing a catastrophic benefit. Instead, Ford asked Congress for a catastrophic benefit for Medicare beneficiaries. He said the so-called mandated plan would be too expensive at present.

On abortion, the Republicans supported "the ef-

forts of those who seek enactment of a constitutional amendment to restore protection of the right of life for unborn children." The Platform conceded that the issue "is one of the most difficult and controversial of our time . . . undoubtedly a moral and personal issue" involving "complex questions relating to medical science and criminal justice."

The Supreme Court's ruling on abortion permitting it until the last stages of pregnancy was "an intrusion into the family structure through its denial of the parents' obligation and right to guide their minor children," said the Platform.

* * *

The House has passed the so-called toxic substances act which gives the Environmental Protection Agency new powers to prevent hazardous chemicals from being marketed. A provision was added on the House floor to ban within two years the manufacturers of PolyChlorinated Biphenyls (PCBs). The chemical has been found in fish in the Great Lakes and the Hudson River and traces discovered in humans. PCBs are used in electrical equipment and enter the food chain through waste dispersal in waterways.

* * *

The HEW Department has awarded contracts to establish five centers for health planning in Madison, Wisconsin; Columbia, Missouri; Denver; San Francisco; and Boise, Idaho. The contracts, totaling $3.2 million will provide training and consultation to health planners in 24 states, Guam, American Samoa, and the Trust Territories of the Pacific. HEW established five other centers for health planning earlier this year in Boston; Syracuse, New York; Fort Washington, Pennsylvania; Atlanta; and Houston.

* * *

The House Ways and Means Subcommittee on health postponed until mid-September hearings on issues involved in increasing physicians' fees and possible revisions in the present reasonable charge reimbursement system used in the Medicare program.

The Subcommittee heard testimony on:

Factors in the present system which influence physicians to accept assignment or to direct bill; advantages and disadvantages to requiring physicians to accept assignment in any case; factors contributing to geographic variations in physicians' reasonable charges, including differences in urban and rural charges; implications of the differences in charges between primary care physicians and specialists, and the effect of such fee differences on the selection of certain specialties by physicians; feasibility and desirability of reimbursing physicians on a fee schedule basis and the factors which would be used to adjust the schedules to reflect the variation in physicians' cost of practice; the rule of relative value scales in determining physician fees; results of experimental reimbursement programs; comments on legislation already pending which would amend Medicare reimbursement of physicians.

The Subcommittee also examined the issues involved in the payment of physicians in teaching hospitals under Medicare. However, Congress will not be able to act on such matters this year.

* * *

President Ford has named Robert Nelson Smith, M.D., Toledo, Ohio, anesthesiologist, to be Assistant Secretary of Defense for Health Affairs. Dr. Smith, who served as President of the Ohio State Medical Association in 1969-1970, succeeds James Cowan, M.D., who resigned.

Dr. Smith graduated from West Point in 1943 and served in the Air Force from 1943 to 1948. He received a Master of Science degree from Massachusetts Institute of Technology in 1945 and his medical degree from the University of Nebraska College of Medicine in 1952.

The 56-year-old physician is a member of the AMA, the Ohio State Medical Association, and the American Society of Anesthesiologists.

Book Review

Books Received

Help Your Doctor Help You. By Walter C. Alvarez, M.D. 126 pages. Price, $4.95. California: Celestial Arts, 1976.

So Get On With It. By Marilee Weisman and Jan Godfrey. 159 pages. Price, $8.95. New York: Doubleday & Company, Inc., 1976.

In Memoriam

ARTHUR HILL LONDON, JR., M.D.

Dr. Arthur Hill London, Jr., died April 24 at his home in Durham at the age of 73.

Dr. London was born in 1903 in Pittsboro and had his early education in the public schools there. He received his B.S. in medicine from the University of North Carolina in 1925; in 1927 he received his M.D. from the University of Pennsylvania.

After interning at Methodist-Episcopal Hospital (1927-1928), he was assistant resident in pediatrics at Children's Hospital, Cincinnati and then chief resident in pediatrics, Children's Hospital, Philadelphia. During that time he was an instructor and lecturer at the University of Pennsylvania.

In 1930 he opened his office in Durham for the practice of pediatrics and later that year he joined the staff of the new Duke Medical Center, starting a 45-year affiliation with that institution. He became chief of the pediatric service at Watts Hospital in 1933 and held that position until 1968. During that time he also taught in its nursing school. Dr. London joined the faculty of the University of North Carolina School of Medicine in 1933 and served as clinical professor of pediatrics until his death. He was also pediatrics consultant to Lincoln Hospital in Durham.

Dr. London's career was marked by community projects designed to upgrade medical care. In the early years of his practice, he established a free children's clinic in Pittsboro with Dr. William B. Chapin. He also established "feeding clinics" in Durham. He became a member of the Durham County Board of Health in 1939 and served as its chairman for four years. He retired in 1974 after 35 years of service.

Dr. London served as president of the North Carolina Pediatric Society, district chairman of the southern area of the American Academy of Pediatrics, president of the Durham-Orange County Medical Society and a member of the Governor's Coordinating Council on Aging. He wrote a number of articles in scientific and pediatric journals.

Dr. London endeared himself to his patients and their parents by his warmth and personal concern. He was greatly respected and loved by his colleagues and students. It was typical of Dr. London that, although he knew he had a terminal illness, he continued practicing medicine until just a few days before his death.

Many honors came to Dr. London. The State Medical Society awarded him the Moore County Medal in 1937. The University of North Carolina Medical School presented its distinguished service award to him in 1958. In 1971 Dr. London was honored at the dedication of the Arthur H. London, Jr. Pediatric Library at North Carolina Memorial Hospital in Chapel Hill. He received the Distinguished Alumni Award from Duke in 1975.

Dr. London was a member of St. Philip's Episcopal Church, a member of its vestry, senior warden of the parish and a trustee of the Episcopal Foundation of the North Carolina diocese.

Dr. London was married to Jeanette Brinson of Savannah, Georgia, who died in 1971. He is survived by a son, Arthur H. London III of New Orleans; a daughter, Jeanne Elizabeth Torrence of Lexington Park, Md.; three brothers, Lawrence F. London of Chapel Hill, John H. London of Pittsboro and Fred W. London of Raleigh; four grandchildren and one great-grandchild.

DURHAM-ORANGE COUNTY MEDICAL SOCIETY

OSCAR SEXTON GOODWIN, M.D.

All of us remember Oscar Goodwin with positive warm happiness and smile . . . for he was truly a man of infinitely good disposition, common sense, good humor, and a genuine caring for human beings. It may be a long time before we again see his special brand of individuality and enthusiasm for the community good.

Dr. Goodwin died on April 22 at the age of 81. He had suffered a heart attack at the age of 72 but recovered sufficiently to practice medicine one-fourth of the day until he died. Such consistency was in no small measure due to his loving and faithful wife, Elizabeth Shreve Goodwin, with whom he celebrated their 50th wedding anniversary on April 11, 1975, one year before his death. Together they had three sons and one daughter: William S. Goodwin runs the home farm near Apex; Joel S. Goodwin, M.D., is a physician in Salisbury; James O. Goodwin, M.D., is a physician in residency; and Jacqueline Burgess lives in Raleigh. Dr. Goodwin came from a large family himself, having had four brothers and two sisters. He has eight grandchildren.

Born near Apex in 1895, Dr. Goodwin finished high school at Mars Hill College in 1912 and attended Wake Forest College from 1915 to 1917, when he began a distinguished military service with the Navy. He was awarded the Navy Cross and the French Croix de Guerre. In 1919 he returned to spend two years at the University of North Carolina and then in 1923 he graduated from Jefferson Medical College in Philadel-

phia and interned for one year at the Methodist Episcopal Hospital in Philadelphia.

In 1924 he began his medical practice in Apex. He joined the North Carolina Medical Society in 1926 and became a Life Member. His leadership was recognized as he became president of the Wake County Medical Society in 1953, president of the 6th District Medical Society in 1941, president of the Seaboard Coast Line Railroad Surgeons in 1962. He further served as an active member of the Southern Medical Society and the American Medical Association. He was physician for the Norfolk and Southern Railroad as well as the Durham and Southern Railroad.

As Wake County built hospitals, Dr. Goodwin became a staff member of the present Wake Medical Center and served as chief of staff in the Apex Branch from 1962-63. He, naturally, became an ardent supporter of the American Academy of Family Practice and received a 25-year service award in New York as a Charter Fellow of the Academy. In 1964 he was given the Distinguished Service award by the School of Medicine at the University of North Carolina at Chapel Hill.

Most importantly, Oscar Goodwin served his community. He was active in multiple civic activities and as a member of Apex Baptist Church. He was president of the Apex Lions Club in 1947 and he faithfully served as chairman of the local school board for 12 years. North Carolina needs more physicians to serve in the great tradition as did Oscar Goodwin and family doctors everywhere would do well to follow his precept.

And if Oscar were here today, he would bid us, with a smile, to get on with our business . . . as long as we take the time to care about the fellow next to us.

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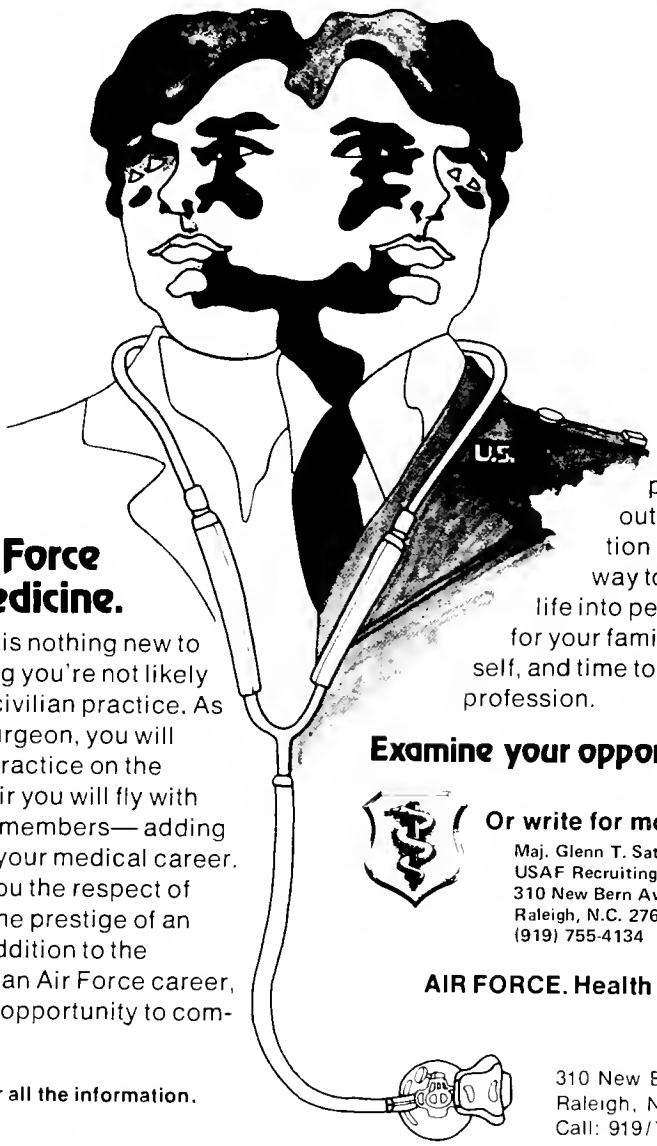

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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

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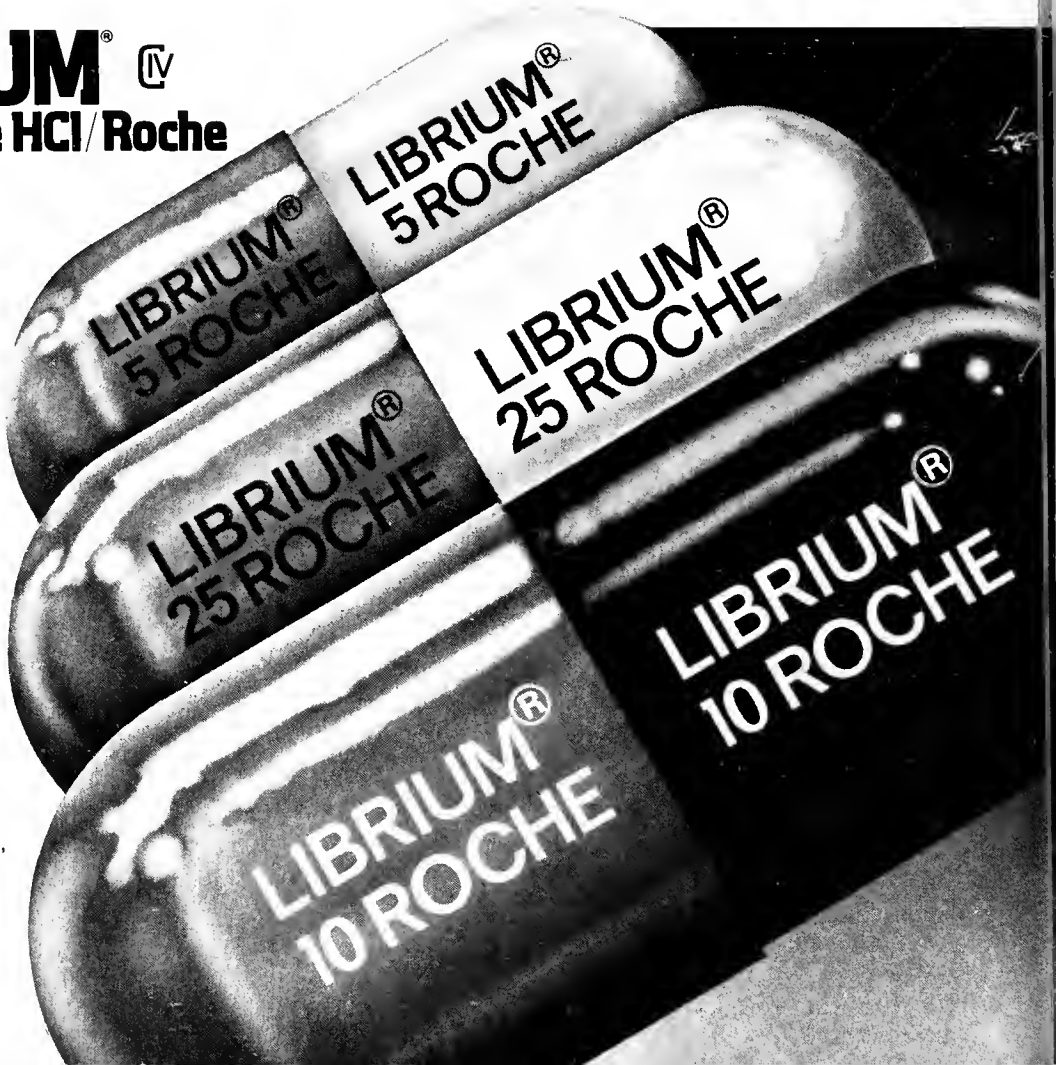

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NORTH CAROLINA
Medical Journal

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY ☐ ☐ ☐ November 1976, Vol. 37, No. 11

IN THIS ISSUE:

1977 Leadership Conference
January 28-29—Raleigh

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

1977 Committee Conclave
Sept. 21-25—Southern Pines

Both often

Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

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in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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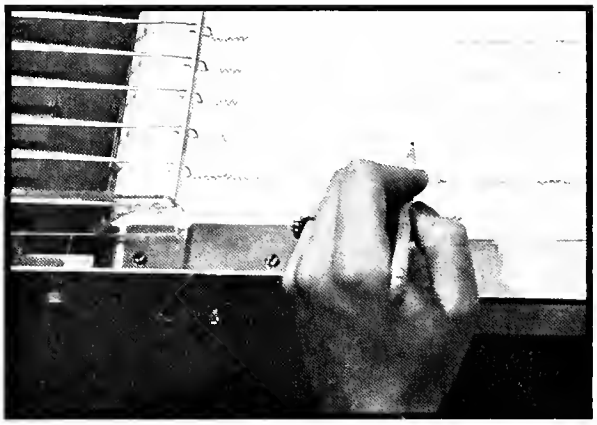

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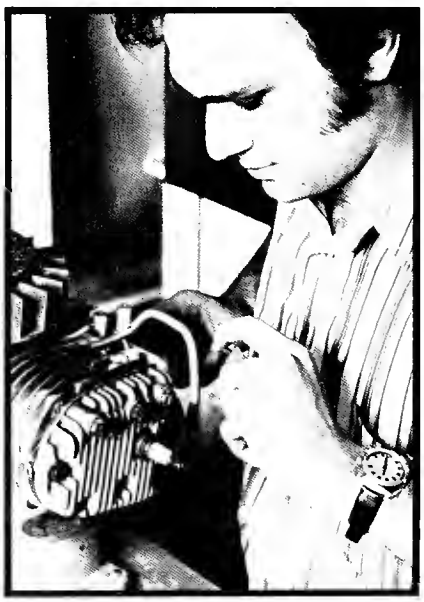

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Brand M	18	1.1
Brand K Menthol	17	1.3
Brand M Box	17	1.0
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Brand P Box	14	0.8
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Brand W Lights	13	0.9
Brand K Milds Menthol	13	0.8
Brand T Menthol	11	0.7
Brand T	11	0.6
Brand V Menthol	11	0.8
Brand V	11	0.7
Carlton Filter	***2**	***0.2**
Carlton Menthol	***1**	***0.1**
Carlton 70	***1**	***0.1**

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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina Medical Society

November 1976, Vol. 37, No. 11

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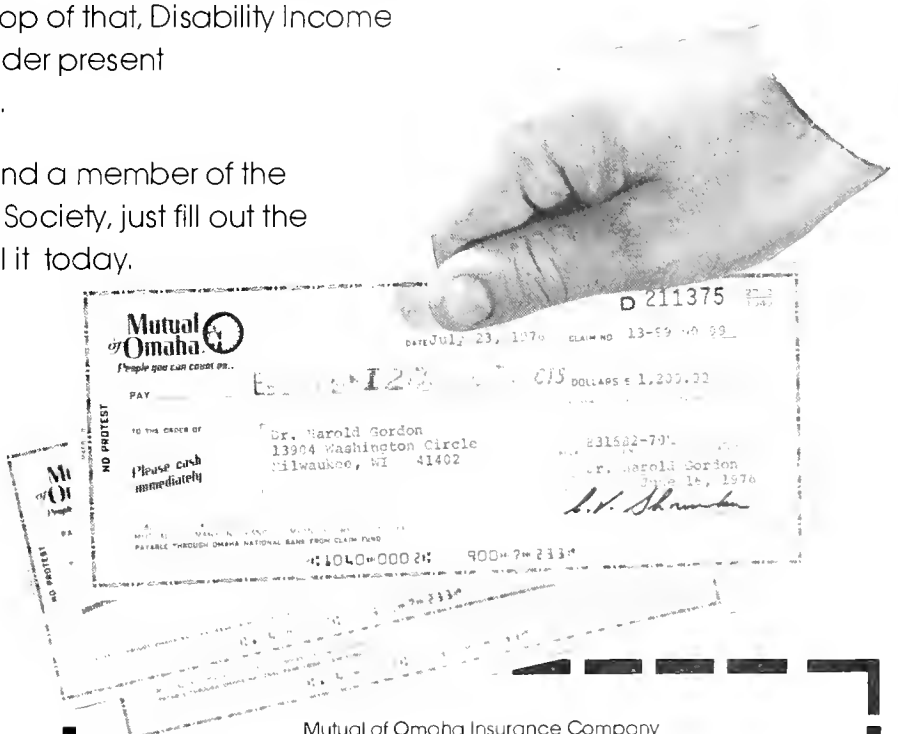

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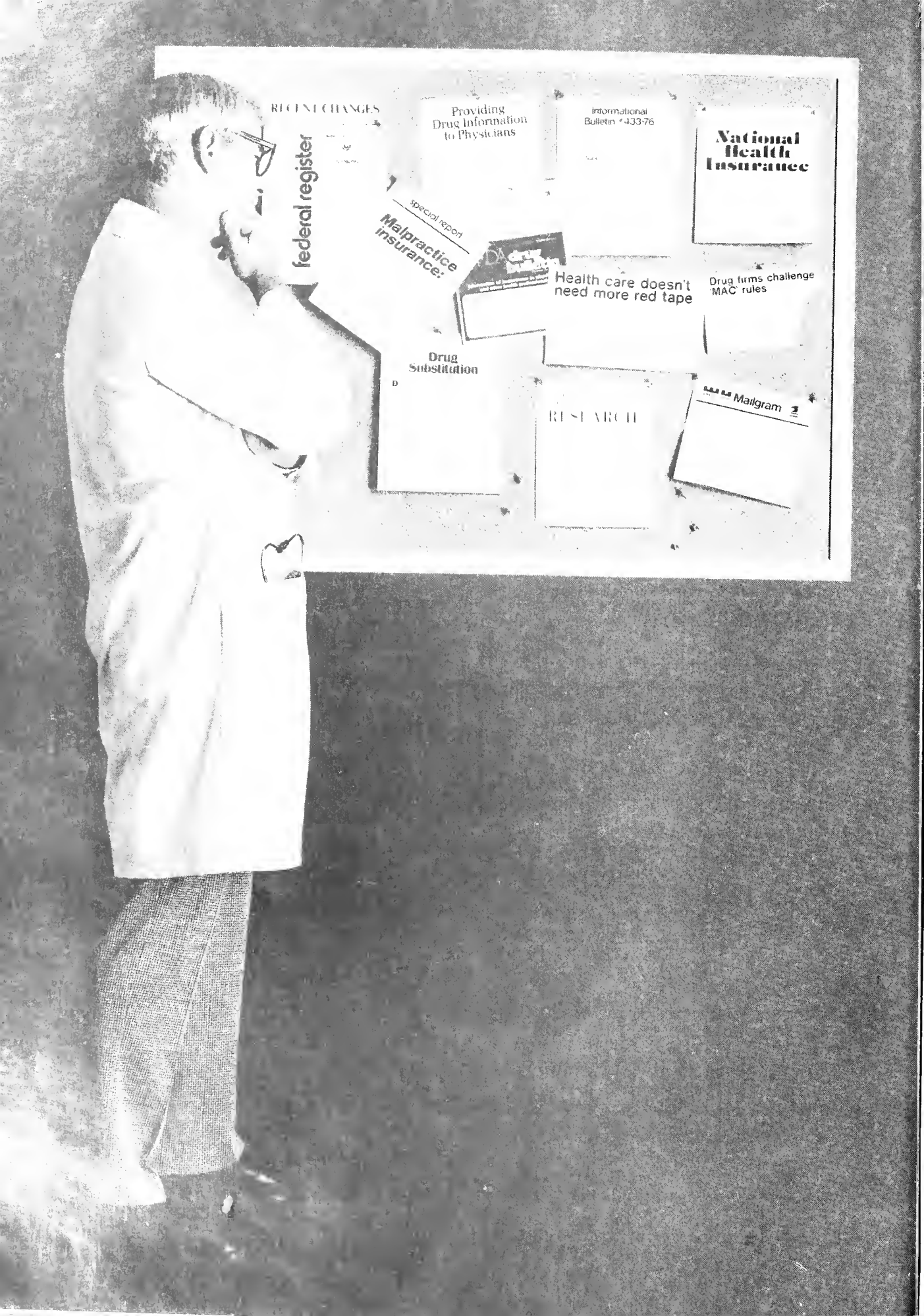
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THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

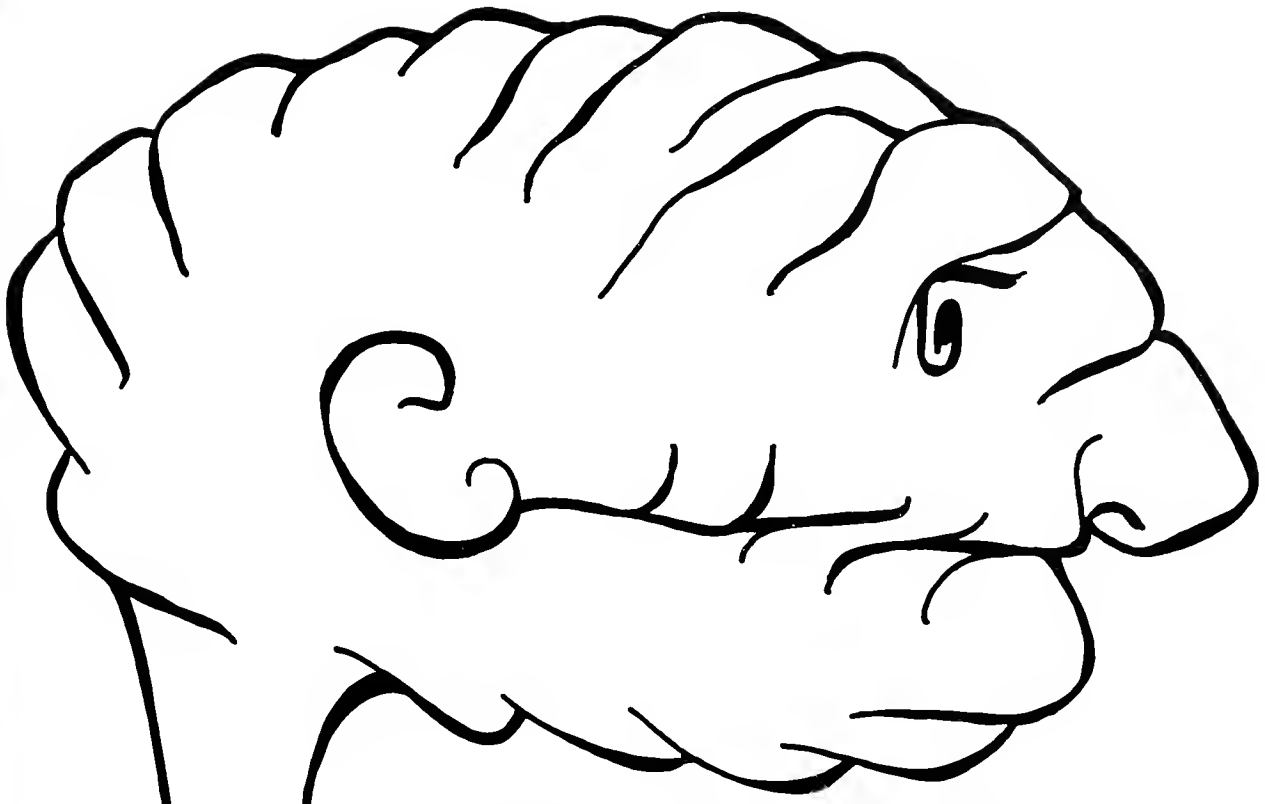
The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



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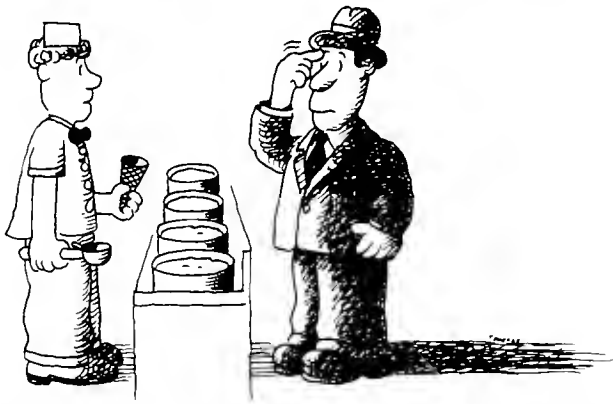

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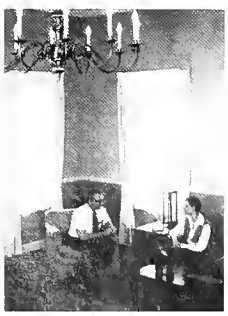

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Narrowing down pneumonias

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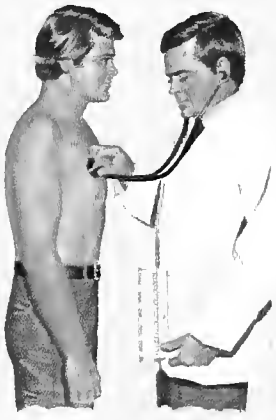
Bacterial or nonbacterial?

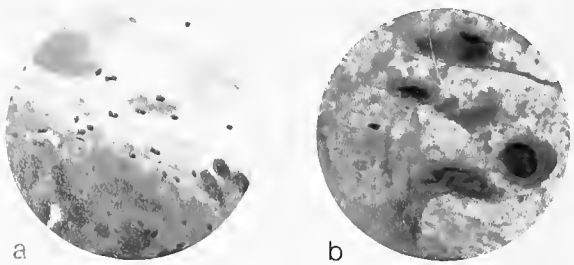
In the early stages of mild to moderate pneumonia, it is often difficult to reach an accurate bacteriologic diagnosis. A tentative differentiation may be made on history-taking, physical examination, CBC with differential analysis, and microscopic study of the sputum smear. Specimens should be obtained for culture and sensitivity testing, but when a bacterial pneumonia is diagnosed, therapy is often instituted before the etiological agent is positively identified.



Bacterial pneumonias may have a sudden onset with a shaking chill, rapid development of fever, pleuritic pain, and cough productive of rust-colored sputum. The Gram-stained sputum smear generally shows polymorphonuclear neutrophils as well as a predominance of the causative organisms. These are likely to be *Streptococcus pneumoniae*, still by far the most frequently encountered agent in bacterial pneumonia.[1] The CBC reveals marked leukocytosis with a shift to the left.

In *nonbacterial pneumonias*—mycoplasmal or viral—classical symptoms tend to develop more slowly, with myalgia, lassitude, and headache predominating. Sputum production is usually scanty, and the sputum smear is relatively uninformative, showing gram-positive cocci and other organisms which are part of the normal pharyngeal flora. The leukocyte count is normal or slightly elevated.

Direct Gram-stained sputum smears. (a) Pneumococcal pneumonia—note abundant polymorphonuclear leukocytes, as well as gram-positive diplococci. (b) Nonspecific—consistent with viral or mycoplasmal pneumonia. Note large mononuclear cell, as well as a few polymorphs and mixed bacterial flora (pharyngeal contaminants).



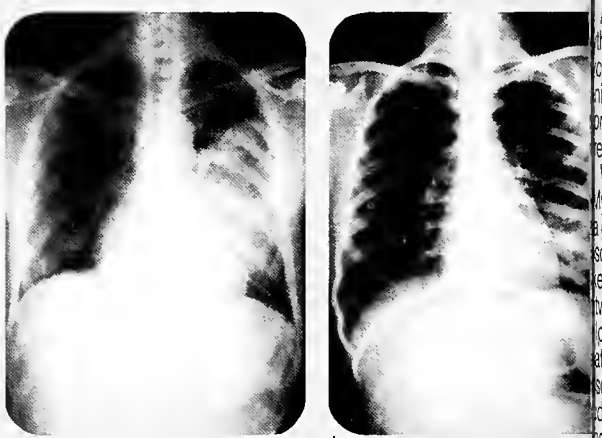
a b

Mycoplasmal or viral?

Differentiation between mycoplasmal and viral pneumonias may be impossible in the acute stage.

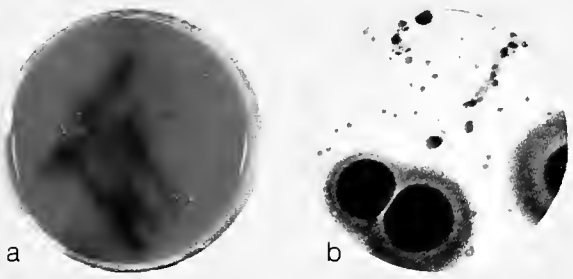
Serologic testing and culture methods for *Mycoplasma pneumoniae* are complex and time-consuming, taking as long as two weeks after obtaining samples. The sensitivity and specificity the test for cold agglutinins have been questioned. The complement-fixing antibody test may reflect previous infection. Furthermore, facilities for culturing *M. pneumoniae* are not widely available.[3]

If treatment is to be initiated, therefore, it may be necessary to start on the basis of a *presumptive* diagnosis of mycoplasmal pneumonia.[1-3] In reaching such a diagnosis, the physician relies on clinical judgment, considering such factors as the age of the patient and the history of exposure. For example, *Mycoplasma pneumoniae* is considered the most common cause of pneumonia among ambulatory patients aged 20 to 35.[1]



a b

Chest x-rays of patients with (a) pneumococcal pneumonia—classically heavy, extensive infiltration of left lung; (b) mycoplasmal pneumonia—mild infiltrate confined to left lower lobe. Roentgenography usually does not help in differential diagnosis, since both types of pneumonias may present with a wide spectrum of x-ray as well as clinical findings.



a b

(a) Distinct mucoid colonies of type 3 pneumococci *(Streptococcus pneumoniae)* on sheep blood agar showing greenish discoloration (alpha-hemolysis) of medium. (b) Typical "fried-egg" colonies of *Mycoplasma pneumoniae* consisting of dense central core with lighter periphery. Cultural and serologic methods for detecting *M. pneumoniae* are complex, time-consuming, and not widely available.

Expectant therapy

he patient with a presumptive diagnosis of coplasmal pneumonia or bacterial pneumonia, it y be desirable to initiate antibiotic therapy before ture and sensitivity results are available.

A course of erythromycin or tetracycline is nsidered effective in the treatment of mycoplasmal eumonia to help speed the clearing of infiltrate and rten the duration of symptoms.[1,3] In pneumococcal eumonia, erythromycin is an effective alternative to nicillin, the drug of choice. A recent report, based data from 200 hospitals of 100 beds or more, found % of *S. pneumoniae* sensitive *in vitro* to thromycin.[4]

Among these therapeutic agents, only thromycin provides effective coverage of both *coplasma pneumoniae* and *S. pneumoniae.* The nicillins are not effective against *Mycoplasma,* and *pneumoniae* has shown a relatively high incidence esistance to tetracycline.

When erythromycin is selected for therapy, Mycin (erythromycin enteric-coated tablets, Upjohn) good choice. E-Mycin is administered and sorbed as active erythromycin base, and may be en q.i.d., q 6h, or b.i.d., immediately after meals or tween meals. Thus, patients can use mealtimes to p them remember their medication. The enteric ating on E-Mycin tablets helps ensure efficient sorption in the intestinal tract, and bioavailability dies show that E-Mycin can be expected to duce predictable, acceptable blood levels. The cost of E-Mycin helps assure economical therapy.

E-Mycin rarely causes serious side effects and is associated with liver toxicity.* The most frequent e effects are upper gastrointestinal, such as dominal cramping and discomfort, and are dose-ated. Nausea, vomiting, and diarrhea occur requently with usual oral doses. Serious allergic ctions, including anaphylaxis, have rarely been orted.

cautiously in patients with severe liver impairment

ERENCES: 1. Chusid EL, Dalrymple W, Holloway WJ, et al. Managing the infectious monias. *Patient Care* 9:122-167, 1975. 2. The occasional might of mycoplasma *rgency Med* 7:82, 85, 1975. 3. Stevens DA. Viral and Mycoplasma pneumonias *grad Med* 55:81-86, 1974. 4. Data source: PMR Bacteriologic Report, Winter Series 1975-1976. Data are a compilation of laboratory reports submitted during December 1975 and January and February 1976 by 200 acute care hospitals of 100 beds or more

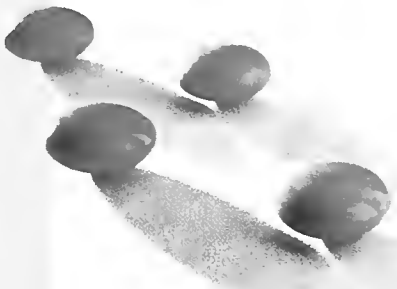
Please turn page for brief summary of prescribing information

Summary

Because pneumonias may be difficult to differentiate at the outset, treatment is often initiated before a causal diagnosis is made. However, readily available diagnostic criteria occasionally allow early differentiation between bacterial and nonbacterial pneumonias. When the diagnosis appears to be nonbacterial pneumonia, further differentiation between mycoplasmal pneumonia and viral pneumonia is more complex and time-consuming. Therefore, therapy is often initiated on the basis of a *presumptive* diagnosis of mycoplasmal pneumonia.

Erythromycin is an effective antibiotic against *Mycoplasma pneumoniae, Streptococcus pneumoniae,*† and *Streptococcus pyogenes.*† E-Mycin (erythromycin enteric-coated tablets, Upjohn) is administered and well absorbed as the active base, may be taken immediately after meals or between meals, and is essentially nontoxic.

† Although penicillin remains the drug of choice against these organisms, erythromycin is an effective alternative



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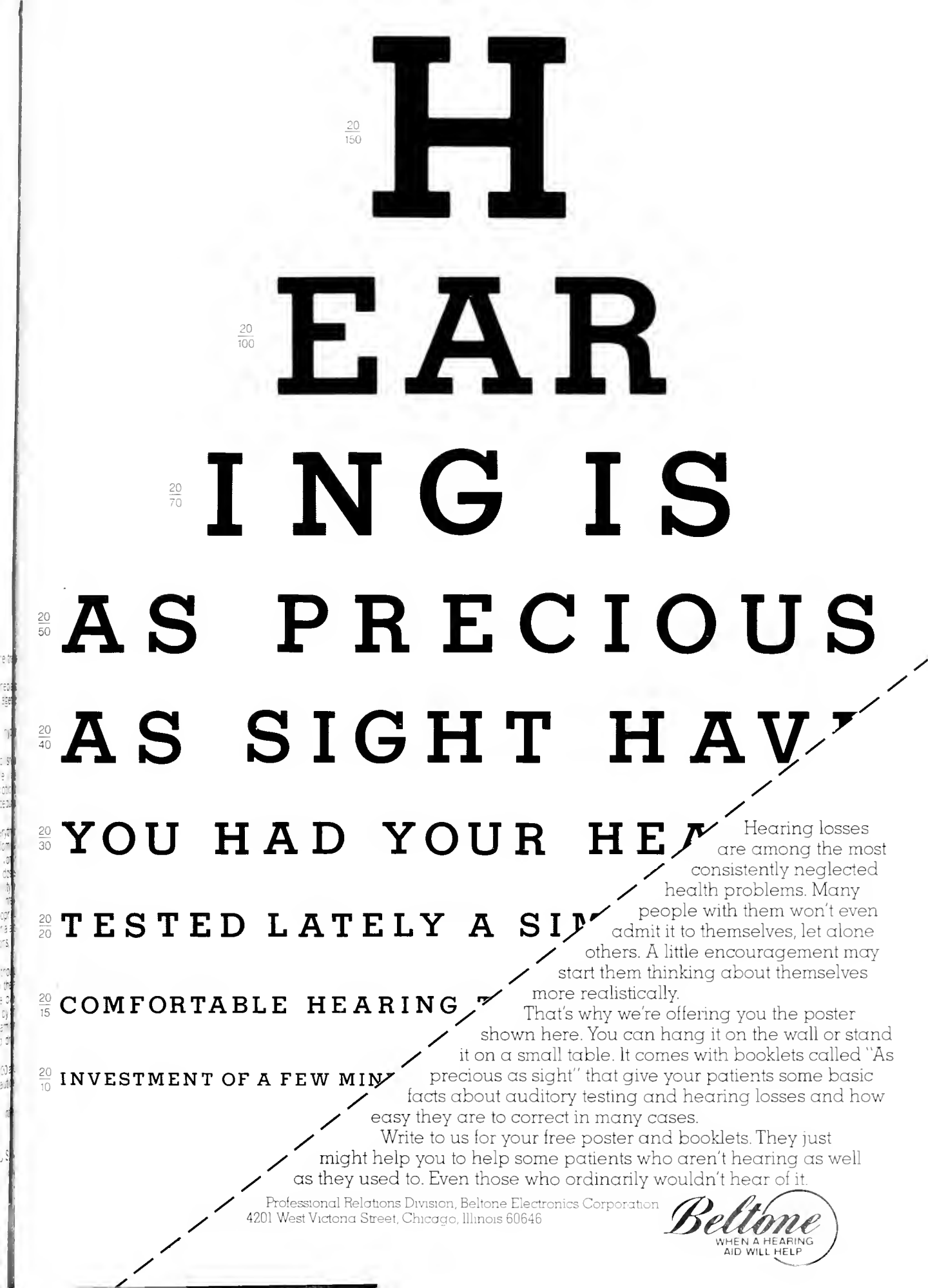

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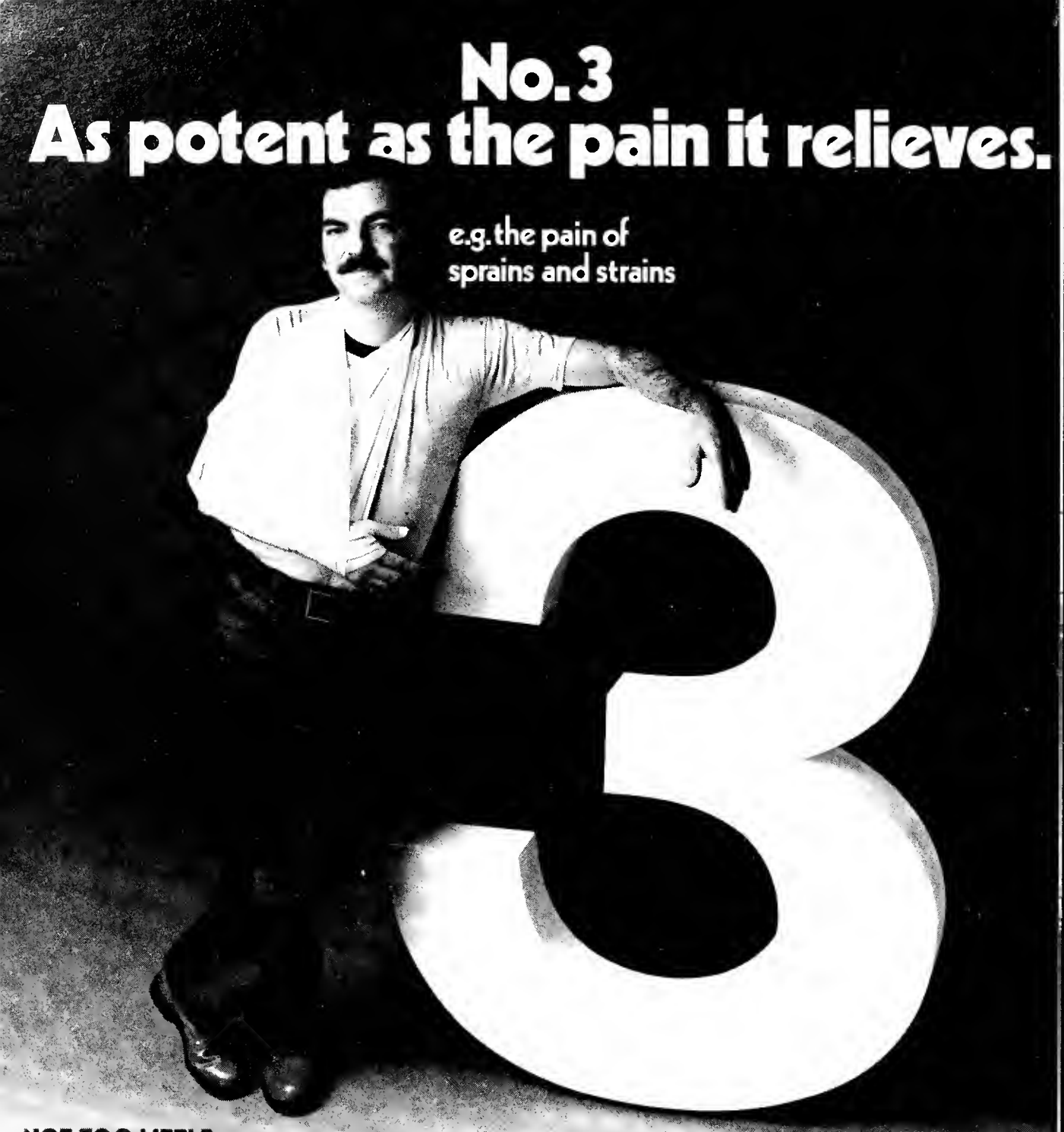

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Tradition of Excellence in Dental Health

Jacob Koomen, M.D., M.P.H.

COMMENCING in May, aided by a grant from the W. K. Kellogg Foundation, North Carolina began a searching evaluation of its preventive dental health program.

Substantially, that program is carried out under the aegis of the Dental Health Section of the Division of Health Services, although, as this paper will later delineate, private dentistry and a number of other institutions and organizations are partners in the marked preventive thrust of dental health in North Carolina.

That the Kellogg Foundation awarded the substantial grant of $325,000 to measure the state's progress in dental health connotes the foundation's awareness that the preventive program in this state is exceptional. There are other indicators: In 1972 the American Dental Association gave its first Preventive Dentistry Award to the preventive dental health education program. Leaders in both organized dentistry and in public health seem tacitly to recognize, and continue to articulate, that North Carolina's dental public health program, in its comprehensiveness and in its depth, is without peer. Visitors from throughout the country come here to learn how it is done.

Neither the evaluation grant nor the recognitions are accidental. There has been a sure and steady growth in dental public health in North Carolina for over a half century.

It seems to me that there are at least seven distinguishing features of the preventive dental health program in our state:

1. *It is a cooperative venture.* It enjoys not only strong support but also heavy involvement from the North Carolina Dental Society, other allied dental professional organizations, the UNC School of Dentistry, the UNC School of Public Health and the N.C. Department of Public Instruction, to mention only a few.

2. *Prevention is, indeed, the major focus.* Reduction of dental disease, not simply the treatment of disease, is the objective.

3. *Health education, in its most classical sense, is at the very heart of the program.* By health education I mean a way of working with people which encourages not only their participation in self-care programs but also their involvement in community effort on behalf of dental health.

4. *The program has great visibility.* There are 38 dentists and 28 dental hygienists directly serving 69 counties and providing some service to remaining counties. They reach hundreds of thousands of children, teachers and parents annually, with treatment arranged for needy children and education given all. The General Assembly, cognizant of the visible service statewide, has in three of its last four sessions, approved special funds for expansion of the preventive dentistry program.

5. *Diversity characterizes the program.* Community fluoridation, rural school fluoridation, a fluoride mouthrinse program in schools, in-service training for private dentists in preventive techniques, training of teachers in preventive methods and nutrition for dental health, and preventive dental health education in classroom and community are components of the program.

6. *The program is built upon scientifically assessed needs.* North Carolina is the only state in the nation which has been epidemiologically mapped for dental disease. It is against complete data developed in the early 1960s by Drs. John T. Fulton and John T. Hughes that we will match the results of the 1976-78 Kellogg Studies to determine what progress in dental health has been

Given before the annual meeting of the North Carolina Medical Society and the Commission for Health Services, May 8, 1976.

Reprint requests to Dr. Koomen, 225 N. McDowell Street, Raleigh, North Carolina 27602.

gained through the extensive preventive activity.

7. *The program operates under a strong 10-year plan.* That plan was developed by the Dental Health Section in 1973 in concert with its partners, previously noted, and aims specifically at reduction of dental disease by 25 percent in the population 20 years and younger and 40 percent in the population 10 years and younger by 1983.

Rich Foundations

The dental public health program has a rich history.

As early as 1896, Dr. J. M. Parker spoke to the North Carolina Dental Society, which was organized in 1856, about the need to appoint dentists to examine the mouths of school children, remarking that the school age was one of the most important periods in a person's life and one when dental attention was most needed. In 1908, the first scientific paper on the need for dental education of school children was presented to the society. In 1910, Dr. J. C. Watkins, president of the dental society, called, in his presidential address, for a permanent committee on oral hygiene whose mission would be the improvement of dental health through education of all the people of the state. The committee was established and gave impetus to the rise, in many communities, of school programs which were manned by private practitioners. As the role of the dentist-as-teacher gained emphasis, Dr. R. M. Squires of Wake Forest, a crusader, remarked: "The true function of both medicine and dentistry is to prevent the ills they are called upon to cure."

Prior to 1914 there were few references to physicians' awareness of the relationship of unclean mouths to systemic disease. It was about this time, in dental circles, that mention was made of the stress the Mayo brothers laid upon the impact of dental health on total health. Dr. William Sydney Thayer of Johns Hopkins was reportedly insisting upon careful examination of the mouth before he would render a physical diagnosis.

Then, out of the medical profession in North Carolina came the call for a strong oral hygiene program within the State Board of Health: Dr. George M. Cooper, Director of the Bureau of Medical Inspection of Schools, within the Board of Health, delivered in 1918 a ringing appeal to the annual meeting of the dental society at Wrightsville Beach to heed the dental condition of North Carolina's children. (His subject was "Preventive Dentistry," the very title given today to the progressive movement within the dental field.) Dr. Cooper's facts, his focus on the need for cooperation between medical and dental professions, and his personal persuasiveness stirred the dental society to pass this resolution:

"Resolved that the North Carolina Dental Society heartily endorse the plan of the State Board of Health as outlined by Dr. G. M. Cooper and that we pledge him the loyal support of this Society." The society supported an appropriation in the Legislature to help initiate a school dental health program. As a quick sequel, the first school dentist began work in Nash County on July 10, 1918.

The first dentist was appointed to membership on the State Board of Health in 1919. Two years later the first supervising dentist was employed for state level work; also in 1921 the purpose of the dental program in schools was fixed: (1) relief of pain and suffering and (2) education to the awareness of the need for good dental health.

Dr. Ernest A. Branch was called from the private practice of childrens' dentistry in Raleigh to assume, in 1929, the supervisory position in dental public health; for five years prior to his private practice he had demonstrated the efficacy of dental public health in Wake County. One of the early things Dr. Branch did to equip himself for the pioneering statewide endeavor was to take special courses in child psychology, educational methods, visual education and public speaking. From then on, in his colorful and inimitable way, he stumped the state for the cause of dental education in schools and communities.

By 1931, Dr. Branch had organized the Division of Oral Hygiene within the State Board of Health; it was to be the first *state* dental public health program in the nation. Five years later, in his zeal to prepare his local dentists well for their tasks, he helped to establish the institute of Public Health Dentistry within the UNC School of Public Health; this was another national first. In 1941, the Division of Oral Hygiene occupied its own building.

Dr. Branch's novel ideas for teaching dental health became legend. His Little Jack Puppet Show, which made its debut in 1935, traveled up and down the roads of North Carolina. Manned by puppeteers from the Carolina Playmakers and changing its script every two years, the Little Jack Show was beloved by millions of North Carolina schoolchildren for three decades.

Throughout his dynamic tenure, Dr. Branch and his talented and loyal staff, although ministering to the treatment needs of children who could not afford a private dentist, continued to advocate and to demonstrate that public health education was their primary objective. The concepts and the activities of Dr. Branch won honors for this public health statesman here at home and throughout the United States.

New Era of Prevention

Dr. E. A. Pearson, Jr., who came both from private practice and dental public health, succeeded Dr. Branch in 1959. Early in his administration the scientific survey of dental disease problems in North Carolina previously referred to was carried out by Drs. Hughes and Fulton, aided by a Public Health Service grant.

These definitive data became the basis for future planning.

Concurrent with the period of the study, dental public health, with another Public Health Service grant, organized and held a series of 36 seminars for private dental practitioners on oral cancer screening. Chosen to organize these seminars was a professionally trained health educator. In the course of her work she visited nearly all the dentists in the state, inviting them into interest

in both the seminars and in dental public health.

Fluoridation became a focus of the program in the middle '60s. A North Carolina Citizens' Committee for Dental Health was established to help prosecute the fluoridation movement. That committee lobbied successfully for funds from the Legislature to match local funds for the purchase of fluoridation equipment. Both community fluoridation and rural school water fluoridation began to expand. Today there are 87 communities adjusting the fluoride levels in their water supplies; the water supplies of 26 communities have naturally the optimum levels of fluoride. The rural school water fluoridation program initiated in the late '60s is now the largest such system in the nation; there are 106 rural schools fluoridating, covering some 44,000 children who do not have access to community fluoridation.

Although prevention had been an underpinning of the dental health program since its inception, in the 1970s a new movement was rising in the entire field of dentistry; dental public health, along with progressive private practitioners, became a part of it. Out of dental research laboratories had come the identification of the agent responsible for both dental caries and peridontal disease. That agent is plaque — a sticky, colorless film enveloping food particles, bacteria and bacterial exudate (acid); it forms continuously on the teeth. Plaque thrives best in sheltered areas between the teeth, in the pits and fissures of the tooth surface, and around and just below the gumline; these are all areas difficult to reach by ordinary brushing methods. If not thoroughly removed daily by special brushing and flossing techniques, plaque takes its toll of both teeth and gums.

The dental research findings clearly indicated that the individual had as much, if not more, responsibility for his dental health than did his dentist. Preventive-minded dentists in North Carolina took up the cause of self-care; one of them authored an article in his hometown newspaper titled, "Home Care Key to Dental Health."

Out of the 1970 sessions of the North Carolina Dental Society came resolutions advocating a strong preventive dental health program which would embrace fluoridation, fluoride treatments for school children, education of the dental professionals on how to incorporate self-care education into their practices and plaque control education in schools and communities.

The society established first an Ad Hoc then a permanent Committee on Preventive Dentistry. Its membership included the dental society, dental public health, community colleges training dental auxiliaries and the UNC School of Dentistry.

Teaching the potential teachers the new plaque control techniques became the first mission of leadership in both organized dentistry and dental public health. Many workshops were conducted, none more important than six which were held across the state in 1972 for 600 private dentists and their auxiliaries. All the workshops for professionals, and later for leaders in consumer organizations, were joint endeavors of preventive-minded private practitioners and dental public health personnel. A new climate for preventive dental health was set throughout North Carolina.

With education ascending to dominance in the dental public health field, Dr. Pearson, with the concurrence of public health and dental leaders, elected to place dental hygienists in local health departments which desired them. (Special legislation, approved in 1971, permitted employment of hygienists to function primarily as educators under supervision of regional dental consultants.) They were sought for work in both schools and communities.

In 1973, as new plaque control and other prevention methods gained public approval, the demands for dental hygienists and rural school water fluoridation increased. Leadership within the entire field of dentistry felt that the dental public health program should be financially strengthened in order that it might become, even more, a focal point for prevention activity which would reduce dental disease. The North Carolina Dental Forum, a consortium embracing representatives from all organizations within the scope of dentistry, employed, with the help of a federal grant, a consultant of national prominence, Dr. Frank E. Law of Bethesda, Md., to help draft a 10-year plan for prevention, outlining goals for the Dental Health Section of the Division of Health Services and its supporters.

The Law Report became the 10-year plan unanimously adopted by the Dental Forum and accepted by the Dental Health Section. The prevention goals incorporated in the document were communicated to the General Assembly by members of the Dental Society and other friends, such as agricultural extension leaders. The 1973 General Assembly appropriated special expansion funds for dental public health.

Dental leaders and the Dental Health Section had long sought a stronger alliance with the N.C. Department of Public Instruction; now the 10-year plan advocated it. In August, 1973, following a meeting of dental, public health and educational representatives, that link-up was consummated. From the deliberations came the Steering Committee for Preventive Dental Health Education in North Carolina Schools. The coalition includes the N.C. Department of Public Instruction, the Dental Health Section, the UNC School of Dentistry and N.C. Association of Dental Hygienists and the N.C. Association of Dental Assistants.

From this steering committee, which meets every month, have come plans and programs which have greatly augmented preventive dental health education in the public school system. Immediately, 10 pilot demonstration counties, with private dental practitioners as coordinators, were established and a "Teachers Guide to a Preventive Dental Health Education Program in North Carolina Schools" was developed by health educators in the Dental Health Section.

As of today, the school efforts have expanded to include all counties of the state with greater concentration in those counties served by public health dentists and hygienists. As goals of the 10-year plan are achieved, more and more counties will be served by dental public health personnel assigned to them. By the early 1980s it is hoped that every county will be covered.

The school phase of the preventive dental health program now includes these elements:

—106 fluoridated rural schools (school fluoridation must be requested by the local school board).

—179,267 school children in 492 schools on a weekly fluoride mouthrinse program. (All children involved have received parental permission to participate.)

—3,707 elementary schoolteachers trained by dentists, hygienists and health educators in dental disease, all methods of disease control, nutrition for dental health, accident prevention, and methods of teaching dental health.

—38 dentists and 28 dental hygienists working with teachers in the kindergarten and elementary classrooms to teach prevention to the children. Nearly 300,000 children were reached with preventive education last year.

—38 dentists providing dental care to needy school children. (Both dentists and hygienists orally screen all school children under their purview.) Children who have a dentist are referred.

The Evaluation

The tremendous evaluation process being initiated this summer will provide data which should show, among many other things, whether all the efforts and all the taxpayers' funds expended are producing favorable results. Needless to say, we are confident. As per a promise to the General Assembly, our lawmakers will know the facts as will the public. Detailed analysis of the data will tell us to what degree various facets of the overall program are helping curb dental disease. And, for the benefit of the North Carolina Dental Society, the survey will reveal where the dental manpower needs are most critical in the state.

Conclusion

Dental disease is, of course, the most widespread of all diseases within our populace. Ninety-five percent of our citizens will experience dental disease, in some form, within their lifetime unless faithful self-care and professional dental care intercept the processes.

A World Health Organization expert committee on dental health noted in its 1970 report: "Dental health cannot be separated from general health since oral disease may be a manifestation of or an aggravating factor in some more widespread systemic disorder. Consequently, action taken to improve or maintain dental health may be very important in safeguarding general health."

The Dental Health Section of the Division of Health Services, in tandem with its concerned partners in the private field of dentistry, are — through prevention — making singular contribution to the general health and well-being of the citizens of North Carolina.

We certainly can greatly assist the dietetic regimen by other means. The effect of counter-irritation is often very conspicuously beneficial. A small plaster of tartar-emetic and Burgundy pitch applied to the pit of the stomach is one of the most powerful counter-irritants we possess, and is far superior to blisters. A scruple of the tartrate of antimony to each drachm of the Burgundy pitch, will, in two or three days, produce a copious crop of pustules, which will continue to discharge for a week afterwards, and afford much relief. I have no objection to a few leeches being previously applied to the part, especially if much tenderness is complained of on pressure: — for although irritation and inflammation are two very different conditions, and require different treatment, yet the former sometimes leads to the latter, and we frequently see the two combined. On this account, the application of a few leeches is a safe precursor to the counter-irritation. Small doses of the nitrate of potash, in common effervescing draughts, are also very useful in such states. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, pp 81-82.

Child Health, Rural North Carolina and Chapel Hill: AHEC in Columbus County

Joseph L. Holliday, M.D., M.P.H., Claude E. Fox, M.D., M.P.H., and Earl Siegel, M.D., M.P.H.

INTRODUCTION

COLUMBUS County is typical of many southeastern North Carolina counties because of its poverty, high infant mortality and morbidity. This paper describes efforts to provide child health care assistance through the Area Health Education Program (AHEC) and the University of North Carolina School of Public Health. AHEC is based on the assumption that the health needs of North Carolina communities should dictate the programs to be developed and the types of educational opportunities generated. Among AHEC's goals is the exposure of medical and other health science students as well as medical house staff to community health care practices in order to broaden their horizons. Through provision of personnel in AHEC's nine regions and support of student travel and housing, this objective is being fulfilled and has allowed Columbus County, specifically, to improve its care to an underserved pediatric population.

Sociodemographic Characteristics of Columbus County

From 1960 to 1970, approximately half the non-white population, which comprises a third of the total population, left Columbus County, contributing to a slight decline in the county's population during that decade. The deprivation faced by the inhabitants of the county is indicated by poor housing, low per capita income and the number of Aid to Families with Dependent Children (AFDC) cases. Isolation is a major problem; more than 90% of the population is rural and 40% of the houses have no access to telephones. Only 13 counties in this state have a higher percentage of children under 18. (Appendix I)

The county's infant mortality rates, including fetal, neonatal and postneonatal, rank among the state's highest. (Appendix II)

In 1975, Columbus County percentages were higher than those for the state as a whole in the area of live births to mothers who either were under 18, were unmarried, had fewer than nine years of education, or whose previous child (or children) had died.[1] In 1970, home deliveries by non-physicians occurred in almost one-fifth of all nonwhite live births. Only six North Carolina counties had higher percentages.[2]

Child Health Care Resources

In the past, with neither pediatrician nor obstetrician practicing in Columbus or three surrounding counties, specialized care for mothers and children has been severely limited. Two general prac-

APPENDIX I

Sociodemographic Characteristics of Columbus County, 1970

Total population (Black 30% Indian 2%)	46,937
Percentage of Population Living in Rural Area	91
Percentage of Children Under 18	38
Percentage of All Overcrowded Housing (nonwhite 27%)	13
Percentage of All Housing with Incomplete Plumbing (nonwhite 64%)	28
Per Capita Income	$2,403
Number AFDC Families	1,132

Source *A Decade of Change in North Carolina, 1960-1970. Selected Measures Relevant to Mental Health*, Chapel Hill, N.C. Social Research Section, Division of Health Affairs, University of North Carolina, 1972

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Greenville, South Carolina 29602

APPENDIX II

Fetal, Neonatal and Postneonatal Death Rates For North Carolina and Columbus County, 1972.

	North Carolina			Columbus County		
	Total	White	Nonwhite	Total	White	Nonwhite
Fetal Death Rate	16.0	12.8	23.4	20.4	17.7	24.6
Neonatal Death Rate	17.0	14.7	22.5	17.6	14.9	21.7
Postneonatal Death Rate	6.5	4.2	12.3	8.8	3.4	17.2

Source *Maternal and Child Health Statistics, 1972.* Raleigh, N.C.: Personal Health Section, Division of Health Services, Department of Human Resources.

titioners in Whiteville have provided the physician support for the almost 600 births a year in Columbus County Hospital. Acute pediatric care for the indigent has been shared by the county's nine general practitioners. Other community resources are three school health nurses employed by the county/city school districts, the Columbus County Guidance Center and one certified day care center.

Some diagnostic referral resources for pediatric problems are available outside the county.* However, because private pediatric and obstetrical practices in Wilmington and Lumberton are heavily committed to their own residents and transportation is difficult, accessibility to these specialists for Columbus County's large indigent population is restricted.

The Columbus County Health Department offers several supplementary services.** The prenatal clinics, staffed by eight public health nurses, see 125 to 175 patients a month. After referral to a private physician for medical evaluation, patients are followed through their prenatal course by the health department. Most of these are delivered by a private physician but a small number elect home delivery. Infants, at the time of delivery, are referred to the health department for well child care.

New Child Health Initiatives

The director and nursing staff of the health department and concerned community physicians have long recognized Columbus County's lack of preventive and primary pediatric care for the indigent. In early 1971, in collaboration with AHEC and the School of Public Health at the University of North Carolina, the Columbus County Health Department decided to attempt to provide these services to the indigent and refer diagnostic problems for further study. Lack of space, staff, pediatric experience and physician support were the problems attacked first. During 1972-73, a staff nurse attended a short course in Denver, Colo., while three others took short courses offered by the Maternal and Child Health Branch of the N.C. Division of Health Services. These courses covered pediatric screening, physical assessment and organization of a child health clinic. Another staff nurse enrolled in a pediatric nurse practitioner program in Greenville, N.C. In mid-1974, the Maternal and Child Health Branch also provided funds for an additional maternal and child health nurse, an outreach worker, a clerk and a trailer in which a new child health clinic could be housed.

In late 1974, without a physician, the clinic began limited operation. Early in 1975, through AHEC, two physicians from the Department of Maternal and Child Health of the School of Public Health were assigned to Columbus County as consultants. Since that time pediatric clinics have been held twice a month with 35 to 40 children seen at each clinic. Public health nurses first interview parents and children; then, each child receives a visual and auditory screen, a developmental assessment, immunizations and physical measurements. Appropriate laboratory tests are performed (hematocrit, sickle cell screen, urine for protein and tuberculin skin test). The child is seen by the AHEC physician who prescribes medication, referral and follow-up as needed. Appropriate home visits, telephone contacts and patient counseling are provided by the public health nurses and the outreach worker. The nurses also have begun to assume a more active role during actual clinic operation. One nurse with additional training began evaluating two-month-olds, under the guidance of the physician. It is hoped that eventually a two-month-old nursing clinic will be held concurrently with the medical clinic. This is part of an overall attempt to provide support and consultation to the pediatric screening nurses to help them expand and strengthen their clinic skills.

During the first six months of the clinic operation, the graduate students began to explore additional educational opportunities. A profile of the types of children using the clinic and the character of their significant problems was compiled, raising questions about which segments of the infant target population were being served and resulting in a record analysis which encouraged critical review of rural health community issues. For example, what in-service education for nurses is required in relation to routine medical conditions? What medications are prescribed and how may their availability be assured? Which children and what conditions are followed through to correction? Which referral sources are responsive and effective? Are high risk infants in the health department's target population reached?

Health Concerns Expressed by Parents; Significant Health Problems Diagnosed; Medications; Referral and Follow-Up

Of the 201 children seen by the physicians between March 1, 1975, and May 31, 1975, 24% were white and 76% nonwhite; 45% of them were under a year old and only 28% over four (Table 1). Services were reimbursed by Medicaid in 21% of the cases; the remainder were medically indigent. A birth record analysis revealed that 23% of all children born to Columbus County residents (40% of all nonwhite) from

*A tri-monthly rheumatic fever clinic and a Developmental Evaluation Center Clinic are located in Wilmington. A monthly neurology clinic meets in Fayetteville. A recently organized high risk maternity clinic in Lumberton — a component of the pilot regional perinatal health care program — is available to referrals.

**A monthly travel Developmental Evaluation Center Clinic, a monthly chest clinic, a weekly prenatal clinic and a weekly family planning clinic.

January 1, 1975, to March 31, 1975, were seen.

Parents brought their children to the clinic for a number of reasons. Acute infections accounted for 27% of the visits. Next in line were dermatologic and neurologic/developmental problems. Most of the 113 children with no particular complaints were seen in the Early and Periodic Screening Diagnosis and Treatment (EPSDT) Program (Table II).

Clinic physicians diagnosed 139 disorders among 114 of the 201 children seen (Table III). Acute infections accounted for 20% of the diagnoses, iron deficiency anemia 17%* and social and/or emotional 15%. Only 63 of the children were found to have caries, because a large proportion of the patients were under a year old. Eight children were thought to suffer from failure to thrive and three from possible neglect and/or abuse.

Medications were prescribed 58 times during the first quarter. Almost 50% were oral iron preparations, slightly more than 25% antibiotics and about 20% topical preparations (Table IV).

Eighty percent of the 139 diagnosed disorders were handled within the health department; the remainder, most often dental and social/emotional problems, required referral. Dermatologic and infectious problems were referred least often (Table V). Follow-up consisted of a return visit to the clinic or a home visit or phone contact by a member of the health department staff. Where this effort was made, follow-up was successful or continuing in 61% of the problems handled within the health department and 56% of those requiring referral. For example, of the 10 patients with otitis media, eight kept follow-up appointments. Because of limited community resources, dental problems received the least follow-up care.

*Hematocrits were not obtained for one of the six clinics described here.

**Columbus County has a ratio of primary care physicians to population of 1:3129 while North Carolina as a whole has 1:2602. Forty-eight North Carolina rural counties have ratios less than 1:3000.[3]

DISCUSSION

North Carolina, with the highest proportion of its population living in communities of fewer than 2,500, is the most rural state in the nation. Rural areas such as Columbus County often suffer serious deficits in health care providers.** For at least two decades the health manpower distribution problem has been generally appreciated and numerous solutions have been proposed. The AHEC program with its nine regional centers represents

TABLE 1

Total Number and Percent of Children Attending Child Health Clinic by Age and Race Columbus County, N.C. March 1, 1975 to May 31, 1975

All Ages	Total N=201 Percent	White N=48 Percent	Nonwhite N=153 Percent
Under 1 year	44.8	45.8	44.4
1-4 years	26.4	25.0	26.8
5-9 years	19.4	22.9	18.3
10-19 years	9.4	6.3	10.5
TOTAL	100.0	100.0	100.0

TABLE 2

Child Health Concerns Expressed by Parents of Children Attending Child Health Clinic, by Type of Concern, Number and Percent Columbus County, N.C. March 1, 1975 to May 31, 1975*

Type of Concern	Percent Expressed N=109
Acute Infections	26.6
Respiratory 22, Urinary Tract 3, Gastro-intestinal 4	
Dermatological	16.5
Neurological/Developmental	12.8
Emotional/Behavior	11.0
Eye/Hearing/Speech	8.3
Orthopedic	5.5
Other	19.3
Heart Murmur 3, Prematurity 3, Nutritional 3, Head Trauma 3, Constipation 2, Spitting Up Blood 2, Other 5	
TOTAL	100.0

*Of 201 children who attended Child Health Clinic from March 1, 1975, to May 31, 1975, 88 had concerns expressed by their parents

TABLE 3

Number of Significant Disorders Diagnosed in Child Health Clinic by Type and Percent Columbus County, N.C. March 1, 1975 to May 31, 1975*

Type of Disorder	Percent Diagnosed N=139
Acute Infections	20.1
Respiratory 23, Acute Diarrhea 3, Urinary Tract 1, Gonococcal 1	
Iron Deficiency Anemia	17.3
Social/Emotional	15.1
Dermatological	12.2
Dental	8.6
Other	26.6
Developmental/Neurological 10; Ophthalmological/Hearing/Speech 9, Inguinal Hernia 5, Organic Heart Murmur 5, Congenital Anomaly 3, Orthopedic 3, Chest Mass/Positive PPD2	
TOTAL	99.9

*Of 201 children who attended Child Health Clinic from March 1, 1975 to May 31, 1975, 114 children had significant disorders diagnosed

TABLE 4

Medications Prescribed to Patients of Child Health Clinic by Percent and Number, Columbus County, N.C., March 1, 1975 to May 31, 1975

Types of Medications	Percent of Medications N=58
Ferrous Sulfate	41.4
Antibiotics (Oral 9, Topical 7)	27.6
Topicals (Cortico-steroids 4, Other 6)	19.2
Decongestants	10.3
Other	3.4
TOTAL	99.9

a dramatic statewide shift in educational and service commitments among university health sciences centers. Opportunities are being provided students and house staff to develop their competencies outside the university center. This report describes the early experiences of one such educational effort.

The pediatric graduate students in public health learned: (1) through direct contact with rural parents what concerned them regarding their children's health; (2) to identify and manage significant child health problems with comparatively few resources; (3) that with physician help, public health nurses can provide adequate well child care and refer sick children to specialty care; (4) that public health personnel are resourceful and effective in identifying and making accessible further needed health care; and (5) to appreciate the public health nurse's understanding of family, social and community factors that affect illness.

Analysis of clinical records revealed: (1) 71% of the children were younger than five and 45% less than a year old; (2) concerns expressed by parents and disorders diagnosed by physicians correlated well, most being infectious and dermatologic problems but also quite often social/emotional and developmental; (3) among the few medications required, oral antibiotics, topical preparations and oral iron were the most common; (4) 80% of the disorders diagnosed were handled within the rural health department; and (5) when it was attempted, follow-up care was either achieved or continuing for 61% of the problems handled within the health department and 56% of those requiring referral.

SUMMARY

Columbus County and AHEC are engaged in a continuing effort which fulfills the needs of both programs. The county health department's goals and capabilities were recognized by university students and faculty who grasped the opportunity to learn, teach and expand health care in an environment where a large proportion of North Carolina's neediest families live. In addition, basic health services issues have been raised and examined in the process of offering care previously not available to North Carolina's people. The potential for similar activities through collaboration between rural counties and health science centers is widespread.

ACKNOWLEDGMENTS

The authors wish to acknowledge the invaluable assistance provided by Dr. J. R. Black and his staff, Columbus County Health Department, North Carolina; Dr. Richard R. Nugent, North Carolina Perinatal Project, Division of Health Services, Department of Human Resources; and Charles J. Rothwell, Public Health Statistics Branch, Division of Health Services, Department of Human Resources.

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TABLE 5

Number of Significant Disorders Diagnosed in Child Health Clinics by Type, Source of Treatment and Results of Follow-up, Columbus County, N.C., March 1, 1975 to May 31, 1975

Type of Disorder	Total	HEALTH DEPARTMENT			REFERRED		
		No Follow-up Contact	Follow-up Pending	Follow-up Contact Made	No Follow-up Contact	Follow-up Pending	Follow-up Contact Made
Acute Infections	28	2	0	11	0	0	1
Iron Deficiency Anemia	24	14	4	5	0	0	1
Social/Emotional	21	4	1	6	0	0	4
Dermatological	17	1	0	0	0	0	0
Dental	12	0	0	0	12	0	0
Other	37	1	2	6	6	10	7
TOTALS	139*	22	7	28	18	10	13

*No follow-up was attempted on 5 of 139 disorders diagnosed

Infant Care Study

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Hugh G. Young, M.P.H.,** Carol J. Hogue, Ph.D.,† and Barbara Cale**

INTRODUCTION

THROUGHOUT rural eastern North Carolina there exists a great need not only for delivery of adequate health care but also for evaluating present care to determine whether it is directed toward the needs of the community. The Department of Community Medicine at Edgecombe General Hospital, the Edgecombe County Health Department and the Tarboro Clinic have been concerned about which health services are needed, sought and used by county residents. The Department of Community Medicine, in cooperation with the other health providers in the county, initiated a retrospective study of infant care to determine the type of care needed, sought and used by the infant and early childhood population of the county.

A records search was performed on a stratified random sample of all births at Edgecombe General Hospital in 1971, 1972 and 1973. Birth certificate information and data from the records at the three major health services (the health department, the hospital and the clinic) were obtained to answer the following questions:

1. What percentage of the children born at Edgecombe General Hospital during the years 1971, 1972 and 1973 have had no follow-up medical care since birth?
2. Of those children who receive care, what type of care are they seeking?
3. What is the average number of visits per child, by age of child and reason for visit?
4. Where is this care being sought?

METHOD

Birth certificate information came from the State Division of Health Statistics in Raleigh. A records search was performed on all 600 infants, stratified with 200 births per year, at each of the three major health services, to determine place of visit, age of infant at visit, reason for visit, whether the infant was referred and/or rehospitalized for further care and, if so, where. Coding and data compilation were done by the Department of Biostatistics, School of Public Health, University of North Carolina, Chapel Hill.

RESULTS

Birth certificates revealed that 60% of all Infant Care Study (ICS) births were black and 40% white. Among the 600 births studied, 15 infants had died, 2.5 deaths/100 live births. Two infants had been placed for adoption. The average maternal age of the entire ICS population was 22.2 years. Sixty-six percent of the mothers were married. Of the mothers who were not married, 95.6% were black. Half of the maternal population was primigravida. Of those who were multigravida, 90 (27.7%) had had at least one previous fetal death. Prenatal care, on an average, started by the fourth month of pregnancy and the mean number of prenatal visits was 6.4. The mean number of weeks of gestation was 38.8 and the average birth weight was between 2500 and 3000 grams. There was a high correlation between race of the mother and birth weight of the infant. The phenomenon of lower birth weight among blacks has been well documented.[1]

The records search revealed that 61 infants (10.5%) had not been returned for health services (73.8% of the no-returns were black, 26.2%

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TABLE 1

Frequency Distribution of All Visits by Reason for Visit

WELL-BABY CARE

Reason for Visit	Number of Visits	% of Visits
Pediatric Screening Clinic*	257	10 60
Nurse Screening Clinic*	741	30 56
Immunization Clinic*	26	1 07
Well-Baby Care	1,401	57 77
Total	2,425	100.00

NON-WELL-BABY CARE

Reason for Visit	Number of Visits	% of Visits
Fever	464	22 91
Cold	358	17 68
Respiratory Problems	217	10 72
Dermatological Problems	160	7 90
Ear Infection	152	7 51
Diarrhea	116	5 73
Illness of Newborn Period	111	5 48
Viral Gastroenteritis	14	0 69
Urinary Infections	12	0 59
Asthma	11	0 54
Anemia	11	0 54
Measles, Mumps and Chickenpox	9	0 44
Hernia Repair	7	0.35
Burns	6	0 30
Heart Murmurs	4	0 20
Other**	373	18 42
Total	2,025	100 00

*Health Department WBC Clinics
**Other includes reasons with frequency of visits ≤ 4 visits per reason, e g , meningitis, poisonings, cataracts, circumcisions, hydrocelectomy, etc

white). However, other sources of private care are available in the county. A private physician in Tarboro and one in Macclesfield attend to some of the infants born at Edgecombe General Hospital. A future study will review the ICS population with respect to these practices.

The reason for visit was defined as the actual reason the parent sought child care in Edgecombe County. This variable does not necessarily include or exclude the final diagnosis by the physician. The reasons were numerous and were divided into two categories: well-baby care and non-well-baby care. Well-baby care (WBC) is defined as any visit for regular checkups and immunizations. In this particular county, well-baby clinics at the health department were included. These are the Pediatric Screening Clinic, the Nurse Screening Clinic and the Immunization Clinic. Non-well-baby care (NWBC) includes all reasons other than well-baby care. A frequency distribution of all visits by reason for visit (Table I) shows that more than half of all visits to health service areas are for well-baby care and that the major reasons parents seek care are fevers, colds and respiratory problems.

Table II gives an overall view of the number of visits by reason for visit, age at visit and average number of visits per child. The percentage of WBC visits decreases — and the percentage of NWBC visits increases — as the child grows older. This inverse proportion between the type of visit and the age of the child is present in all three years of the study. The average number of visits per child shows that by the time a child is 24 months old, he or she has averaged 7.8 visits to a health service area. These visits were equally divided between well-baby care and non-well-baby care visits. However, these data do not separate from the total data those children who only came for NWBC, and they represent only those children who have had at least one visit to the health care systems being studied. This study is primarily an overall view of the area and further analysis is planned.

If a visit resulted in referral, the case was coded physician, out of county, developmental evaluation clinic, pediatric screening clinic or other. Physician referrals include all children referred to a physician for any reason. (When reviewing these figures it is necessary to note again that all visits to the health department were exclusively for well-baby care and, if problems arose, the children were referred to a physician.) Most of the referrals (63.83%) were to a physician and represented either intraservice referral (Tarboro Clinic) or health department referrals. Eleven percent of all referrals were made to services out of the county. A total of

TABLE II

Total Number of Visits by Age of Infant at Visit, Reason for Visit and Average Number of Visits per Child.

Year of Birth	Age of Infant* at visit (months)	Total Number of visits	Percent Well-Baby Care	Percent Non-Well-Baby Care	Average # of visits per child
1971	0-3	394	69 04	30 96	2.35
(n_1=178)	4-6	253	66 80	33 20	1.51
	7-12	331	55.59	44 41	1 97
	13-18	198	43 43	56 57	1.18
	19-24	138	29 99	70 01	0 82
	25-36	174	28 74	71.26	1.04
1972	0-3	419	70 88	29 12	2.37
(n_2=183)	4-6	242	68 18	31 82	1.37
	7-12	358	57 54	42 46	2.02
	13-18	219	40 64	59 36	1.24
	19-24	162	38 27	61 73	0 92
1973	0-3	417	68 11	31 89	2.41
(n_3=177)	4-6	244	67 62	32.28	1 41
	7-12	376	51 06	48 94	2 17
	13-18	200	40 50	59 50	1.16

*Only those age groups which include the total study population within each stratum (n_1, n_2 and n_3) are listed

6.34% of all visits resulted in referrals. These referrals pertain to a total of 4,451 visits, not to the total number of children in the study. Data concerning hospitalization revealed that 180 visits (4.04%) resulted in hospitalization.

Another objective of the study was determining where children sought care. Of 4,451 visits, 73.9% were to the Tarboro Clinic, 23.1% were to the Edgecombe County Health Department* and 3.0% were to Edgecombe General Hospital.

DISCUSSION

Birth certificate data on this population were found to be consistent with national, state and county natality statistics.[1-3] The racial makeup of the ICS population is representative of the overall racial composition of the county. The percentage distribution of prenatal visits and infant mortality figures for the ICS population has also proved comparable.

In Edgecombe County, visits per child to a health service area by the age of 24 months average 7.8. These are evenly distributed between well-baby care visits and non-well-baby care visits with an inverse proportionate trend of well-baby care visits with increasing age. The frequency distribution of visits by reason for visit reveals that more than half are for well-baby care. The major reasons for non-well-baby care visits include respiratory problems, cold, fever, dermatological problems, ear infections and that nebulous category, "illness within the newborn." These categories were compiled according to what was found in the infant's hospital, health department or clinic record.

Six percent of all visits resulted in referrals and four percent in rehospitalization. Referrals include those made at the well-baby clinics at the health department. Most referrals were to physicians within the health service system. There was a significant correlation between referrals and rehospitalizations ($r=0.8618$, $p < .001$), implying that those children who were referred were often rehospitalized at the same visit.

SUMMARY

To the health planners of Edgecombe County, these results reveal that for children from birth to three years of age, access to health care within the county is not a major problem. Ninety percent of all children born at Edgecombe General Hospital are returned at least once for postnatal care. It can be postulated that the remaining 10% receive health care somewhere other than at the health department, the hospital or the clinic. A future study will determine the frequency and location of health care provided to those infants treated elsewhere. Since lack of access is evidently not a problem, further analysis of these data may reveal specific high risk target groups who, for various reasons, do not take full advantage of the available health services. It may also show excessive use by another portion of the population.

A deeper study of the information obtained from the Infant Care Study is being undertaken to answer the following questions:

1. Is there any relationship between prenatal care and postnatal care?
2. What are the demographic characteristics of the portion of the population who utilize the health services only for non-well-baby care?
3. What happened to the 10% of these infants who were never returned for any postnatal care?
4. Is there any relationship between birth certificate information (such as birth weight or previous pregnancy histories) and the type of postnatal care being sought by this population?

Future analysis will involve a determination of the need for ancillary medical personnel to conduct well-baby care visits. Another portion of this study will follow these children until they enter school and determine the types and amount of care they have received since age three and the relationship between their present health status and data obtained from their birth certificates.

This information, despite its limitations, represents a valuable base for further analysis of infant care within the community. It should encourage other health care systems in the state to consider initiating comparison studies in their own counties.

*The health department maintains only well-baby clinics

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The white mustard-seed has lately attracted considerable attention; and I have known a great number of dyspeptic invalids take it — some with apparent advantage, others without much effect — and in a very few instances it appeared to do harm. It certainly is not calculated for a very irritable state of the gastric and intestinal nerves — since all spicy or hot aromatic substances are injurious in such cases. It is where the bowels are very torpid, the appetite bad, and the whole system languid and sluggish, that the white mustard-seed promises to be serviceable. If it keep the bowels open, and produce no unpleasant feeling in the stomach, alimentary canal, or nervous system, it may be taken with safety. If it does not produce an aperient operation, it can do little good, and may, perchance, do mischief. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels.* James Johnson, 1836, p 81.

Editorials

A HAPPY CONJUNCTION

Sometimes we physicians forget that we really aren't responsible for preventive maintenance of the whole body. But let one of us get a toothache, maybe eventually demanding a root canal, and we remember that it is nice to know a good dentist. If it has been a long time since our last visit, some of us may be astonished at the care and thoroughness of our colleague's examination. So it is particularly appropriate that a physician remind us of North Carolina's admirable heritage in dental health. As pointed out elsewhere in this issue, our progress has not been accidental but has been as sure and steady as careful planning and precise execution can allow. In recognition of this shared tradition of service, the *North Carolina Medical Journal* and the *North Carolina Dental Journal* are pleased to publish simultaneously Dr. Koomen's review presented at the State Medical Society meeting this year.

J.H.F.

DOWN HOME — THE HAZARDS OF TRAVEL AND OF STAYING AT HOME

North Carolina has now had its first case of relapsing fever, an infection caused by a spirochete of the Borrelia species and manifested in this instance by headache, myalgia, fever, chills, anorexia, ataxia and weakness.[1] The patient acquired the infection while camping in the west, probably in the mountains of Oregon where the disease has been occasionally observed since 1940, flew home before he was stricken and responded satisfactorialy to treatment in Durham.

Among other things this illness confirms that we Americans are still pilgrims as we have been since 1607 and 1620. Physicians too suffer from the wanderlust and travel the world round on educational cruises with medical instruction in the morning and historical and social adventures in the afternoon and evening. Recently the mails brought yet another invitation fo such broadening experiences addressed to "Dear Fel low Traveler." How times have changed! In the late '40s and early '50s — the McCarthy era — fellow traveler was a dangerous designation, identifying someone who was not a member but who wandered i intellectual agreement with card-carrying Com munists. It is nice to know that fellow travelers ar respectable again, even if we risk tick bites in th process.

Home isn't all that safe either because we have ha in North Carolina, within the past year, our secon outbreak of North American blastomycosis, the thir reported in the literature.[2] The diagnoses were made in December, 1975, and January, 1976, in three chil dren and two adults, resident in Enfield, who had beer hospitalized because of pulmonary difficulties. The first epidemic occurred in 1954 at Grifton in southern Pitt County; 11 cases were found, seven in young people 15 or under. All survived except a 7-month-old child.[3]

We also boast the dubious superlative of having more cases of Rocky Mountain spotted fever annually within our borders than any other state in the union with little likelihood of losing our supremacy.[4] Since Virginia and Maryland are our closest competitors fairness in labeling would dictate that the name of the disease be changed to Middle Atlantic spotted fever. Let us hope that by the time such a change in nomenclature would be accepted, we would be ready to change the name to another region.

J.H.F.

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Correspondence

UNSTERILE INTERMITTENT CATHETERIZATION

o the Editor:

Intermittent catheterization for incontinence has ained wide acceptance, especially for children with eningomyelocele.[1,2] The longest documented use of is procedure with no deleterious effects, is 17 ears.[3] Recently a 69-year-old man, a patient at the rology clinic, reported he had practiced intermittent elf-catheterization for more than nine years with no dverse effects. He had a transurethral resection in 964. Eighteen months later he experienced an pisode of retention and, in order to continue working, e tried self-catheterization. Since then he has suc-essfully continued a regimen of catheterization every our hours during the day and twice at night. He uses a Jo. 14 red rubber catheter which he carries in his rousers pocket and discards after two months. He ses no hygienic procedures before or after catheteri-ation and little or no lubrication.

Cultures from fossa navicularis grew E. coli and Pseudomonas, but a urine culture obtained aseptically through a panendoscope and biopsies of posterior urethra and bladder wall (cultured in agar broth) were sterile. Urethrogram was normal but a bladder neck stricture was discovered. He declined any resection.

Comarr,[4] one of the proponents of sterile intermittent catheterization for adult paraplegics and quadriplegics, reports a relatively high incidence of urethral complications. It is remarkable that this man with no formal instruction or supervision has remained trouble free for so long. Could it be that the small catheter is less traumatic?

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Bulletin Board

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WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A " credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

December 1-2

Third North Carolina Postgraduate Course on Pulmonary Disease
Place: Velvet Cloak Motor Hotel, Raleigh
Sponsors: North Carolina Thoracic Society, North Carolina Lung Association and North Carolina Academy of Family Physicians
Fee: $25; enrollment limited
Credit: AAFP approval requested
For Information: C. Scott Venable, Executive Director, North Carolina Lung Association, P.O. Box 127, Raleigh 27602

December 3-4

Second Annual Family Medicine Workshop
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

December 4

Annual Staff Meeting, Department of Ophthalmology, McPherson Hospital
Place: McPherson Hospital, Durham
For Information: S. D. McPherson, Jr., M.D., Chairman, McPherson Hospital, 1110 West Main Street, Durham 27701

January 12

First District Medical Society Postgraduate Course in Medicine (the first of six weekly sessions)
Sponsors: First District Medical Society and the Office of Continuing Education, UNC School of Medicine
Fee: $80 for all sessions or $15 per session
Credit: 12 hours; AAFP approval requested
For Information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932

January 21-22

Current Surgical Problems
Fee: $100
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 26-28

Alcoholism-The Search for the Sources
Place: Governors Inn, Research Triangle Park
Sponsors: North Carolina Alcoholism Research Authority and North Carolina Medical Society
Fee: $30
Credit: 16½ hours approval requested
For Information: John A. Ewing, M.D., Executive Secretary, North Carolina Research Authority, 623 E. Franklin St., Chapel Hill 27514

January 28-29

North Carolina Conference for Medical Leadership
Place: Royal Villa Hotel, Raleigh
Sponsor: North Carolina Medical Society
For Information: Mr. William N. Hilliard, Executive Director North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

February 5

Pediatric Symposium for the Practicing Physician
Place: Velvet Cloak Inn, Raleigh
Sponsors: Wake AHEC and Raleigh pediatricians
Fee: $35 for physicians and $15 for Housestaff
For Information: Mrs. Joann Phillips, C/O Wake AHEC, 3000 New Bern Av., Raleigh 27610

February 5-6

Update in Clinical Anesthesiology
Place: Berryhill Hall
Sponsors: UNC School of Medicine, Department of Anesthesiology and Department of Continuing Education
Fee: $10
Credit: AAFP Approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

February 11-12

American College of Physicians — North Carolina Society of Internal Medicine Annual Meeting
Place: Sheraton Inn, Crabtree Valley Mall, Raleigh
For Information: John T. Sessions, Jr., Department of Medicine, UNC School of Medicine, Chapel Hill 27514

February 16

Wingate Johnson Memorial Lecture
Speaker: Eugene Braunwald, M.D., Harvard Medical School
Credit: 2 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 23-26

Workshop: Electrolyte and Acid-Base Disorders
Fee: $150
Credit: 21 hours; AAFP approval requested
For information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 24-25

Malignant Disease Symposium
Place: Clinic Auditorium, Chapel Hill
Credit: AMA Category 1; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean For Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 9-12

Internal Medicine Annual Symposium '77
Place: Berryhill Hall
Fee: $150
Credit: 25 hours; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 11-12

Annual E. C. Hamblen Symposium in Reproductive Biology and Family Planning
Sponsors: Duke University Medical Center and the Department of Obstetrics and Gynecology
For Information: Charles B. Hammond, M.D., Box 3143, Duke University Medical Center, Durham 27710

March 12-13

Second Annual Radiology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 18

yelodysplasia — Orthopedic Course
or Information: Robert J. Ruderman, M.D. Department of Orthopedics, Duke University Medical Center, Durham 27710

March 18-19

rank R. Lock Obstetrics and Gynecology Seminar
ee: $100
redit: 9 hours; AAFP approval requested
or Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 28-April 1

adiology of Bones and Joints
lace: Downtowner Motor Inn, Durham
ee: $300; registration limited to 100
redit: 30 hours
or information: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham 27710

April 1-2

ractical Pediatrics
ee: $50
redit: 9 hours; AAFP approval requested
or Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 21

Gastrointestinal Bleeding — Wilson Memorial Hospital Postgraduate Symposium
Place: Wilson Memorial Hospital Learning Center
Sponsors: Wilson Memorial Hospital, Wilson Chapter, AAFP and AHEC
Credit: AMA Category 1; AAFP approval requested
For Information: William Banfield, M.D., Wilson Clinic, Wilson 27893

April 22-23

Third Annual Perinatology Postgraduate Course
Credit: AMA Category 1; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 26-27

Annual Meeting of the North Carolina Thoracic Society
Place: Great Smokies Hilton, Asheville
Sponsor: North Carolina Thoracic Society
For Information: Mr. C. Scott Venable, Executive Director, North Carolina Lung Asso., P.O. Box 127, Raleigh 27602

May 4-5

Breath of Spring '77 Respiratory Care Symposium
Fee: $35
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 5-8

123rd Annual Session of the North Carolina Medical Society
Place: Pinehurst Hotel and Country Club, Pinehurst
For Information: William N. Hilliard, Executive Director, North Carolina Medical Society, Box 27167, Raleigh 27611

May 18-19

The 28th Annual Scientific Sessions of the N.C. Heart Association
Place: Winston-Salem
For Information: Mebane M. Pritchett, 1 Heart Circle, P.O. Box 2408, Chapel Hill 27514

May 20-21

Infectious Disease Symposium
Place: Berryhill Hall
Credit: AMA Category 1; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean For Continuing Education, UNC School of Medicine, Chapel Hill 27514

ITEMS OF SPECIAL INTEREST

January 2-15

Second Medical Refresher Cruise Seminar — (Yucatan Peninsula, Coast of Guatemala — Columbia, Montego Bay)
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
Fee: Tuition $200; other fees, dependent upon accommodations
Credit: 21½ hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 7-18

Eighteenth Postgraduate Medical Seminar Cruise — (Willemstad, Caracas, St. George's, Bridgetown, Martinique and Charlotte Amalie)
Sponsors: Department of Postgraduate Medicine of Albany Medical College
Credit: AMA Category 1; AAFP approval requested
For Information: Frank M. Woolsey, Jr., M.D., Department of Postgraduate Medicine, Albany Medical College, Albany, New York 12208

February 26-March 5

Caribbean Cruise, Seminar on Alcoholism
For information: John A. Ewing, M.D., Executive Secretary, North Carolina Alcohol Research Authority, 623 E. Franklin St., Chapel Hill 27514

Instructional Materials Available on Problem-Oriented Medical Records

As part of a two-year project financed by the North Carolina Regional Medical Program, the UNC School of Nursing at Chapel Hill has developed two manuals designed to assist health personnel with implementation of the POMR system. These are:

—a Self-Instructional Manual on the Basic Components of POMR, designed for nurses (46 pages)

—Guidelines for Implementation of the POMRS (53 pages), which includes a bibliography on POMR, a section on obstacles to implementation and questions.

The manuals are available for $1.00 each plus postage. A variety of videotapes, demonstrating the use of POMR to nurses, slides and a film produced by Lawrence Weed, M.D., and associates, on POMR, may be borrowed for training.

For more information contact: Ruth J. Harris, Assistant Professor, School of Nursing, UNC-CH, Chapel Hill 27514

ANNOUNCING

Free Training Workshops for Physicians and Nurses in S.A.F.E. Office Sex Counseling and Therapy, offered through the Office of Continuing Medical Education, University of Kentucky Medical Center.
Credit: 24 hours
For Information: Linda Carpenter, M.S., Coordinator, Center of Rational Behavior Therapy Training, Office of Continuing Medical Education, University of Kentucky Medical Center, Lexington, Kentucky 40506

Courses in Ultrasound

The last of a series of three ten-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category 1.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Postgraduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem, 27103.

PROGRAMS IN CONTIGUOUS STATES

December 2-4

First Southeastern Conference on Alcohol and Drug Abuse
Place: Marriott Hotel, Atlanta
Sponsors: Peachford Hospital and the Georgia Academy of Family Physicians
Fee: $125; enrollment limited
For Information: Conway Hunter, Jr., M.D., Medical Director, Addictive Disease Unit, Peachford Hospital, P.O. Box 81106, Atlanta, Georgia 30366

December 7-10

Coronary, Valvular and Myocardial Heart Diseases
Place: Williamsburg, Virginia
Sponsor: The American College of Cardiology
Fee: $150 for members; $200 for non-members
For information: Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014.

February 25-26

Virginia Chapter, American Academy of Pediatrics and The Virginia Pediatric Society Annual Meeting
Place: Williamsburg, Virginia
For Information: Douglas E. Pierce, M.D., 1201 Third St., S.W. Roanoke, Virginia 24016

April 7-8

Southeastern Regional Meeting of American Group Practice — Quality Assurance and Ambiltory Care
Place: Calloway Gardens, Georgia
Credit: AMA Category 1, approval requested
For Information: Luther W. Kelly, Jr., M.D., Nalle Clinic, 1350 South Kings Drive, Charlotte 28207

The items listed in the above column are for the six months immediately following the month of publication. Requests for listing should be received by "WHAT? WHEN? WHERE?", P.O. Box 27167, Raleigh 27611, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

Membership at the County Level

When Alice in Wonderland (not knowing where she wanted to go) met Mr. Rabbit, she inquired as to what direction to take. Mr. Rabbit replied, "Alice, if you don't know where you're going it really doesn't matter what direction you take." To improve membership in your county auxiliaries, don't be like Alice. It is important to set goals and plan definite directions.

There are four categories for membership in the medical auxiliary: *regular membership* for spouses whose husbands or wives belong to the county, state or national association; *member-at-large* for those living outside an auxiliary area but belong to the state or national auxiliary; *special membership* for those whose husbands or wives do not belong to the county, state or national association; and *junior membership* for interns' and residents' spouses.

Do you have a membership committee in your auxiliary? Is your treasurer a member of the committee? In larger areas does your membership chairman have an urban chairman? If the answer to all of the questions is no, then it's a good idea to explore the reasons a committee is a good idea. Being a membership chairman is a big job for an enthusiastic person willing to spend some time making personal contact.

The duties of a membership committee:

1. Getting from hospital records of your county medical society the names and addresses of new spouses.
2. Calling and visiting potential new members.
3. Assigning one auxiliary member to be responsible for bringing a new member to all programs

EXPERIENCE. STILL YOUR HIGHEST AUTHORITY.

The discovery of Librium at Hoffmann-La Roche represented a landmark in psychotherapeutics. And, more specifically, a landmark in the treatment of anxiety and anxiety-related conditions.

Today, the acceptance of Librium by the medical community is based firmly on experience. And on a well-documented clinical record.

A record so voluminous it had to be put into a computerized storage and retrieval system.

Take the matter of safety, for example.

Experience with millions of patients indicates that the most common side effects of Librium are dose-related and, therefore, largely avoidable. There appears to be a low potential for dependence. Tolerance rarely develops. Few cases of known toxicity have been reported. However, patients should be cautioned about possible combined effects with alcohol and other CNS depressants.

Librium seldom produces adverse effects on the cardiovascular or respiratory

system. It is used concomitantly with many primary medications, such as cardiac glycosides, antihypertensive agents, anticholinergics, diuretics, antacids and anticoagulants. It should be noted that variable effects on blood coagulation have been reported very rarely in patients receiving Librium and oral anticoagulants; however, a causal relationship has not been established clinically.

Experience. Yours and ours. Together they make the task of choosing an antianxiety agent much simpler.

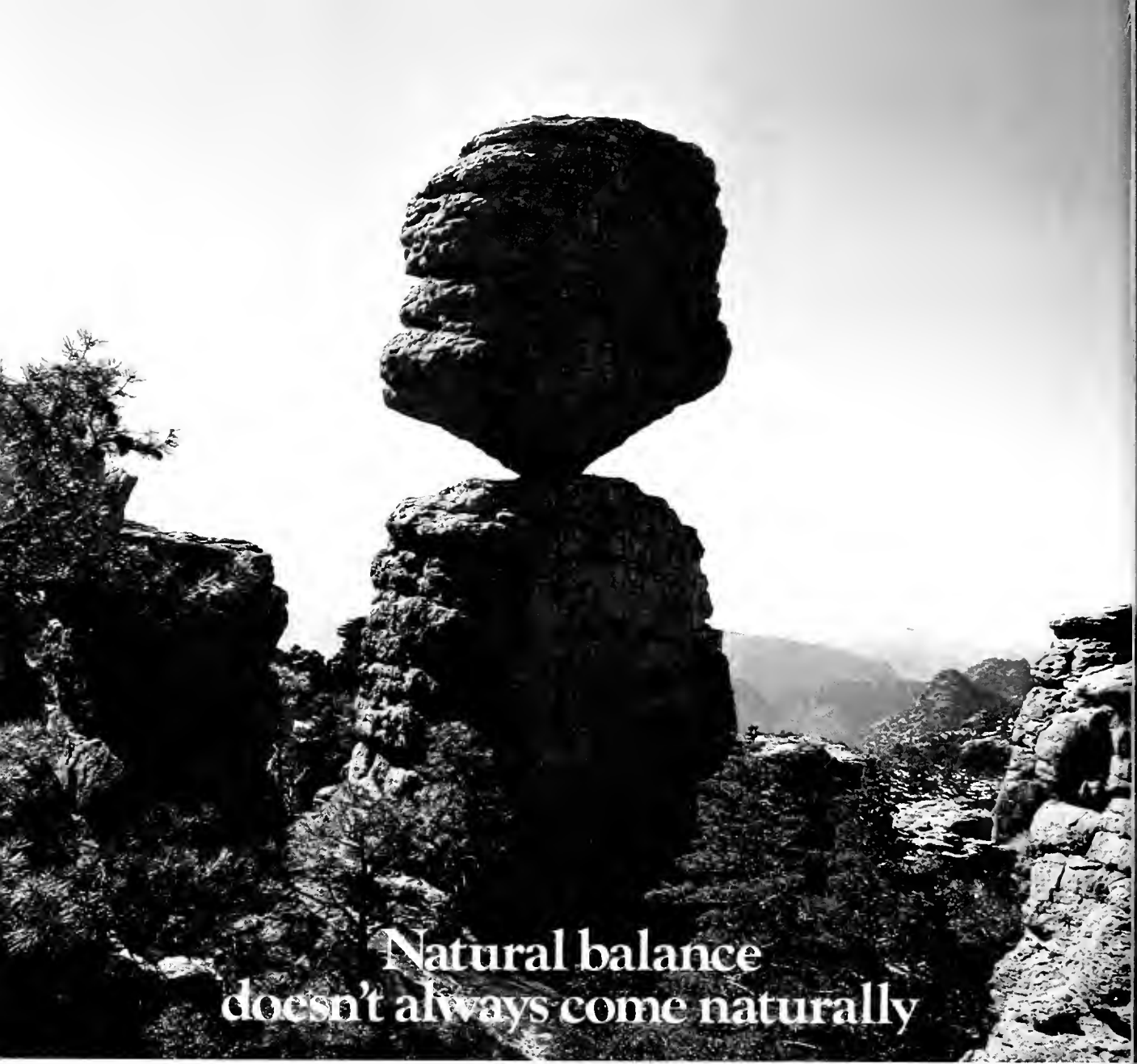
LIBRIUM® Ⓘⓥ

chlordiazepoxide HCl/Roche

THE ANXIETY-SPECIFIC

ROCHE

Please see summary of product information on opposite page.



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

■ **Most Widely Prescribed**—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Meniere's disease, labyrinthitis, and vestibular neuronitis.

■ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo.*

■ **Dosage for Vertigo*** —The usual adult dosage for Antivert/25 is one tablet t.i.d

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children. Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy. See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

(an inactive member assigned to a new member can double the new membership.).

4. Finding out new members' hobbies and interests and giving them responsibilities that "turn them on" their first year.
5. Getting a phone committee and contacting every member.
6. Arranging an orientation workshop for new members before the first meeting.
7. Using Project Bank.

Don't forget the widows and young wives with small children. Some ideas to make your auxiliary appealing to all ages are:

1. Arrange a luncheon and pay tribute to those who have been members 10, 15 and 20 years.
2. Have a nursery and sitter for young children during auxiliary meetings.
3. After Christmas have a weigh-in and pledge to AMA-ERF $1 per pound lost by spring.
4. Have a tennis or golf tournament among members with entry fees going to AMA-ERF.
5. Plan an old-fashioned ice cream social and family picnic.
6. Exchange programs with neighboring auxiliaries.

Make sure your programs appeal to a certain segment of your membership every time. Keeping a file card on each auxiliary member helps to know the interest areas of your group as well as helping the nominating committee and president appoint new chairmen.

Should members be concerned only with membership in their local county auxiliary? The answer is no. The state, county and national auxiliary cannot stand alone. Each leans on the other, forming a pyramid of power with the membership as the deeply felt force supporting the three organizations.

With the treasurer as part of the membership committee, dues can be collected in several ways. One way is dual billing. The doctor receives notification of his dues and his spouse's. With this statement can appear a card saying, "The medical auxiliary is a service organization for physicians' spouses. We hope you will encourage your spouse's participation in our auxiliary." This message informs the doctor about two things: the auxiliary is a service organization and we appreciate the doctors' support.

A good membership committee succeeds when there is good cooperation with your treasurer, good communications and good programs. Here's a recipe for you to try:

Mix an inspired president
1 active membership
A pinch of laughter
Blend 1 cup of friendliness
Sift old and new members
Simmer with conversation
Garnish with service
Serve your whole community

MRS. CHARLES K. SCOTT
President, Alamance-Caswell Auxiliary

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Twenty-one fulltime and 24 part-time faculty members have been appointed to the Bowman Gray faculty.

Named to the fulltime faculty were Dr. Craig W. Beattie, assistant professor of pharmacology; Dr. Salah Bibi, instructor in medicine; Dr. Patrick Box, instructor in medicine (rheumatology); Dr. Carolyn C. Clarke, instructor in pharmacology; Allene Cooley, instructor in community medicine (allied health); Dr. George J. Doellgast, assistant professor of physiology; Dr. Kenneth A. Gruber, assistant professor of physiology; Dr. Emily Jane Herron, instructor in medicine (rheumatology); and Dr. J. Ray Israel, instructor in psychiatry.

Also, Dr. Maria P. McGee, research instructor in microbiology; Dr. Mariana Morris, assistant professor of physiology; Dr. Michael L. O'Connor, associate professor of pathology; Dr. William W. O'Neill, assistant professor of medicine (pulmonary); Dr. Richard Pinneau, assistant professor of physiology; Dr. Elizabeth Philp, instructor in medicine; Dr.

Ward A. Riley, Jr., research assistant professor of neurology (medical sonics); Dr. David K. Sundberg, assistant professor of physiology; Dr. Mary Ann H. Taylor, instructor in community medicine; and Dr. Carlo P. Yuson, instructor in neurology.

Dr. J. F. Smiddy received an appointment as clinical assistant professor of medicine. Named as clinical instructors were Dr. James P. Arlington, orthopedic surgery; Dr. Glenn N. Burgess, psychiatry; Dr. William F. Hopper, medicine (pulmonary); Dr. James M. Rogers, pediatrics; Dr. Louis Stein, psychiatry; and Dr. Hal M. Stuart, family medicine.

Six preceptors in the undergraduate training program were named lecturers in community medicine. They are Dr. James C. Abell of Statesville; Dr. Franklin D. Burroughs of Hatteras; Dr. James P. Culley of Troy; Dr. Robert R. Dixon of Hickory; Dr. J. Dale Simmons of Mt. Airy; and Dr. Keith Thompson of Statesville.

Eleven preceptors were named clinical instructors in community medicine (allied health): Dr. Leland S. Averett Jr. of High Point; Dr. Edward G. Bond of Edenton; Dr. Thurman M. Bullock Jr. of Chadbourn; Dr. F. Murray Carroll of Chadbourn; Dr. William F. Folds of Winston-Salem; Dr. Henry J. Fowler of Walnut Cove; Dr. Paul A. Mabe Jr. of Reidsville; Dr. Russell C. Minick of Winston-Salem; Dr. J. Lewis Sigmon of West Jefferson; Dr. John K. Southard of Winston-Salem; and Dr. David O. Wright of Edenton.

* * *

The Farmington Health Center in Davie County, which Bowman Gray helped establish four years ago, has passed another milestone toward a self-sustaining status.

The center, which is staffed by a nurse practitioner, is receiving its fifth and last year of financial support directly from the Appalachian Regional Commission. Previously, the commission funneled financial support to the center through Bowman Gray because of its status as a recognized agency.

When the center opened, it was unincorporated and had an advisory board. It was seeing about 250 patients a month. In 1975, the center was incorporated as a nonprofit health center with a board of directors. The center now sees about 550 patients a month.

From the center's inception, Bowman Gray's intention was to assist in getting the center established and then to withdraw from an administrative role. The medical school continues to provide medical backup for the center and to rotate some medical students and house officers through the center as part of their training.

* * *

Dr. Thomas B. Clarkson, professor and chairman of the Department of Comparative Medicine, has been named by the Commission on Human Resources of the National Research Council to the Clinical Science Advisory Panel of the Committee on a Study of National Needs for Biomedical and Behavorial Research. He also has been elected to a three-year ter on the Research Study Committee of the America Heart Association Scientific Council on Ar teriosclerosis.

* * *

Dr. Ann Herndon, assistant professor of psycho ogy, has been appointed to a three-year term on th Committee on Continuing Education of the America Association of Marriage and Family Counselors.

* * *

Dr. Noel D. M. Lehner, associate professor o comparative medicine, has been appointed chairma of the Subcommittee on Genetics and Breeding of th Committee on Nonhuman Primates, Institute o Laboratory Animal Resources, Division of Biologica Sciences, Assembly of Life Sciences, National Research Council.

* * *

Michael D. Sprinkle, head librarian at Bowma Gray has been elected secretary of Region IV of the National Medical Library Program.

* * *

Dr. Marvin B. Sussman, professor of sociology and chairman of the Department of Medical Sciences and Marital Health, has been named to the editorial board of the *Journal of Marriage and Family Counseling*.

News Notes from the

UNIVERSITY OF NORTH CAROLINA-CHAPEL HILL SCHOOL OF MEDICINE AND NORTH CAROLINA MEMORIAL HOSPITAL

Dr. Ronnie Gorman Swift, a resident in psychiatry at the N.C. Memorial Hospital, has been named a Falk Fellow by the American Psychiatric Association.

One of 25 residents selected nationwide for the fellowship, Swift is a December 1975 graduate of the University of North Carolina-Chapel Hill School of Medicine.

The Falk Residency Fellowship Program, established in 1968 by the Maurice Falk Medical Fund, identifies promising young leaders among second-year residents in psychiatric training. Those selected bring their thinking to bear on the formation of APA programs and policies that are shaping the future of psychiatry.

Swift is the first N.C. Memorial psychiatry resident to be selected a Falk Fellow. A native of New York, N.Y., she received her undergraduate degree from the City College of New York, where she was graduated with honors in chemistry. A member of Alpha Omega Alpha medical honorary society, she was awarded the

eorge C. Thrasher Award earlier this year for the ost outstanding performance and ability in sychiatry during medical school.

She is married to Dr. Michael Swift, an associate rofessor in the UNC-CH department of medicine and hief of the division of medical genetics.

* * *

The University of North Carolina-Chapel Hill chool of Medicine has been awarded an $800,000 rant from the Robert Wood Johnson Foundation to ontinue its Clinical Scholars Program for another hree years.

The program offers selected physicians the oppor- unity to receive special post-residency training in a umber of academic fields. The objective is to pro- uce health professionals with the knowledge and kills necessary to improve the nation's systems of ealth care and medical education.

The UNC-CH medical school is one of only 11 in the ation, and the only one in the Southeast, in which the rogram is offered. Six new scholars enter UNC's rogram each year.

Dr. David McKay, director of the UNC-CH pro- gram, says the scholars are exposed to a number of isciplines that most physicians know little about. To elp them cope with the increasingly complex prob- ems of medical care, the clinical scholars learn the ethods of epidemiology, statistics, systems analysis nd behavioral science.

Dr. Eric Jensen, a former clinical scholar at UNC-CH, is associate director of the Chapel Hill program.

* * *

Dr. Joel B. Baseman of the University of North Carolina-Chapel Hill School of Medicine has received funding from the National Institute of Allergy and Infectious Diseases that will enable him to continue his research on the origin and development of microbial diseases.

The Public Health Service Research Career Development Award provides Baseman's salary for a five-year period. The associate professor of bacteriology and immunology is focusing his research efforts on defining the consequences of host-parasite interactions resulting from venereal disease and acute respiratory infections and on developing satisfactory measures for control of these disease states.

A 1975 Jefferson-Pilot Fellow in academic medicine at UNC-CH, he did his undergraduate work at Tufts University in Boston and received the Ph.D. degree from the University of Massachusetts at Amherst. His postdoctoral training program was supported by the National Institutes of Health, Harvard University and the department of microbiology and molecular genetics at Harvard Medical School.

* * *

A group of 12 Japanese scientists visited N.C. Memorial Hospital Aug. 15 and 16 to learn about one of the newest methods being used in the diagnosis of heart problems.

They observed procedures developed in the hospital's cardiac graphics laboratory to detect the origins of heart sounds and murmurs. The group of cardiologists and electronics experts visited leading medical centers around the United States to learn about the latest developments in the field of echocardiography.

By combining the techniques of echocardiography and phonocardiography, researchers at the University of North Carolina-Chapel Hill School of Medicine have developed a method for establishing more precisely the relationship between heart movements and heart sounds. Dr. Ernest Craige, Henry A. Foscue Distinguished Professor of Cardiology and director of the cardiac graphics laboratory, is recognized as a leader in this relatively new field, echophonocardiography.

The itinerary for the Japanese visitors also included the Mayo Clinic, Rochester, Minn.; University of Rochester, N.Y.; Mt. Sinai Hospital, N.Y.; the National Institutes of Health, Bethesda, Md.; and Baylor Medical Center, Houston, Tex.

* * *

A "cafeteria plan" clinic where the patient selects therapy that suits his own "appetite" or needs should be used in treating alcoholics, says Dr. John A. Ewing, professor of psychiatry and director of the Center for

Alcohol Studies at the University of North Carolina Chapel Hill.

Ewing explained this plan in a paper presented September at the First International Magnus Hus Symposium in Stockholm, Sweden.

With the cafeteria plan, Ewing said, the alcohol selects a "psychotherapeutic diet" that appeals t him. By making the choice himself, he said, the patier makes the type of personal commitment needed t guarantee success in ending his drinking problem Clinics that use this plan, Ewing noted, find dropou rates low and patient enthusiasm high.

Ewing said he most strongly supports the self-hel methods and a method he calls unilateral therapy fo alcoholism, which is directed at the spouse of th alcoholic.

* * *

Of the 128 physicians licensed in August by the stat Board of Medical Examiners, the three who score highest on the written examination are all graduates o the University of North Carolina-Chapel Hill Schoo of Medicine.

Dr. Richard N. Duffy III obtained the highest aver age. A native of Knoxville, Tenn., he received his undergraduate degree from UNC-CH. He is currently a resident in internal medicine at Barnes Hospital, St Louis, Mo.

Scoring second was Dr. Catherine J. Everett, Robersonville native who is now receiving training ir radiology at N.C. Memorial Hospital. She holds the A.B. degree from Duke University.

Dr. David F. Silver, from Carrboro, received the third highest average. Now a resident in psychiatry at Dartmouth Affiliated Hospitals, Hanover, N.H., he received his undergraduate degree from the College of William and Mary, Williamsburg, Va.

All three physicians were members of the class of 1976 at the UNC-CH medical school.

* * *

Plans for a new graduate-level program in occupational therapy, the first in the state, are being considered at the University of North Carolina-Chapel Hill. Students may be able to enroll as early as 1977.

Dr. Marlys Mitchell, named to develop and direct the new program, said she is hopeful that students may be admitted as early as next August. A member of the UNC-CH School of Education faculty since 1968, Mitchell is now an associate professor in the department of medical allied health professions in the UNC-CH School of Medicine.

Topping the list of priorities for the new director is the development of the proposed curriculum. Initially a three-person faculty, including Mitchell, will direct the 12 to 15 students who will make up the first-year class. After the first year the proposed two-year program will have between 24 and 30 students enrolled at any one time.

Mitchell's professional background includes work in occupational therapy and an extensive career as an

ducator. Before joining the UNC-CH faculty in 1968, he taught in public schools for eight years, six years of which were devoted to working with "exceptional" children.

She received her undergraduate degree in occupational therapy from the University of Minnesota and completed the masters degree in education at the University of North Dakota. She received the doctorate in special education from UNC-CH.

News Notes from the—
DUKE UNIVERSITY MEDICAL CENTER

The next major phase of the Duke Hospital North project — planning for the actual move into the new hospital in the spring of 1979 — has begun with the appointment of Wallace E. Jarboe as director of the new Office of Logistics and Management.

Previously Jarboe directed the Hospital Project Management Office and was responsible for getting the entire hospital project under contract. Final contracts were let in October.

Ground was broken for the $92 million Duke Hospital North in September of 1975.

* * *

Dr. E. Harvey Estes, chairman of the Department of Community Health Sciences, addressed the Second International Seminar of the Life Planning Center in Tokyo in September and spoke on "Primary Care Education in the United States."

* * *

Couples who use condoms or diaphragms as their birth control method may be helping prevent cervical cancer, Dr. William T. Creasman told the annual Walter L. Thomas Symposium. Creasman directs the gynecologic cancer division of the Comprehensive Cancer Center.

Creasman said the devices may protect the cervix from an unidentified cancer-causing agent. He and other researchers have studied funguses and Herpesvirus type II in their search for the cancer-causing substance.

"All we can say is that Herpes virus may be a related factor," Creasman said, "but no cause and effect relationship has been proven."

* * *

Dr. William C. Hall, associate professor of anatomy, has received a second consecutive Research Scientist Career Development Award.

The $150,000, five-year award is from the National Institute of Mental Health. The grants are intended to promote the careers of scientists engaged in research relevant to problems of mental health.

Hall's research centers on better understanding of the parts of the brain involved in vision.

Better coordination of all the laboratories in the hospital is the goal of Dr. Kenneth A. Schneider, who has been appointed to the new position of director of hospital laboratories.

Schneider, 43, also holds the faculty position of professor of pathology.

Formerly director of clinical pathology at the VA Research Hospital in Chicago and associate professor in clinical pathology at Northwestern University, Schneider received his medical degree from Northwestern University Medical School in 1959.

Since 1972 he has been principal investigator in the hypertension detection and follow-up program of the National Heart and Lung Institute.

* * *

Dr. Robert B. Jennings, chairman of the Department of Pathology, spoke on "The Fate of the Ischemic Myocardial Cell: Can We Affect the Process?" at the 10th International Congress of Cardiology in Caracas, Venezuela, in September.

* * *

As part of a faculty development program in Family Medicine, Dr. George R. Parkerson former clinical director of the Family Medicine Clinic, will become the first faculty member to attend the School of Public Health at the University of North Carolina at Chapel Hill.

The one-year course of study, financed by the Robert Wood Johnson Foundation, is an effort to strengthen the scientific base for the discipline of Fam-

ily Medicine. Dr. Parkerson will receive a Master of Public Health degree in epidemiology upon completion of the program.

* * *

Dr. William J. Kane, director of the Family Medicine Program, attended a four-week course in London, observing the British National Health Service.

* * *

Thirty North Carolinians make up the largest single group among this year's 114-member entering class in the School of Medicine.

The North Carolina students are:

NORTH CAROLINA — Gwen M. Haagensen, Janet S. Kinney and Emily S. Yarbrough of Durham, Meredith Alden, John K. Buckner and Raymond S. Greenberg of Chapel Hill, Eben Alexander III of Winston-Salem, John E. Alexander of Laurinburg, Charles R. Beasley of Maxton, William H. Bell of New Bern, Richard Brasington Jr. of Asheville, Carolina Chiles of High Point, Stephen M. Denning of Rutherfordton, James W. Grant of Rocky Mount, Sherry L. Hall of Snow Hill, David N. Howell of Greenville, Richard G. King of Gastonia, Kent H. Kistler and Ralph E. Whatley of Raleigh, Lilliam L. McKay, Richard G. Michal and Richard M. Ward of Charlotte, Mary L. Peacock of Greensboro, Lucy E. Peterson of Matthews, Stephen E. Post of Greenville, Randale C. Sechrest of Jamestown, Harry W. Sever ance Jr. of Wilson, John W. Stringfield of Hazelwood Thomas R. White of Cherryville and Bryan H. Wilso of Boone.

AMERICAN ACADEMY OF FAMILY PHYSICIAN

Dr. Robert H. Shackelford of Mount Olive has bee elected vice speaker of the Congress of Delegates c the American Academy of Family Physicians. Hi election was part of a sequence of changes resultin from the death last April of the academy's president elect, Dr. Herb L. Huffington of Waterville, Minn His replacement, Dr. B. Leslie Huffman of Maumee Ohio, was installed at the academy's annual meetin and scientific assembly in Boston in September. Th 37,000-member academy, founded in 1947, was in strumental in helping set up the American Board o Family Practice, which certifies physicians in th medical specialty of family practice.

NATIONAL CANCER INSTITUTE-VA MEDICAL ONCOLOGY BRANCH

The National Cancer Institute-VA Medical Oncol ogy Branch, located at the Veterans Administratior Hospital, Washington, D.C., requests your coopera tion in referral of veteran or non-veteran patients with the following malignancies:

1. *Small cell carcinoma (oat cell or other small cel varieties) of the lung* for treatment with intensive

hemotherapy. Patients should not have received prior chemotherapy or radiotherapy.

2. *Epidermoid (squamous) carcinoma and adenocarcinoma of the lung* for treatment with chemotherapy. The patient should have unresectable disease, be fully ambulatory, have no prior treatment with radio- or chemotherapy and have evaluable lesions.

3. *Hepatocellular carcinoma (hepatoma)* for treatment with chemotherapy or consideration of combined chemotherapy and surgery for local disease.

4. *Advanced prostatic carcinoma (Stage D)* for treatment with chemotherapy and hormonal therapy. Patients who have failed estrogen therapy are eligible.

5. *Multiple myeloma — Waldenstrom's macroglobulinemia, heavy chain disease and related monoclonal gammopathies* for combination chemotherapy treatment. Patients who have received no prior chemotherapy are eligible.

6. *Cutaneous T-cell lymphomas — including mycosis fungoides and Sezary syndrome* for treatment with electron beam radiotherapy and/or chemotherapy. Patients with all stages of disease are eligible.

7. *Non-resectable or recurrent gastric carcinoma* for treatment with combination chemotherapy. The patient should have unresectable disease, be fully ambulatory, have no prior chemotherapy and have evaluable lesions. Patients who have received radiation therapy are eligible.

The referring physicians will be kept fully informed as to the results of treatment and are encouraged to participate in the follow-up care of their patients. In addition, the branch is serving as a lung cancer pathology reference center.

To refer a patient or obtain further information, please call or write Dr. Martin H. Cohen, Dr. Daniel C. Ihde, Dr. Paul Bunn or Dr. John Minna.

NCI-VA Medical Oncology 2CN
Veterans Administration Hospital
50 Irving Street, N.W.
Washington, D.C. 20422
Tel. (202) 389-7275 or 7558

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SERVICES

Dr. James R. Fouts, scientific director for the National Institute of Environmental Health Sciences (NIEHS) in Research Triangle Park, North Carolina, has been elected chairman for the 1978 Gordon Research Conference on Drug Metabolism. He will also serve as vice-chairman of the 1977 Drug Metabolism Conference.

As chairman, he will be responsible for developing a program to bring participating experts in drug metabolism up to date on the latest developments, to analyze the significance of these developments and to provoke suggestions concerning the underlying

theories and profitable methods of approach for scientific research.

Dr. Fouts is an international authority in the field of enzyme induction and has won awards for his research from U.S. and Canadian organizations. He has also written or co-authored more than 160 scientific publications. Currently, he teaches at two North Carolina universities and is chairman of the division of drug metabolism of the American Society for Pharmacology and Experimental Therapeutics.

Month in Washington

After three long years of sometimes bitter infighting, the Congress has passed legislation to provide more than $2 billion over a three-year period for medical education assistance.

The long squabble on how many federal strings should be attached have been kept to a minimum due in large part to the activity of the AMA and other groups.

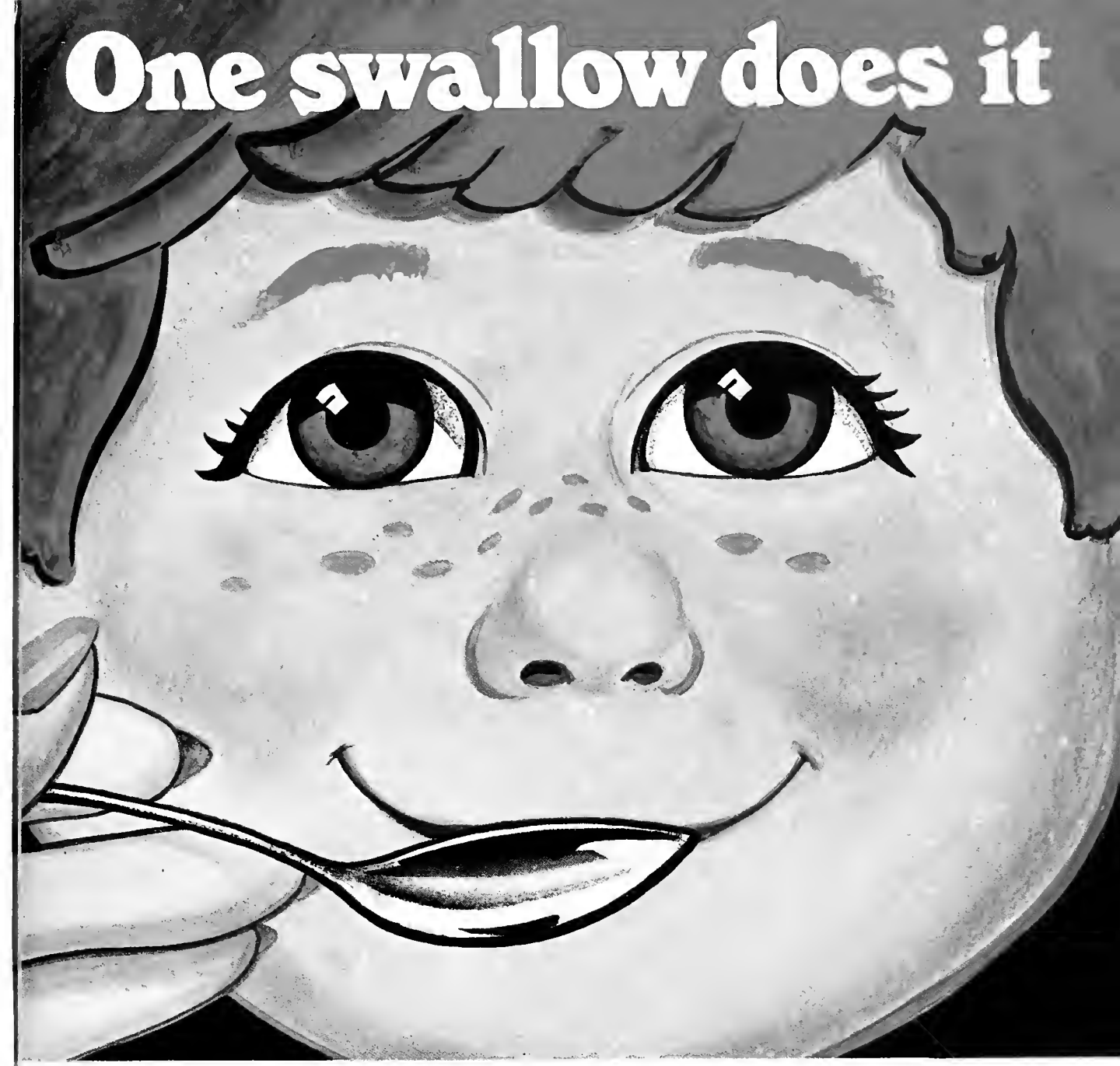
Commenting on the final provisions of the conference committee action, James H. Sammons, M.D., AMA's Executive Vice President said, "Many features which we felt were not in the best interests of medical education were dropped — and for this we are very pleased."

Dr. Sammons pointed out that the bill still contains language that will be troublesome, but emphasized that, "The end results of years of work will be a bill that will — overall — help us increase the supply of physicians and the number of physicians in primary care as well as continued support of the National Health Service Corps."

The major battle fought by the AMA, the administration and others defeated the prolonged efforts of some to use the so-called Health Manpower Bill as a vehicle for federal dictation of curriculum, regional allocations, federal service and licensure of physicians.

As a result of the legislation's passage, medical schools are assured of a continuation of capitation and construction funds, medical students will have increased opportunities for federal scholarships and loan assistance, and the government's National Health Service Corps stands firmly entrenched as an expanding program to channel physicians into shortage areas. In addition, medical schools will be required to produce more "primary care" physicians.

The most controversial feature in the separate bills that had been approved earlier in the House and Senate had been a House provision compelling medical



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graduates to pay back in money or in shortage area service for the capitation aid their medical schools had received (rather than individual scholarships or loans the students might have taken). This was not contained in the Senate bill nor in the final compromise measure worked out by the House and Senate conferees.

Only one burdensome requirement of importance remained in the bill. As a condition for capitation aid, medical schools must have in 1978 at least 35% of their filled first year positions in direct or affiliated residency training programs in primary care, defined as family medicine, general internal medicine and general pediatrics. This percentage rises to 50% by 1980.

Rather than requiring certain percentages of medical school graduates to enter shortage area service or join the National Health Service Corps (NHSC), the new medical education bill simply puts up enough PHSC scholarship funds to assure sufficient numbers of young physicians entering the program. Authorized for such scholarships are $75 million for the fiscal year which started October, $140 million next fiscal year and $200 million for fiscal 1980. Also $51 million over three years was authorized for special scholarships for "students who are of exceptional financial need."

The NHSC also was authorized $174 million for three years for its operations.

For construction of ambulatory, primary care teaching facilities for physicians and dentists, the legislation authorized $120 million for three years.

The capitation grant levels were set at $2,000 per student for the coming fiscal year, $2,050 for fiscal 1979, and $2,100 the next year.

New restrictions were imposed on alien foreign medical graduates including a requirement they return to their country of origin after training. U.S. citizen graduates of foreign medical schools would be given special consideration for acceptance by American medical schools. Medical board and English proficiency tests are specified for immigrating health professionals.

The Health, Education and Welfare Department, under the bill, will prepare sweeping data on health professionals' location, training, etc., "for the purpose of establishing a uniform health professions data reporting system."

The measure provides that new "unaffiliated" residency programs will not be eligible for federal grants and loans, but existing programs are given a "grandfather clause" exemption.

There is no language pertaining to federal relicensure for physicians.

* * *

Congress has sent to the White House legislation to expand medical aid for Indians.

The measure, backed by the AMA, authorizes a three-year program for health professions recruitment and preparatory scholarships for Indians and for scholarships and extern programs to provide physicians, dentists and other health professionals who would provide health services to Indians.

The bill authorizes construction and renovation of Indian Health Service hospitals, health centers, health stations, and other facilities. It eases medical standards for Indian Health Service facilities and makes the facilities eligible for Medicare and Medicaid reimbursements.

For the first time health service activities for Indians in urban areas would be furnished, including outreach programs, identification of Indians and their health needs, assisting Indians to use community health facilities and the direct delivery of services.

* * *

Hospital-based blood banks have charged that the American National Red Cross is threatening "a crisis in blood supply which will have an impact on health care delivery."

At issue is the Red Cross decision after 16 years to cancel its agreement with the American Association of Blood Banks to exchange blood through the AABB's clearinghouse program.

The AABB, which represents most major hospital banks in the country, termed the Red Cross decision — effective Oct. 19 — a "drastic step" that "will have an adverse effect on the nation's blood supply and will serve to fragment the blood banking system in this country."

Bernice Hemphill, AABB President, told a Washington, D.C., news conference that if the Red Cross carries out its threat, "competition for blood donors between AABB banks and Red Cross centers will increase and the blood programs of both organizations will be affected by the public confusion that will follow."

The blow-up pits the completely voluntary, no-credit approach to blood collection as embodied by the Red Cross against the individual responsibility of advance credit for giving philosophy of the hospital banks. And the wrangle threatens to jeopardize the careful and deliberate efforts being made by the parent American Blood Commission to bring the competing elements in blood banking together in a voluntary cooperative program before the federal government steps in.

The Red Cross was urged by the AABB to reconsider its decision or to agree to national mediation on the issue.

The AABB said it went public with its appeal and protest "not without a great deal of anguish . . . but we no longer have a choice."

* * *

The AMA has asked Congress to drop a proposed tax provision that would authorize state and local governments to require Social Security numbers to be submitted in administration of any "general public assistance program."

"We are concerned that the term 'general public assistance program' could be defined to include such

health programs as local neighborhood health clinics, drug, alcohol or venereal disease programs, as well as the Medicaid program," said James Sammons, M.D., AMA Executive Vice President.

In a letter to Congress, Dr. Sammons said:

"It is generally recognized that any required submission of Social Security numbers as a condition for participation in the above or other health programs could inhibit public assistance recipients from seeking necessary medical care and also inhibit medical personnel from participating in such programs. Effective delivery of health care to the poor could thus be jeopardized."

He continued: "A confidential relationship between a physician and his patient regarding medical care is necessary, especially with respect to such sensitive medical conditions as venereal disease, drug use, mental illness and abortion. The individual citizen must be assured that his medical care will be kept in strictest confidence in order to assure that degree of open and candid discussion which is necessary for proper treatment. The current language . . . would infringe upon this right of confidentiality of persons who require public assistance in obtaining medical care."

Veteran AMA representative on Capitol Hill, James W. Foristel, retired after 25 years service with AMA's Washington Office. A familiar face to thousands of lawmakers over the years and a close friend to many, Foristel plans to keep his hand in with consultant work in the health field for several organizations including the American Association of Ophthalmology.

Foristel, a lawyer and World War II veteran, first joined the AMA Washington office in 1949 and served as its legal and legislative advisor until 1954. He then joined the HEW Department as associate general counsel.

He rejoined the AMA in 1956 and served as Director, Department of Congressional Relations, to 1970 and as Assistant Director until recently.

The AMA House of Delegates, at its recent Annual Meeting in Dallas, Texas, adopted and presented to Foristel a commendation resolution acknowledging his many years of loyal and competent service to the AMA.

The resolution said in part "his perpetual enthusiasm and individual style have made him one of the association's most effective lobbyists;" and "his unquestioned integrity has brought credit to both the association and the entire profession of Congres-

sional relations — his expertise has earned him the name 'Mr. Lobbyist' from government and Congressional circles. . . ."

* * *

The Director of the National Cancer Institute, Frank J. Rauscher, Ph.D., is resigning because of low pay. Rauscher says he is unable to support five children, three of college age, on his present salary of $37,800. He is going to the American Cancer Society to become Senior Vice President for Research at $75,000.

Dr. Rauscher became head of the Institute in 1972 after Congress gave a major boost to cancer research under the National Cancer Act.

The legislation which expanded NCI made the director a presidential appointee and gave him more immediate access to the President and the Congress through the President's Cancer Panel. But the salary of the NCI director, like that of other directors at the National Institutes of Health, is frozen under civil service classification at $37,800.

An attempt this year to increase directors' salaries to $52,000 failed by one vote in the House Commerce Committee.

During Dr. Rauscher's tenure, funding for cancer research increased from $377 million to $815 million.

Book Review

Books Received

Ganja in Jamaica: The Effects of Marijuana Use. By Vera Rubin, Ph.D., and Lambros Comitas, Ph.D. 240 pages. Price, $2.95. New York: Anchor Press/Doubleday, 1976.

In Memoriam

Bessie Kay Williams, M.D.

The medical profession of High Point lost one of its most loyal and faithful practitioners in the death August 6 of Bessie Kay Williams, M.D. She was an active practicing physician for 18 years until her forced retirement in February, 1976, because of declining health.

Dr. Williams was born in Zebulon on November 27, 1926, the ninth child of Yuma and Pink Williams. She attended Zebulon schools and was graduated from Wake Forest College.

She entered Bowman Gray School of Medicine in 1948 and received her M.D. degree in June, 1952. She interned at George Washington University Hospital, studied pathology for one year at the University of Kansas School of Medicine and completed her residency in obstetrics-gynecology at St. Francis General Hospital in Pittsburgh.

In 1959 she entered practice in High Point. She was a diplomate of the American Board of OB-GYN, a Fellow of the American College of OB-GYN, a member of the American Medical Association, North Carolina Medical Society and Guilford County Medical Society. She was a member of the attending staff of High Point Memorial Hospital, the Guilford County Board of Welfare and the advisory committee of Maryfield Nursing Home.

Dr. Williams was a member of The Church of High Point and St. Mary's Episcopal Church. She attended services at Canaanland.

Surviving members of her family are her mother, Mrs. Charles P. Williams; seven sisters, Mrs. G. A. Pearre, Mrs. D. L. Thompson, Mrs. Mary F. West, Mrs. W. D. Archer, Mrs. C. C. Walker, Mrs. R. M. Garsh and Mrs. B. W. Solley; and one brother, Robert F. Williams.

GUILFORD COUNTY MEDICAL SOCIETY

Van W. Gunter, M.D.

Dr. Van W. Gunter, 55, died July 9 at Moses H. Cone Memorial Hospital. He had been in declining health for about three years. He retired from his position with Jefferson Standard in 1973 after 21 years with that company.

Dr. Gunter, a native of Sanford, was graduated from the Medical College of Virginia and received his medical degree from that institution.

He was in general practice for many years and was associated with another firm before joining Jefferson Standard in 1952 as assistant medical director. He was named medical director in 1959 and second vice president in 1965. His title was changed to second vice president and senior medical director in 1973.

In addition to holding memberships in several medical societies, Dr. Gunter served as president of the Middle Atlantic Medical Directors Club and president of the Greensboro Academy of Medicine. He was a member of the executive committee of the Association of Life Insurance Medical Directors of America for three years and secretary-treasurer of the Board of Life Insurance of Medicine. He was a diplomate of the Board of Life Insurance Medicine.

Surviving are his wife, Elizabeth Couch Gunter; a son, Van W. Gunter, II, of Greensboro; two daughters, Mrs. Frances Boes of Grand Rapids, Mich., and Mrs. Patricia Davis of Houston, Texas; his father, Curvey L. Gunter of Greensboro; a brother, Donald Gunter of Sanford; and two sisters, Mrs. Katherine Wicier of Sanford and Mrs. Hilda Murchison of Wilmington.

Dr. Gunter was held in high esteem by his colleagues in our profession. The services rendered by Van bespoke of the dedication he had in all of his endeavors.

GUILFORD COUNTY MEDICAL SOCIETY

John Milton Pixley, M.D.

Dr. John Milton Pixley, 50, of Winston-Salem died August 27 after an extended illness.

Dr. Pixley was born in Columbus, Ohio, and following Naval service graduated from Denison University and Ohio State University School of Medicine. He served as Fellow resident and Fellow in the Department of Psychiatry at Cincinnati General Hospital, Cincinnati, Ohio. In 1961, he joined the Department of Psychiatry at the Bowman Gray School of Medicine, Winston-Salem, where he served as an assistant professor until 1972. At that time he returned to private practice and most recently in January, 1976, joined the staff of Mandala Center.

While maintaining his primary interests in the clinical practice of psychiatry in which he was a sensitive and skilled therapist, Dr. Pixley also invested much interest, energy and professional consultation in organizations associated with the health of the community. He had served as consultant to the Child Guidance Clinic, Associated Family Service and Mecklenburg County Adult Division of Mental Health.

His memberships were numerous in professional organizations including the American Medical As-

sociation, North Carolina Medical Society, Forsyth-Stokes Medical Society, American Psychiatric Association, Southeastern Psychiatric Association, Southern Psychiatric Association, American Group Psychiatric Association, the North Carolina Neuropsychiatric Association and the North Carolina Group Behavioral Society.

Dr. Pixley is survived by his wife, Nancy Hogg Pixley of the home at 2805 Oldtown Club Road; two daughters, Misses Nancy Beth and Gretchen Lloyd Pixley both of the home; one son, William Kirk Pixley of the home; his mother of Columbus, Ohio; and one brother, Peter Lloyd Pixley of Columbus, Ohio.

Jack Pixley was a strong, vital and involved man, a good physician and a warm friend. He is deeply missed by colleagues, patients and community.

FORSYTH-STOKES COUNTY MEDICAL SOCIETY

Classified Ads

POSITION WANTED: Locum Tenens Emergency Room work. Up to six weeks. Reply: Box 111, NRMC, Camp Lejeune, N.C. 28542.

EMERGENCY PHYSICIANS WANTED: Hospital seeking to begin full time emergency physician coverage. Need two men at this time. Prefer Emergency Medical Trained Men; however, not necessary. Graduate of American Medical School. Salary, $50,000 range. Excellent area for hunting, fishing, water sports, etc. Contact: John P. Davis, Administrator, Beaufort County Hospital, East 12th Street, Washington, N.C. 27889.

LOCUM TENENS IN RADIOLOGY WANTED in North Carolina beginning December, 1976. Board Certified in Radiology in 1951. 20 Years experience, associated with University and large private hospital. Have N.C. license and insurance. Phone: (919) 579-2214 or write W. A. Tosick, Route 1, Box 289, Sunset Beach, N.C. 28459.

WANTED: Medical/Program Director, Physician's Assistant Program, Pitt Technical Institute: Individual must be physician; experience in family practice is desired. Medical/Program Director will be responsible for overall development of new Physician's Assistant Program including instruction and administration. Individual should be able to provide competent medical direction for classroom/clinical instruction and clinical relationships with other educational programs. Position will be available 1/1/77; salary open. Closing date for receiving applications is 12/6/76. For further information, contact: Dr. Charles E. Russell, Assistant to President, Pitt Technical Institute, P.O. Drawer 7007, Greenville, N.C. 27834 (919) 756-3130, An Equal Opportunity Employer.

Fulltime radiologist for thriving 70 bed hospital in Western North Carolina near Ski resorts, lake area. Busy department, excellent young medical staff. Well equipped department, excellent technical staff. Outstanding financial situation, continuing financial incentives. Please contact Robert Holthouser, Administrator, Marion General Hospital, Marion, N.C. 28752 (704) 652-2125.

November graduate of Physicians Assistant program of the Medical University of S.C. desires position with primary care physician within commuting distance of Durham. Work experience includes Naval Regional Medical Center, Charleston, and University Health Services Clinic, Duke. Resume and recommendations furnished upon request. Contact Carolyn T. Thompson, 1315 Morreene Rd., Apt. 26-A, Durham, 27705, or call 684-6721.

TAX DEDUCTIBLE VACATIONS FOR MEDICAL PROFESSIONALS. Over 500 listings of national/international meetings in the medical sciences for 1977. Send a $10 check or money order payable to Professional Calendars, P.O. Box 40083, Washington, D.C. 20016.

EMERGENCY ROOM PHYSICIANS: Active 265-bed general hospital in growing eastern North Carolina city serving area of 100,000. Hourly rate guarantee plus week end incentive. Good surrounding hunting and fishing opportunities and only 85 miles from coast. Contact Dr. Dale Kile, Southeastern General Hospital, Lumberton, North Carolina 28358, 919-738-6441.

PHYSICIANS NEEDED: M.D.'s having completed or near completion of internships or residencies for hospital/clinics/flight surgeon duties. Choice of duty station, $30,000-40,000 starting salary, travel and relocation expenses paid, 30 days paid vacation annually, duty rotation allows excellent family life. Contact LT. Ron Hewett, Navy Physician Programs, Navy Recruiting District, P.O. Box 18568, Raleigh, N.C. 27609 or call collect (919) 872-2547.

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Bactrim DS.
Tabs: #20
Sig: 1 B.I.D.

In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (e.g., vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)
Double Strength tablets
Just 1 tablet B.I.D.

Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

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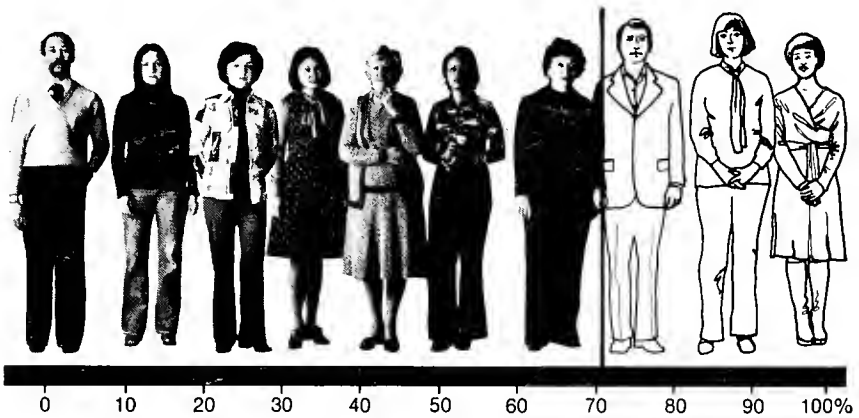
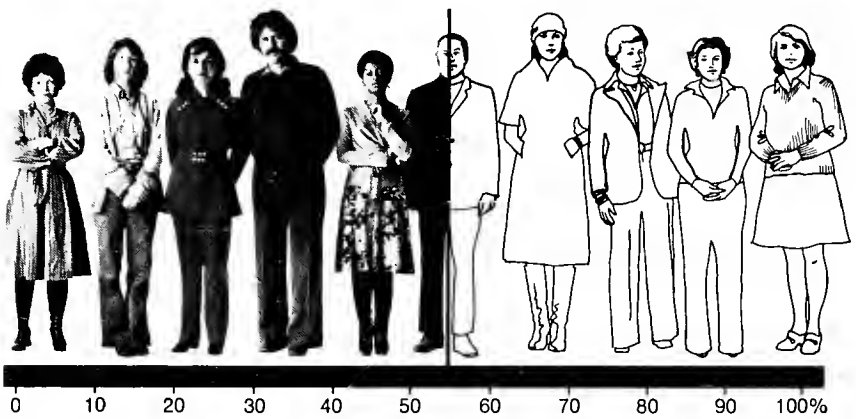
In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

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(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

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NORTH CAROLINA
Medical Journal

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY □ □ □ December 1976, Vol. 37, No. 12

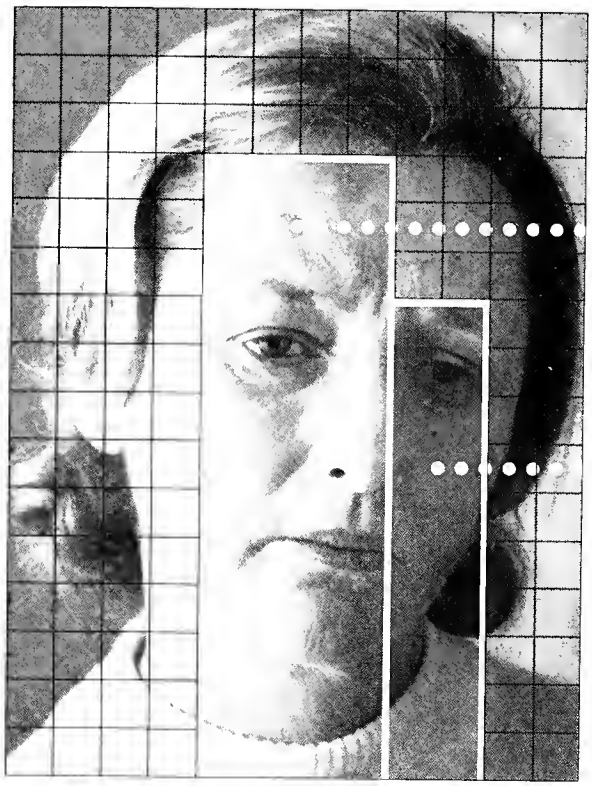
IN THIS ISSUE:

1977 Leadership Conference
January 28-29—Raleigh

1977 ANNUAL SESSIONS
May 5-8—Pinehurst

1977 Committee Conclave
Sept. 21-25—Southern Pines

Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

Valium®
(diazepam) Ⓘⓥ

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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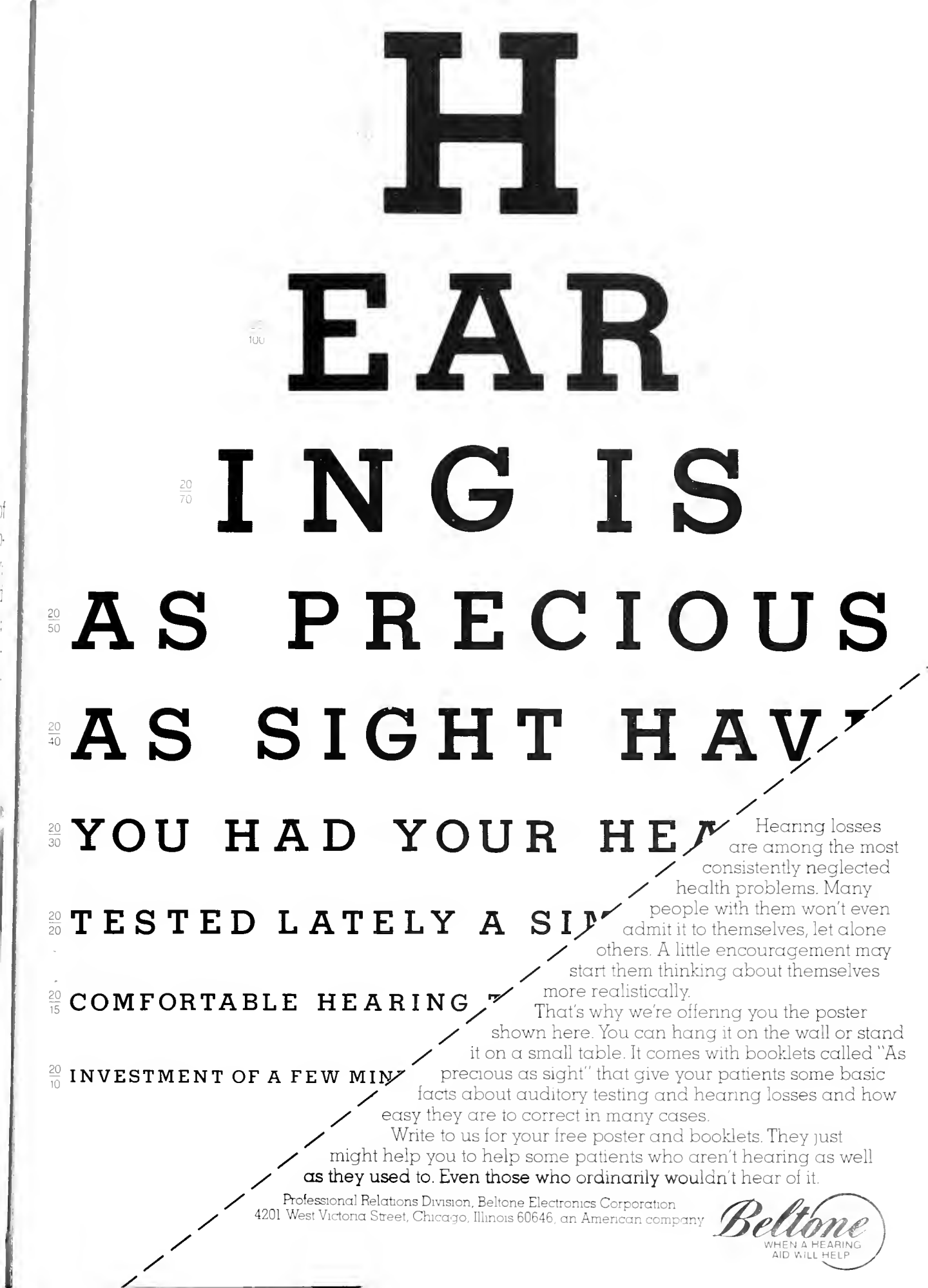
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NORTH CAROLINA MEDICAL JOURNAL

Published Monthly as the Official Organ of
The North Carolina Medical Society

December 1976, Vol. 37, No. 12

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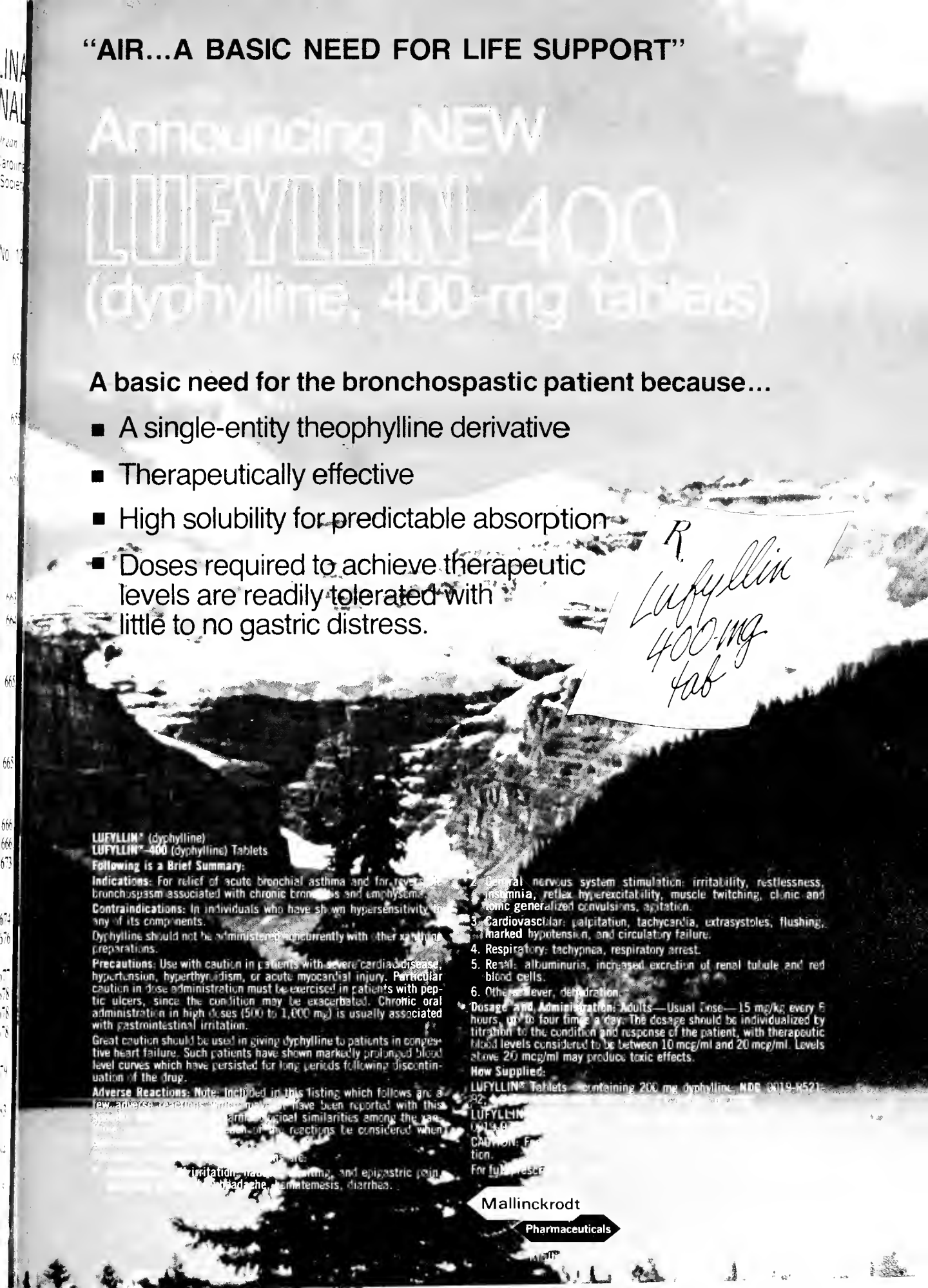

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Indications: For relief of acute bronchial asthma and for treatment of bronchospasm associated with chronic bronchitis and emphysema.

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Dyphylline should not be administered concurrently with other xanthine preparations.

Precautions: Use with caution in patients with severe cardiac disease, hypertension, hyperthyroidism, or acute myocardial injury. Particular caution in dose administration must be exercised in patients with peptic ulcers, since the condition may be exacerbated. Chronic oral administration in high doses (500 to 1,000 mg) is usually associated with gastrointestinal irritation.

Great caution should be used in giving dyphylline to patients in congestive heart failure. Such patients have shown markedly prolonged blood level curves which have persisted for long periods following discontinuation of the drug.

Adverse Reactions: Note: Included in this listing which follows are a few adverse reactions which may have been reported with this [illegible] pharmacological similarities among the xanthines, [illegible] reactions be considered when

[illegible] irritation, vomiting, and epigastric pain. Headache, hematemesis, diarrhea.

2. Central nervous system stimulation: irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions, agitation.
3. Cardiovascular: palpitation, tachycardia, extrasystoles, flushing, marked hypotension, and circulatory failure.
4. Respiratory: tachypnea, respiratory arrest.
5. Renal: albuminuria, increased excretion of renal tubule and red blood cells.
6. Other: fever, dehydration.

Dosage and Administration: Adults—Usual dose—15 mg/kg every 6 hours, up to four times a day. The dosage should be individualized by titration to the condition and response of the patient, with therapeutic blood levels considered to be between 10 mcg/ml and 20 mcg/ml. Levels above 20 mcg/ml may produce toxic effects.

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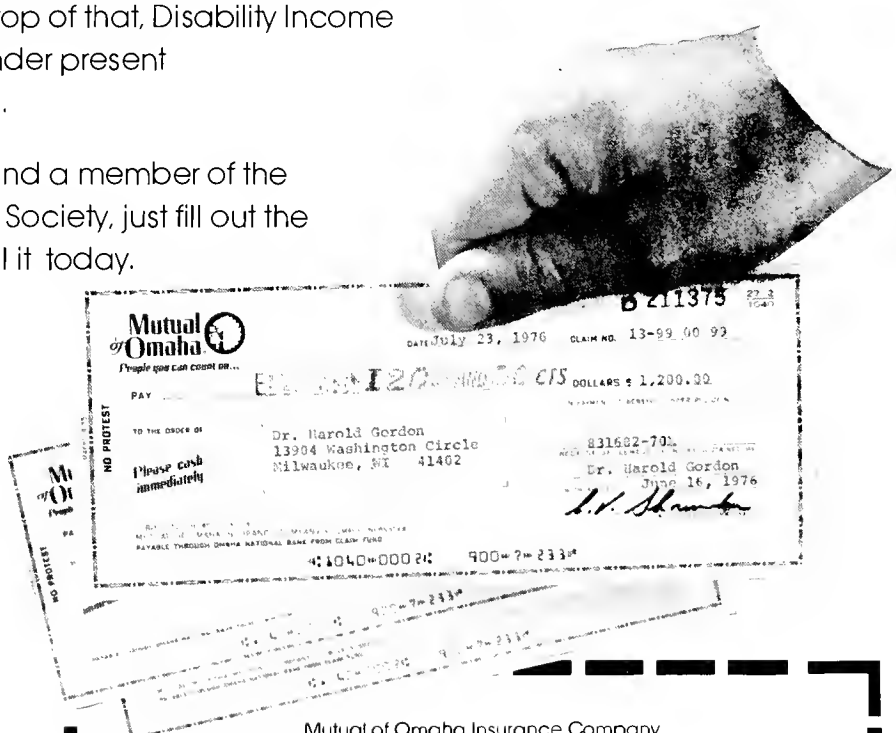

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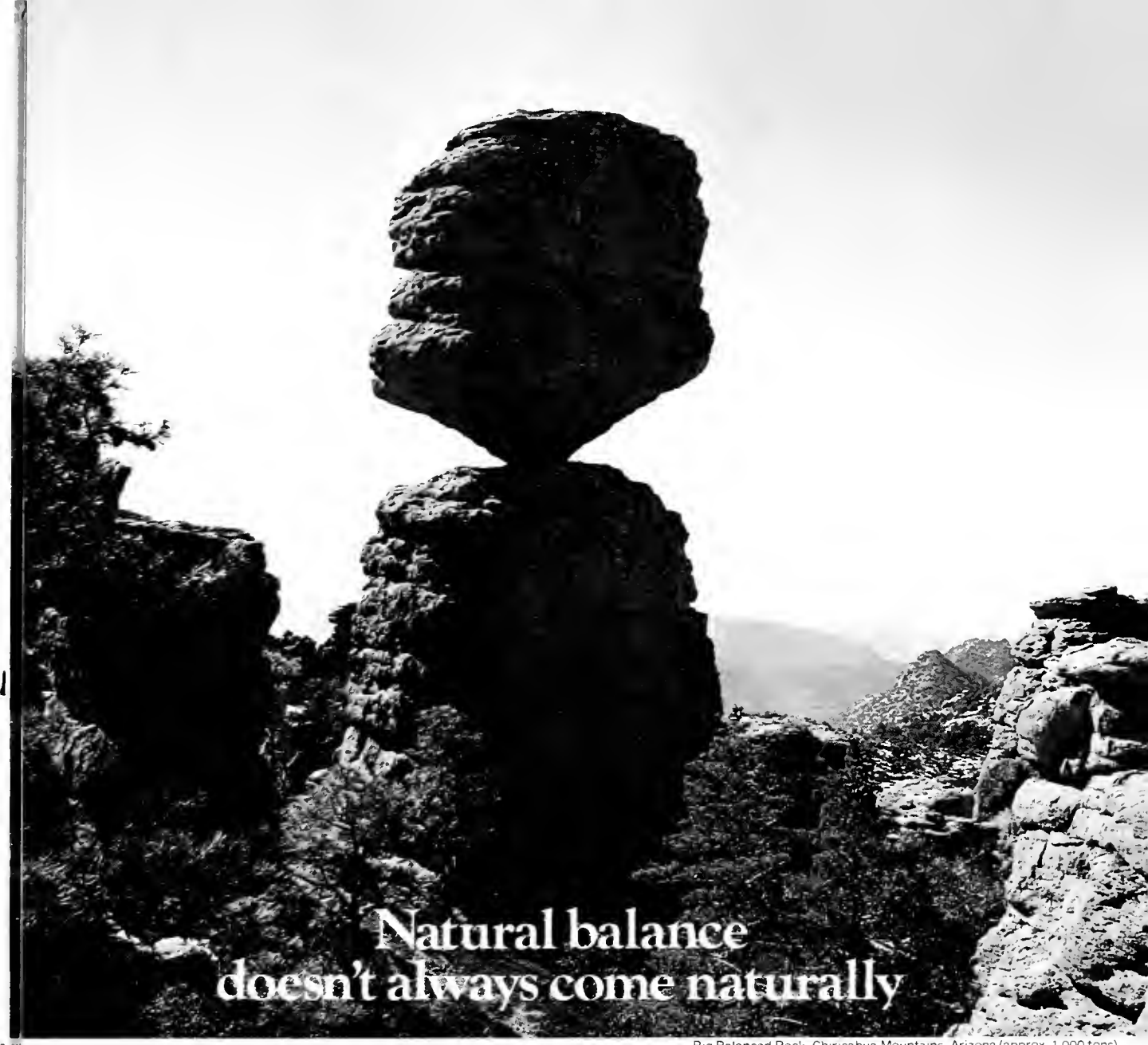


Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

■ **Most Widely Prescribed**—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

■ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo.*

■ **Dosage for Vertigo*** —The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg/kg/day in rabbits and 10 mg/kg/day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children. Clinical studies establishing safety and effectiveness in children have not been done, therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy. See "Contraindications."

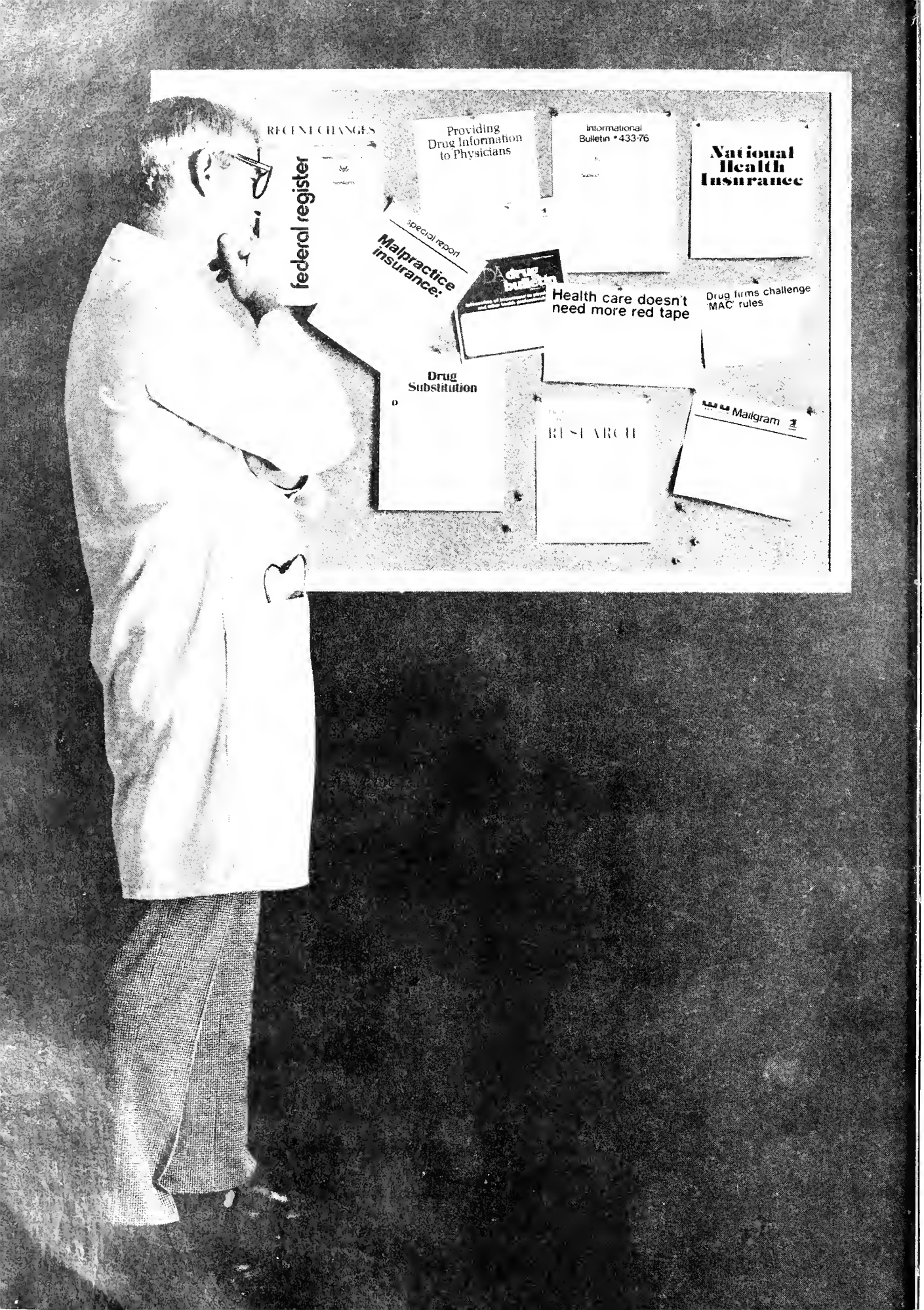
ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25

(meclizine HCl) 25 mg. Tablets
for vertigo*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The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

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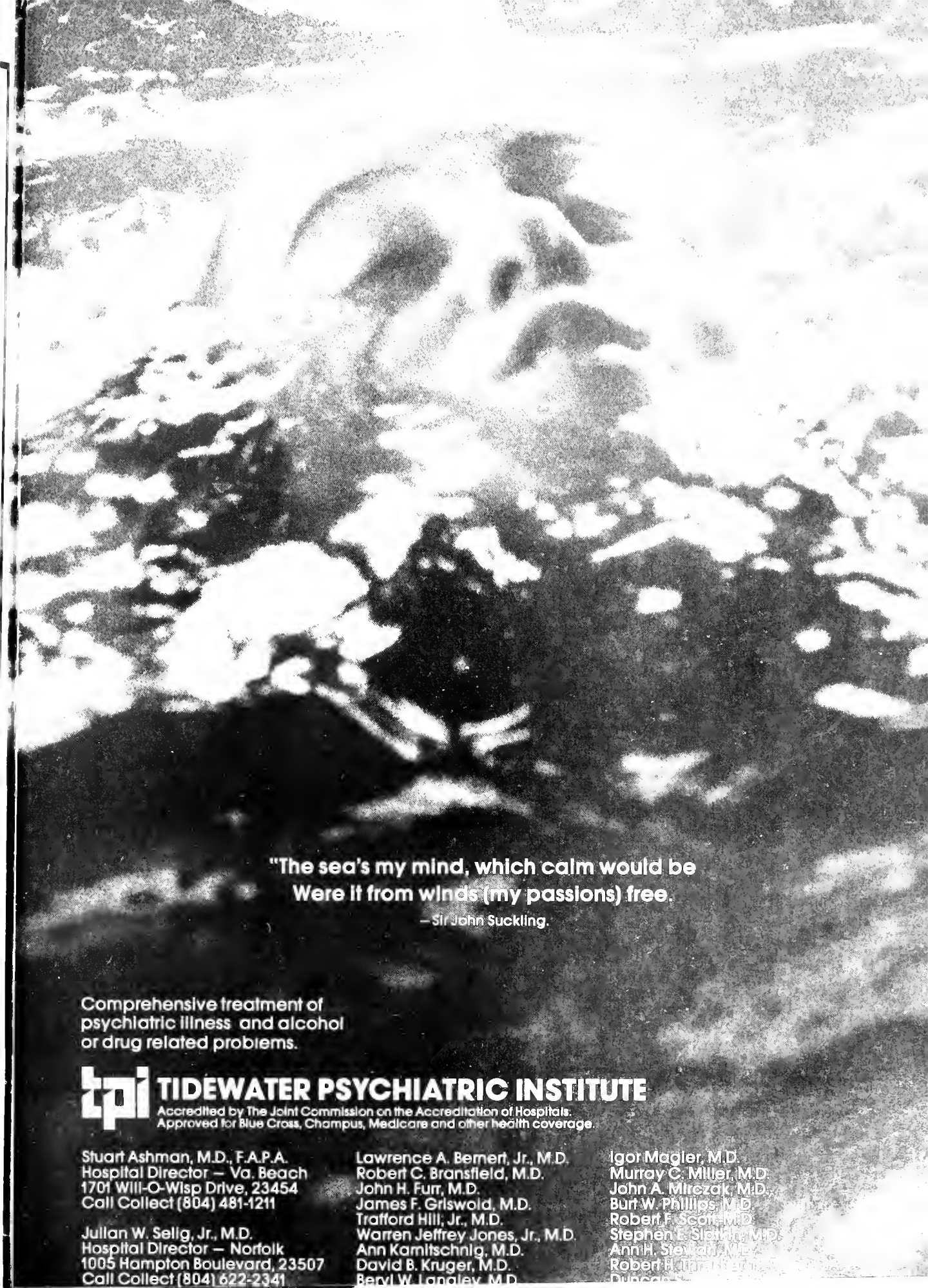

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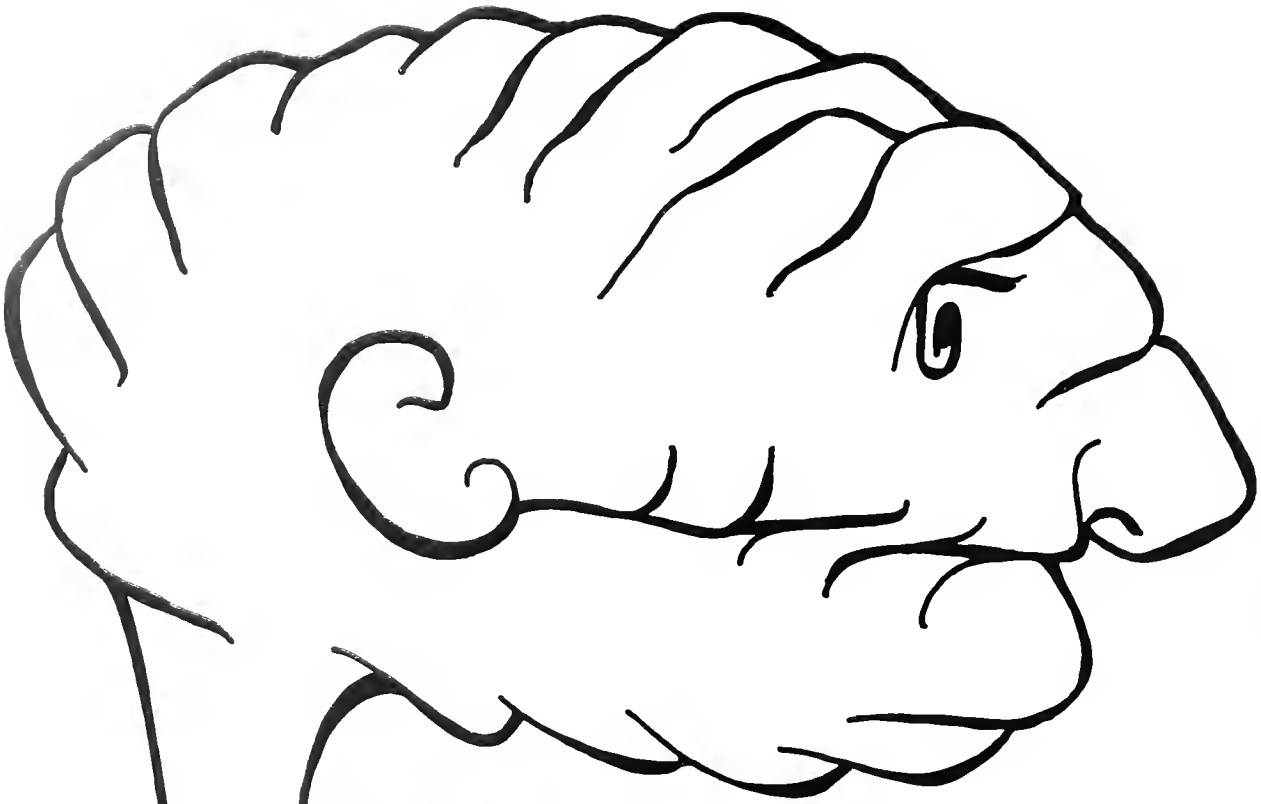

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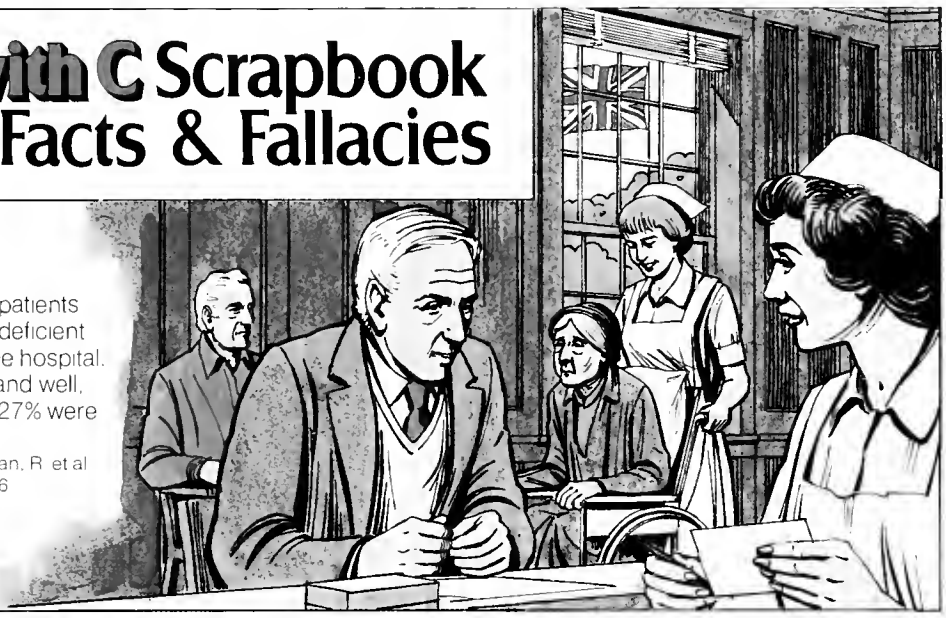

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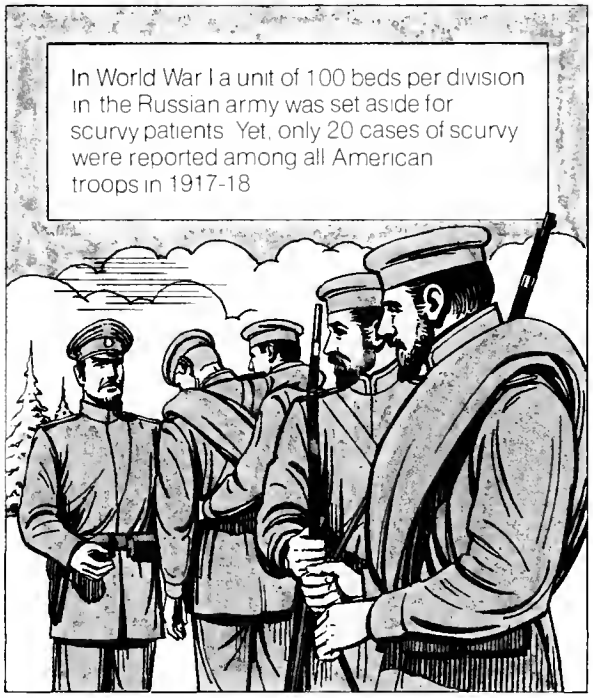

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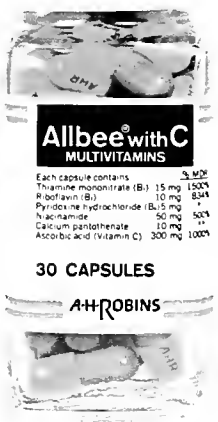

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Venomous Snakebites of the Extremities

Joey M. Carter, M.D.* and A. Griswold Bevin, M.D.†

THE poisonous snake has been a venomous scourge of mankind since the earliest recordings of time. A poisonous snakebite is a source of significant morbidity and occasional mortality. It is estimated that approximately 8,000 people are bitten by poisonous snakes each year in the United States. About 6,800 bites are reported.[1] The bite is lethal for only about 12 of these, representing a fatality rate of 0.18%.

Of the 120 species of snakes found in the United States, only 20 are poisonous. Two families of poisonous snakes are found in the southeastern United States — *Viperidae* and *Elapidae*. The first family is better known as the pit viper and includes the rattlesnake (Crotalus), the cottonmouth moccasin (Agkistrodon piscivorus) and the copperhead (Agkistrodon contortrix). Rattlesnake bites cause 70% of snakebite deaths with cottonmouth moccasins and coral snakes next in order of frequency. No deaths from copperhead bites have been reported since 1950.[2] Comparison of the venom of the copperhead and eastern diamondback rattlesnake show the toxicity of the copperhead to be 10 times less than the rattlesnake.[3]

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Reprint requests to Dr. Carter

More than 98% of snakebites occur on the extremities, mostly on the feet and legs. The severity of injury ranges from local skin necrosis to joint disability, loss of digits, or even amputation of the extremity. A direct relationship exists between the therapy administered and the resulting functional disability.

The course and treatment of the following two patients are presented to illustrate pertinent pathophysiologic features as well as the suggested therapy for venomous snakebites of the extremities.

Case Report 1:

A 22-year-old man, a university zoology major, was reportedly bitten by a copperhead approximately 30 minutes before admission to the North Carolina Memorial Hospital. Upon arrival he was extremely hyperexcitable, the blood pressure was 154/90 mm Hg, the pulse rate 122 per minute and the respiratory rate 16 per minute. Shortly thereafter the patient began having numerous diarrheal stools accompanied by vomiting and severe abdominal cramps. When he became hypotensive to 60/0 mm Hg, fluid was given intravenously and epinephrine and isoproterenol administered.

The bite was approximately four inches proximal to the lateral malleolus of the left lower extremity. A loose tourniquet had previously been placed near the site of the bite and ice packs had been applied to the area.

After resuscitation, the site of the bite was widely excised down to the underlying fascia. Examination of the wound disclosed no significant swelling or localized hemorrhagic changes in the subcutaneous tissues. This finding suggested that the patient's systemic symptoms were probably due to an intravenous injection of the venom.

The patient's history is important because of an allergic reaction to antivenin administered for a previous copperhead bite. Also, a year before the present bite the patient experienced a rattlesnake bite and at that time a strongly positive skin test for sensitivity to antivenin was noted. It was elected not to administer further antivenin to this patient.

After excision of the site of the bite, profuse bleeding occurred at multiple venipuncture sites. Coagulation studies revealed prothrombin time 22.1 seconds, control 12.9 seconds, partial thromboplastin time (PTT) 60.5 seconds, control 53.9 seconds, thrombin clotting time (TCT) 25.2 seconds, control 13.0 seconds and a platelet count of 60,000. Fresh frozen plasma, platelets and fresh whole blood were then given. After 36 hours the prothrombin time was 14.6 seconds, PTT 54.9 seconds, TCT 19.7 seconds and the platelet count 92,500.

During the first 12 hours after the bite the entire left lower leg became

Fig. 1. The site of the bite after 12 hours. Note the large vesicular blebs.

markedly swollen with poorly palpable dorsalis pedis and posterior tibial pulses (Figure 1). Eighteen hours after the bite, pulses were absent upon Doppler examination. A subcutaneous fasciotomy was done without improvement of blood flow to the foot so extensive open fasciotomies were performed laterally and medially along the entire aspect of the lower leg (Figure 2). Large bulging hemorrhagic calf muscles were noted after these fasciotomies. Excellent posterior tibial and dorsalis pedis pulses were then evident upon Doppler examination.

During the next three days the patient developed anasarca with massive penile and scrotal edema. Despite numerous blood transfusions his hematocrit remained between 25 and 28 volumes%. On the fifth day he developed gross hematuria, fever to 104° F and marked abdominal tenderness. From the sixth through the ninth days a progressive decrease in renal function was evident with the BUN rising from 21 mg/dl to 77 mg/dl and the creatinine from 1.2 mg/dl to 5.3 mg/dl. The serum complement level (C_3) was 90 mg/dl on the seventh day and 164 mg/dl on the 13th day (normal range is 90-185 mg/dl). On the seventh day an intravenous pyelogram revealed no ureteral obstruction. An antibiotic regimen of oxacillin and gentamicin was then instituted. Renal failure was considered to be secondary to an allergic glomerulitis with acute tubular necrosis. On the ninth day a Scribner arteriovenous shunt was placed in the right ankle for hemodialysis which was performed seven times between the ninth and the 18th hospital days.

The patient also developed pulmonary edema and cardiomegaly that responded satisfactorily to administration of furosemide. On the ninth day the total bilirubin was 17.1 mg/dl, direct 10.2, indirect 6.9, serum glutamic oxaloacetic transaminase (SGOT) 265 SF units/ml, serum glutamic pyruvic transaminase (SGPT) 91 SF units/ml and the serum alkaline phosphatase 6.7 NP units/ml. During the following two weeks the patient's renal and liver functions returned to normal. During this time the patient was taken to the operating room every two to three days where dressings were changed under general anesthesia. The fasciotomy sites were temporarily covered with porcine split thickness skin grafts; the wound remained clean without evidence of infection. Allografts of split thickness skin were applied to the fasciotomy sites on the 27th day and the Scribner shunt was removed from the right ankle. On the 33rd day the patient, walking with crutches, was discharged from the hospital.

Case Report 2:

A 22-year-old woman received a copperhead bite on the right small finger while picking strawberries in her garden. She was examined about 15 minutes later at the North Carolina Memorial Hospital. Her vital signs were normal and there were no symptoms or signs referable to the cardiorespiratory or central nervous systems. Two fang marks surrounded by an area of ecchymosis were present over the volar aspect of the distal phalanx. The puncture site appeared to represent right angled wounds. These

Fig. 2. The fasciotomy wound with bulging calf musculature.

Fig. 3. The small finger 20 minutes after the bite.

were superficially incised and syringe bulb suction applied (Figure 3). About 20 minutes after the bite, moderate swelling of the entire small finger was noted. Progression of the edema led to marked involvement of the entire hand. Except for the ecchymotic area of the fingertip, the finger became blanched and failed to exhibit capillary filling. Vascular embarrassment of the finger secondary to edema was evident. It was then necessary to perform a longitudinal midlateral incision through the skin and subcutaneous tissue of the entire finger in order to relieve circulatory compromise. Dramatic return of blood flow to the finger was noted as this was done. Thrombosed blood vessels near the ecchymotic area were protruding from the subcutaneous tissues at the site of the incision. Within an hour after injury the entire right forearm was moderately swollen. A mildly occlusive immobilization dressing was applied to the hand and forearm with care taken to place the joints of the fingers and the hand in gentle flexion. The right arm was elevated and examined every two hours during the following 12 hours.

The patient received antivenin, two vials intravenously and one vial intramuscularly, after appropriate skin testing and as soon as the edema of the small finger was noted. Intravenous antibiotics, tetanus toxoid and tetanus immunoglobulin were also administered during the initial treatment. Marked decrease in edema of the entire upper extremity was noted after the first 24 hours and thrombosed vessels in the digit evident (Figure 4). The patient was discharged on the fifth day with the previously ecchymotic area superficially nonviable, clean and dry.

Seventeen days after the bite she was readmitted to the hospital for excision of the clearly demarcated zone of necrosis at the volar distal aspect of the digit. Following debridement of the tissues of this area it was noted that the insertion of the flexor digitorum profundus tendon and a small area of bone was exposed. A lateral rotational pedicle skin flap was used to cover the defect and a small full thickness skin graft to cover the donor area of the flap. The patient's postoperative course was not complicated and restoration of function was satisfactory.

DISCUSSION

Clinical manifestations of envenomation depend on numerous factors. Of paramount importance is the amount of venom injected. The initial objective of therapy is to neutralize and control the local necrotoxic and potentially lethal systemic effects of the venom. The age and size of the victim is important. A small child will probably exhibit a greater response to a poisonous bite. The species and size of the snake and the location, depth and number of bites are all significant. If a patient has been bitten previously he may exhibit a marked sensitivity to the venom. The victim's course is certainly dependent upon the type of first aid and medical care he gets. Early administration of specific antivenom or a polyvalent material such as Antivenin® (Wyeth) is indicated and is governed by gradation of subjective and objective clinical responses. It should be pointed out that an estimate of envenomation should not be entirely dependent

Fig. 4. The fasciotomy site after 24 hours.

upon signs of local wound response; of much more clinical significance are the systemic manifestations.

The systemic signs and symptoms usually include weakness and thirst. It is not uncommon to experience nausea, vomiting, diarrhea and accompanying electrolyte imbalance. A loss of intravascular fluid may be evidenced by a weak and rapid pulse, hypotension and even shock. One may experience respiratory distress that requires mechanical assistance. Also ptosis, blurred vision, tingling, numbness and paralysis may be evident. Derangement of clotting factors and marked platelet consumption may lead to severe hemorrhage and anemia. Albuminuria, proteinuria and myoglobulinuria may lead to renal failure that could require renal dialysis. Coma with subsequent death may be the terminal manifestation.

An adequate understanding of the pathophysiologic effects of snake venom is mandatory in considering proper management methods. Neurotoxins in the venom are known to produce pain directly upon contact with nerve endings. They may also act at the myoneural junction producing curare-like effects. Necrosis of soft tissue at the site of bites is the result of complex proteases. Hemolysis is precipitated by phosphotidases. Hemorrhagins damage endothelial cells of small blood vessels causing thrombosis and cellular injury in surrounding tissues. Fibrinogenemia and platelet consumption may progress to marked hemorrhage. A high content of hyaluronidase is present and as a consequence dissemination of the venom is almost entirely via the lymphatics and not exclusively by the blood stream.

With these facts in mind, proper care can be provided. It is important to keep the patient as calm as possible in order to retard absorption of venom. A loosely applied tourniquet placed proximal to the site of the bite is indicated. The tourniquet should be released every 10 to 15 minutes for one to two minutes and then reapplied in a manner that arterial or venous flow will not be occluded. As the swelling progresses the tourniquet should be placed in a more proximal position. The extremity should be somewhat dependent and always below the level of the heart. Cooling of the extremity probably decreases the rate of absorption of venom. It is of utmost importance that one not freeze the surrounding tissues. Ice application should be employed only temporarily in an attempt to control early dissemination of the venom. Incision of the site of the bite followed by suction is certainly indicated.

In order to prevent rapid dissemination of venom, guard against incision into underlying muscle. It has been demonstrated that venom can be suctioned from wounds of experimental animals up to two hours after envenomation.[4]

After beginning measures to combat shock, excision of the site of the bite should be performed. Huang et al, in 1974,[5] in a report of 54 patients with poisonous snakebites, pointed out that 52 were satisfactorily treated by excision of the site of the bite alone, only two requiring antivenin.

If antivenin is administered, it is important to note that polyvalent antivenin is prepared only in horse serum. Therefore, it is mandatory that the patient be tested for horse serum sensitivity either by skin or conjunctival methods. It is estimated that 75% of patients receiving antivenin will exhibit some degree of sensitivity.[6] Broad spectrum antibiotics are indicated because of wound contamination with mixed types of bacteria transmitted by the bite. Tetanus toxoid and/or tetanus immunoglobulin should also be administered.

As the edema of the extremity progresses, one should at all times insure vascular integrity. At the first evidence of a compromised blood supply, extensive open fasciotomies — not closed subcutaneous fasciotomies — should be performed. This procedure will help maintain a satisfactory vascular integrity and prevent deep gangrenous changes that could result in unnecessary deletion of fingers or toes and even amputation of the hand or leg. Consideration of the functional anatomy of the hand or leg should dictate sites for surgical fasciotomies. Care should be taken to prevent injury to subjacent structures such as digital neurovascular bundles, the recurrent motor branch of the median nerve in the palm, various tendon sheaths and the peroneal nerve in the lower leg.

Definitive surgical procedures other than initial incision and fasciotomy should be characterized by conservatism. The surgical approach with respect to early debridement and excision of tissue should be similar to that adopted in the treatment of frostbite.[7] One should allow unquestionable demarcation of skin necrosis before radical debridement. This insures preservation of potential viable tissues and prevents unnecessary amputations. Skin and subcutaneous defects can be usually resurfaced with split thickness skin grafts. Cosmesis is enhanced for dorsal skin defects of the hand if split thickness grafts are used; but when tendon and bone are exposed local or distant composite pedicles are essential.

SUMMARY

The two cases described demonstrate that the bite of a venomous snake is a potential source of serious disability. The important principles of management are stressed. Treatment of snakebite of the extremities terminates only when functional abilities have been restored. This requires diligent, acute, subacute and chronic management. Carefully considered surgical conservatism rather than routine early deletion of digits or early massive excision of tissue is encouraged for such injuries.

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Pulmonary Aspiration — A Life-Threatening Complication in Obstetrics

John R. Ashe, Jr., M.D.

PULMONARY aspiration of gastric contents remains a constant hazard to the obstetrical patient. Approximately 15% of all maternal deaths are related to anesthesia[1] and over half of these deaths may be due to aspiration of gastric contents.[2] Therefore, obstetricians, anesthesiologists and nurse anesthetists must be constantly aware of this potential hazard in relation to obstetrical anesthesia. The following case report illustrates the seriousness of this complication.

CASE REPORT

A 19-year-old woman, Para 0, EDC March 15, 1974, was admitted to the hospital on March 13, 1974, with a history of irregular uterine contractions and leakage of fluid of five hours' duration. She had eaten a full meal two hours after the contractions began. On admission the fetal heart rate (FHR) was 60 per minute. The patient was placed in the Trendelenburg position and the FHR increased to 180 per minute. The cervix was 3 cm dilated and there was a double footling breech presentation with an occult prolapse of the umbilical cord. Preparations were made for an immediate cesarean section. The nurse anesthetist who evaluated the patient elected crash induction of general anesthesia because of a full stomach, marked obesity and fetal distress. Immediately after intravenous administration of sodium thiopental and succinylcholine, the patient vomited a large amount of gastric contents and aspiration occurred. An endotracheal tube was inserted and repeated tracheal suction removed liquid and small solid particulate matter. The general condition of the patient appeared to be satisfactory and cesarean section was performed with delivery of a living female infant weighing 9 lbs. 5½ oz. in satisfactory condition. One gram of methylprednisolone sodium succinate and two grams of sodium cephalothin were given intravenously during surgery. After surgery the respiratory rate was 24 per minute and the lungs were clear to auscultation. Three hours after aspiration, the patient developed tachypnea with a respiratory rate of 94 per minute, cyanosis and dyspnea. A chest x-ray taken at this time revealed diffuse mottling of both lung fields suggestive of aspiration pneumonitis (Fig. 1). Arterial blood gases were pH 7.36, PO_2 45 mm Hg, PCO_2 29 mm Hg, HCO_3 17 mm/l. The patient was given oxygen by nasal tube and then by mask with no improvement in arterial blood gases and a worsening of her general condition with evidence of fatigue due to increased respiratory effort. A repeat chest x-ray revealed an extensive pneumonic process consistent with severe aspiration pneumonitis (Fig. 2). A central venous pressure catheter was inserted and the central venous pressure, measured at 30-minute intervals, remained below 10 cm/H_2O throughout. Twelve hours after aspiration, a nasal endotracheal tube was inserted and the patient was placed on a Bennett MA-1 Respirator with an oxygen concentration of 40% and a tidal volume of 800 ml. Arterial blood gases 20 minutes after being placed on the respirator were PO_2 75 mm Hg, PCO_2 32 mm Hg, pH 7.47. At this stage the patient was calm, relaxed and appeared to be greatly improved. A nasogastric tube was inserted at the time of intubation and 300 cc of fluid was aspirated from the stomach. The gastric pH was measured every four hours and 30 cc of magnesium-aluminum hydroxide given in the nasogastric tube if the pH was less

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Presented at the Thirty-seventh Annual Meeting of the South Atlantic Association of Obstetricians and Gynecologists, Hot Springs, Virginia, February 2-5, 1975.

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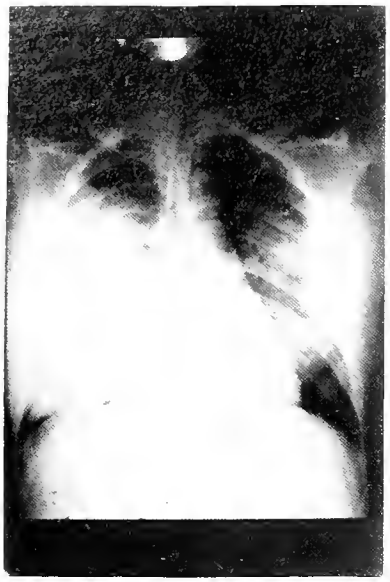

Fig. 1: Chest x-ray three hours after aspiration shows diffuse mottling of both lung fields and suggests aspiration pneumonitis.

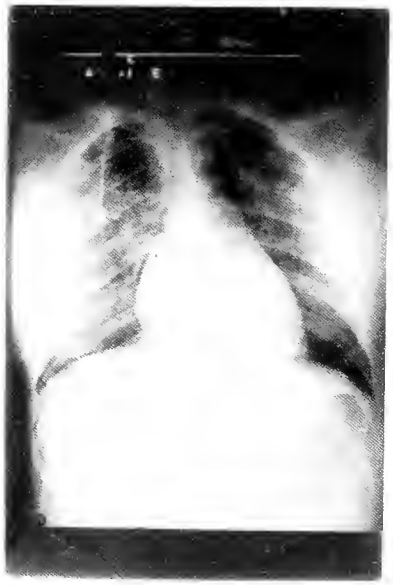

Fig. 2. Chest x-ray 24 hours after aspiration shows extensive pneumonitis.

than 5. Furosemide (20 mg) was given intravenously and diuresis followed. Methylprednisolone sodium succinate was continued — 0.5 g intravenously every six hours for four doses and then 40 mg intravenously every six hours for four days. Sodium cephalothin, penicillin G and clindamycin phosphate were given intravenously as prophylactic antibiotics. Ventilation problems occurring after 48 hours required removal of the endotracheal tube and the performance of a tracheotomy. The patient remained on the respirator for three days until the arterial blood gases returned to normal with inspiration of room air. The tracheotomy tube was removed after six days and the patient was discharged from the hospital on March 27, 1974, when the chest x-ray was normal.

DISCUSSION

In 1946, Mendelson[3] described the pathophysiological changes in the lungs following aspiration of liquid gastric contents which he attributed to the irritating effect of hydrochloric acid with the production of bronchiolar spasm, peribronchiolar congestion and exudative reaction. Subsequent studies[4] concluded that the syndrome occurred only if the pH of the aspirate was less than 2.5 and the volume greater than 25 cc. The time of onset and the severity of the syndrome depend on the volume and the pH. There may be a lag phase of two to four hours before onset of the syndrome. Aspiration of a large volume of gastric contents with a pH less than 2.5 leads to apnea followed by rapid shallow respirations as a result of bronchiolar spasm. A rapid fall in PO_2 occurs and serial arterial blood gases demonstrate a persistent low PO_2 which only increases following the administration of supplemental oxygen by positive pressure. The onset of the syndrome may be rapid with the occurrence of cyanosis, dyspnea, tachypnea, tachycardia and shock. Examination frequently reveals generalized bronchospasm with sibilant rales and rhonchi heard throughout both lung fields. Pulmonary edema, due to direct capillary damage and associated with a low central venous pressure, frequently occurs and may be followed rapidly by death. Cameron[5] reported the overall mortality to be 62%. If only one lobe of the lung was involved the mortality rate was 41%. If two or more lobes were involved the mortality rate was 90%. The pH of the acid gastric contents is rapidly neutralized in the lungs by the copious outpouring of a pink transudate causing the lungs to become edematous and heavy. This loss of plasma in the lungs may result in hemoconcentration and shock.

The obstetrical patient is particularly vulnerable to pulmonary aspiration of gastric contents because of the relaxed gastroesophageal sphincter, elevated intragastric pressure due to the enlarged uterus, decreased gastric motility and diminished gastric emptying time during labor. Fifty-five percent of intrapartum patients have greater than 40 cc of gastric juice and 42% have a pH less than 2.5[6]. Roberts[7] defined the patient at risk as one with 25 cc or greater liquid gastric content and a pH less than 2.5. In a study of patients undergoing cesarean section, he found that one in four of those in labor or those having elective cesarean section with fasting for eight hours were at risk. Pressure on the abdomen during delivery and the loss of the gag reflex during anesthesia may be contributing factors in the aspiration of liquid gastric contents.

The diagnosis of acid aspiration pneumonitis requires a high index of suspicion. The earliest warning may be the appearance of gastric contents in the pharynx or mouth during or after anesthesia for delivery. Unexplained cyanosis, dyspnea, tachypnea and hypotension should arouse suspicion. Arterial blood gas studies will demonstrate a low PO_2 with failure to improve when supplemental oxygen is administered in low concentrations. Chest x-ray shows a diffuse patchy infiltration resembling bronchopneumonia. The sudden onset of pulmonary edema with associated low central venous pressure is indicative of aspiration pneumonitis.

Early recognition and immediate treatment is necessary for survival of the patient. Prompt suction of the tracheobronchial tree for removal of liquid and particulate matter should be performed if aspiration is suspected. Pulmonary lavage with sodium bicarbonate has been tried but has been of questionable benefit. Bronchoscopy should only be performed for the removal of solid material causing airway obstruction. Evidence has been presented that massive (pharmacologic) doses

of intravenous corticosteroids when given early may be beneficial in reducing the amount of pulmonary damage produced by acid aspiration. Baggish[4] recommends doses of 1 gm of hydrocortisone every six hours for 24 to 48 hours followed by 1 gm per day for another 24 to 48 hours. The therapy is then stopped without a period of tapering. It may be necessary to insert an endotracheal tube or to perform a tracheotomy and to mechanically ventilate the patient with a volume ventilator with an increase in oxygen partial pressure. This treatment is monitored by arterial blood gas studies. Frequent hematocrits are performed and plasma substitutes are given to overcome hypovolemia. The central venous pressure should be determined serially and will remain low unless congestive heart failure occurs. Wide spectrum antibiotics and meticulous sterile technique should be employed to avoid the occurrence of secondary pulmonary infection. A falling pH and PO_2 with associated pulmonary edema are grave prognostic signs and indicate extensive pulmonary damage.

All obstetrical patients should be instructed to avoid the ingestion of liquids or solids after the onset of labor. Attempts to empty the stomach of the patient during labor by either nasogastric tube or administration of apomorphine have not been successful and may be hazardous. The use of regional anesthesia reduces but does not eliminate the risk of aspiration. Crash induction of general anesthesia and tracheal intubation will reduce the hazard of aspiration. The Sellick maneuver of cricoid compression of the esophagus may reduce the incidence of regurgitation but this requires a trained assistant and may lead to rupture of the esophagus if vomiting occurs. Allowing the patient to awaken and suctioning the pharynx prior to extubation is also a useful, preventive measure. The head-up position of 20-30 degrees has been recommended for induction of anesthesia but makes intubation more difficult. Awake intubation employing local anesthesia has been recommended but aspiration may still occur. Recent studies by Taylor and Pryse-Davies[6] and Roberts[7] have shown the effectiveness of antacids in neutralizing the acidity of gastric contents and thereby minimizing the risk of the development of Mendelson's syndrome in the event of pulmonary aspiration. It is, therefore, recommended that all obstetrical patients receive an antacid such as aluminum-magnesium hydroxide on admission to the labor room and every three hours during labor. Patients for emergency or elective cesarean section should receive an antacid within an hour prior to the induction of anesthesia.

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I now come to an important class of remedies for the lessening of morbid sensibility of the nervous system — namely, the vegetable bitters and tonics. The state of the appetite being a pretty fair index of the state of digestion, experience, in all ages, has confirmed the benefit to be derived from this class of medicinal substances in dyspepsia, when carefully managed. It is a well-known truth, that debility is the parent of irritability, and it is on this principle only that tonics can be safely employed. But when irritability is great, tonics do more harm than good; and, in fact, increase instead of diminishing the morbid sensibility of the stomach and bowels. On this account, they cannot be safely employed till the irritability is reduced to a certain point by mild diet and by soothing medicines, when they may be applied with the most decidedly good effects. If they are given before this reduction of morbid sensibility, they produce great disturbance in the system, and I am confident they frequently change irritation into inflammation. — *An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 83.

The Retrosternal Foramen of Morgagni: Massive Small Bowel Herniation

W. Randolph Chitwood, Jr., M.D., Robert L. Barnes, M.D., and Raymond W. Postlethwait, M.D.

GIOVANNI MORGAGNI'S genius was not only in his descriptions of postmortem anatomic findings but in his detailed correlation of these with prior clinical symptoms. From his cases at Padua, he first described syphilitic aneurysm of the aorta, heart block, aortic valvular stenosis, vegetative endocarditis and yellow atrophy of the liver. His masterwork, *De sedibus et causis morborum* (*The Seats and Causes of Disease*), published in 1761, was based on 640 postmortem examinations with emphasis on premortem symptoms. In volume three of the English translation, published eight years later, Morgagni described a peculiar hernia that occurs "betwixt the fibers that come from the pars sternalis and the neighboring fibers of the pars constalis."[1] Since that time, defects in this region have retained the eponym of foramen of Morgagni. In 1928 Harrington redescribed the Morgagni hernia and proposed the classification of diaphragmatic defects now in use.[2] Most modern series concerning this lesion are small. The following patient represents several anatomic and symptomatic manifestations not usually found with Morgagni hernias.

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CASE REPORT

A 59-year-old man had been in good health except for occasional chest pain and dyspnea on exertion. He had no known history of pulmonary disease or myocardial infarction. One week before evaluation, he developed progressively increasing dyspnea, early morning cough with sputum production as well as significant orthopnea. He had noted occasional abdominal fullness but no other gastrointestinal symptoms. Respiratory distress developed and he was admitted with the tentative diagnosis of congestive heart failure. A chest x-ray taken one year before admission had shown a moderately elevated right hemidiaphragm.

Physical Examination

The patient's blood pressure was 115/70 mm Hg and his cardiac rate was 90 and he was tachypneic with 35 respirations per minute. He was a well-developed man in moderate respiratory discomfort. Pertinent chest findings included dullness to percussion, decreased breath sounds bilaterally, bowel sounds in the right hemithorax, decreased diaphragmatic excursion and moist rales at the left base. No cardiac gallops or murmurs were present. Minimal tenderness was present in the right upper quadrant and the liver was 2 cm below the right costal margin. Bowel sounds in the abdomen were hypoactive and of normal frequency.

Laboratory Data

The hematocrit and white cell count were 45% and 7,500 mm^3. Serum electrolytes were unremarkable. An electrocardiogram showed an old anterior myocardial infarction, first degree heart block and left anterior hemiblock with left axis deviation. Arterial blood gases were as follows: pO_2 of 65 mm Hg, pCO_2 of 52 mm Hg and pH of 7.42 on room air. Pulmonary function tests were consistent with significant obstructive and restrictive disease.

A chest x-ray at admission showed opacity within the right chest which appeared to be gas-filled loops of bowel on both the anterior-posterior and lateral views (Figure 1). Barium enema showed part of the ascending and most of the transverse colon entering the right chest through an anterior diaphragmatic defect. The lateral view

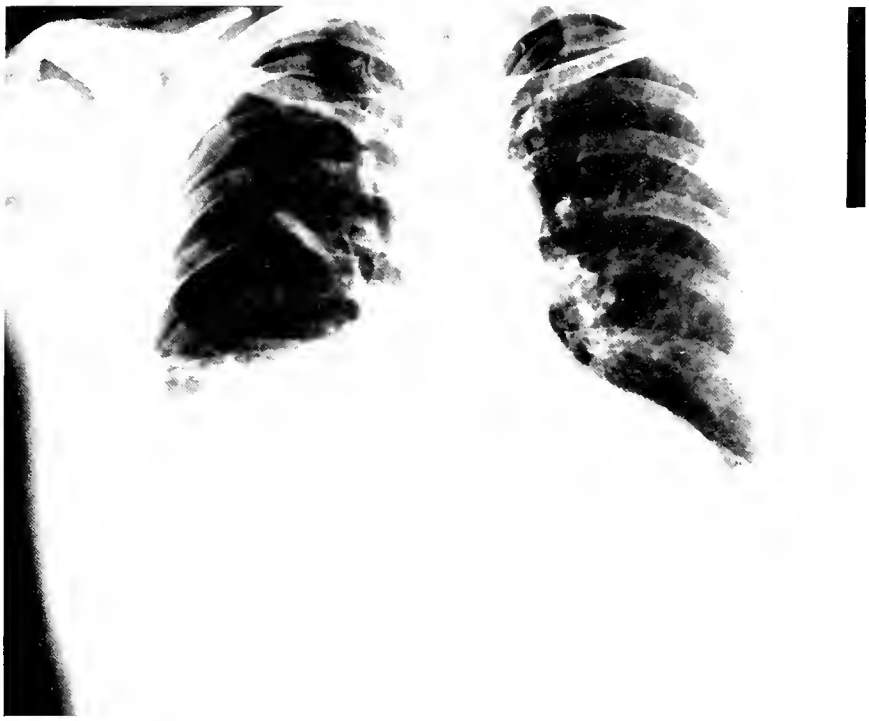

Fig. 1. Posterior-anterior chest x-ray showing what appears to be an elevated right hemidiaphragm. Blunting of both the cardiophrenic and costophrenic angles is noted.

was most valuable for diagnosis (Figure 2). The upper gastrointestinal series suggested that almost the entire ileum and jejunum were herniated into the right hemithorax (Figure 3). In the mid-esophagus, a small traction diverticulum was present.

Operation

The abdomen was explored through a right subcostal incision, and an 8 cm defect was found in the right hemidiaphragm. Through the defect, omentum and small and large bowel were massively herniated into the chest. These components were returned to the abdominal cavity. Next, the peripheral edges of the sac were excised. Using heavy nonabsorbable suture material, the edges of the retrosternal defect were approximated. No operative complications developed.

The patient was uneventfully extubated the day after surgery and his preoperative symptoms disappeared rapidly. The remainder of his hospitalization was unremarkable.

DISCUSSION

The retrosternal defect known as foramen of Morgagni is interesting not only from the historical and clinical views but from the developmental and anatomic aspects. Diaphragmatic development occurs within the eighth to tenth week of fetal life. Anlage contributing to the adult structure include the septum transversum, dorsal mesentery of the esophagus, pleuroperitoneal folds and projections of the lateral body wall.[3] If the retrosternal portion of the septum transversum fails to form and myogenesis from cervical myotomes is incomplete, Morgagni herniation results.[3,4] More than 90% of these hernias have an associated sac.[5] As diaphragmatic embryogenesis is temporally related to sternal development, some feel that incomplete fusion of the sternum may contribute to a retrosternal defect.[4] The Morgagni hernia should be distinguished from the posterior pleuroperitoneal defect described by Bochdalek[7] (Figure 4). Correlation with generalized embryogenic imperfection is shown by occasionally associated anomalies such as dextrocardia, hypospadia, mental retardation and tetralogy of Fallot.

The Morgagni hernia is rarer than either the Bochdalek defect or hiatus hernia. Comer and Clagett's series at the Mayo Clinic from 1934 to 1966 included 54 (3%) Morgagni hernias among 1,750 diaphragmatic defects.[4] Other series have shown a similar ratio.[5-8] Classically, the defect is in the attenuated anterior diaphragm where the muscular fibers fail to fuse with the sternum. Ninety percent of Morgagni hernias occur on the right side because of reinforcement by the pericardium and heart on the left.[9,10] Comer and Clagett's series described four bilateral defects.[4] This is in contradistinction to Bochdalek hernias which are 85% left-sided.[7] Most commonly, omentum is prolapsed into the thorax; however, the transverse colon is found within the chest in 60% of Morgagni hernias[7,11] (Figure 2). Occasionally, the ascending colon, liver and stomach are present.[11] The case presented here represents prolapse of almost the entire small bowel in addition to the transverse colon (Figure 3). This is quite unusual; only one case of 54 described in the recent Mayo Clinic series had any small intestinal component.[7] Prior to our report, a case with the *entire* ileum and most of the jejunum had not been described. Obstruction is not a problem with an aberrant colon but could occur with a highly mobile intrathoracic small bowel.[12]

Symptoms associated with Morgagni hernias have varied in previously reported patients, but many have been asymptomatic. Chin and Duscesne found only 5 of 27 patients with clinical symptoms.[13] The most common symptoms are substernal fullness, epigastric cramping and occasional vomiting.[7,9,12] Unlike Bochdalek herniation, respiratory distress is infrequent and of insidious onset with anterior defects. However, dyspnea, cough and recurrent pulmonary infections have been present.

Most commonly the diagnosis of Morgagni hernia has been made radiographically.[12] Auscultation of bowel sounds within the chest, as seen in this case, is a rarity.[7,11] Generally, the physical examination is of little help in determining the diagnosis. The most typical x-ray presentation is a rounded shadow in

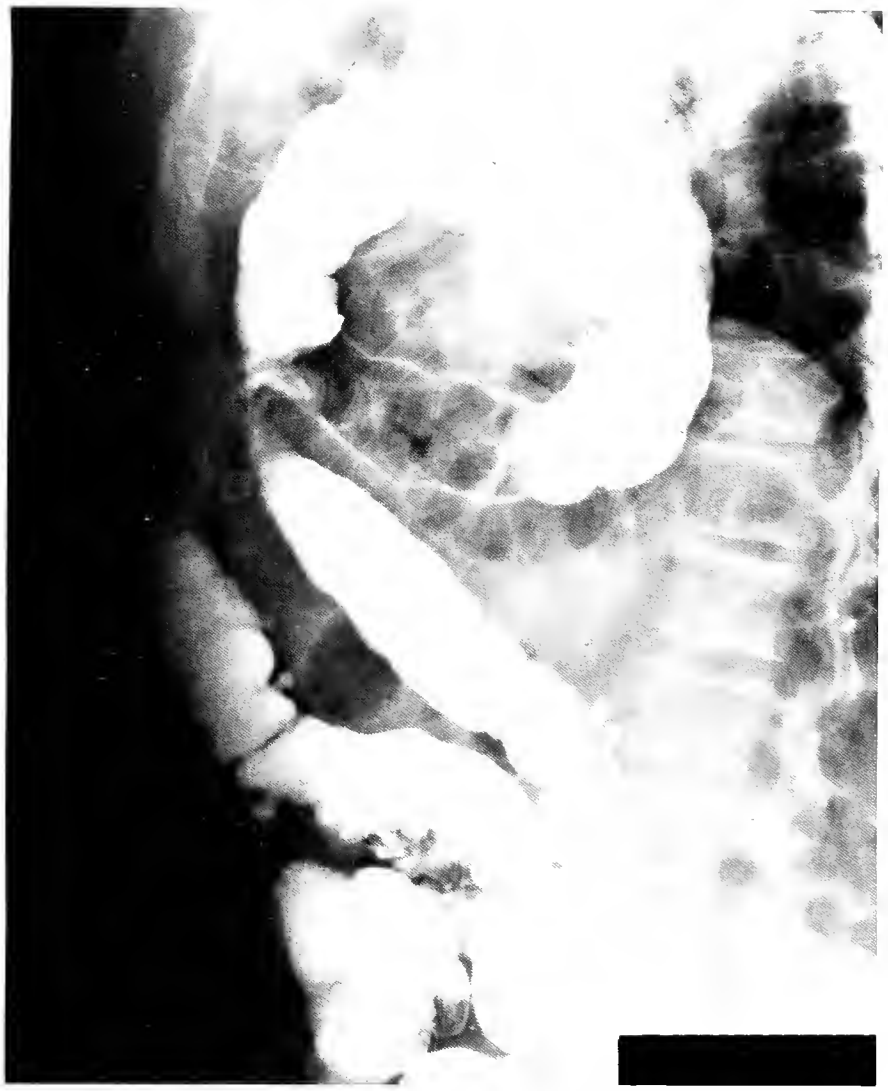

Fig. 2. Lateral view of the barium enema. The colon is seen entering the chest through an anterior diaphragmatic defect thus making the diagnosis of Morgagni hernia. Multiple diverticulae are present.

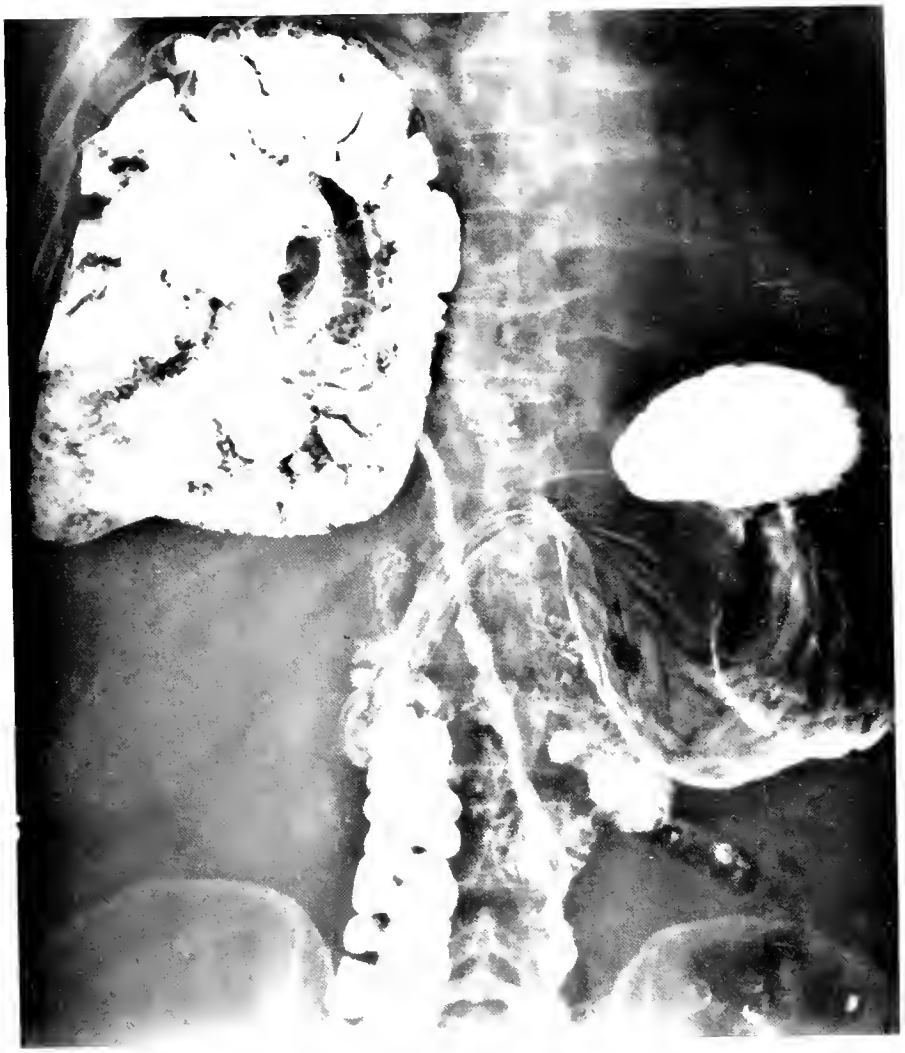

Fig. 3. Anterior-posterior view of the upper gastrointestinal series. Massive quantities of small bowel are seen in the right hemithorax.

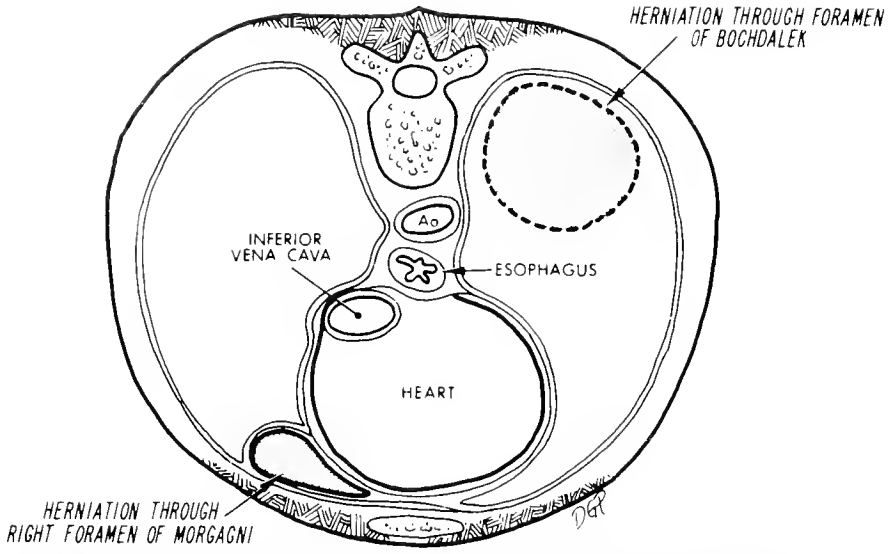

Fig. 4. Superior diaphragmatic surface showing the location of this right-sided retrosternal hernia of Morgagni. The defect seen with the Bochdalek hernia is also illustrated.

the right costophrenic angle. Opacity will be seen if any omentum has herniated into the chest; however, if the bowel is prolapsed, radiolucency will be apparent.[4,7] Teratoma, lymphoma, pericardial and pleural cysts can mimic retrosternal hernias radiographically. For the definitive diagnosis, barium enema is the most helpful since the colon is often constricted as it enters the chest anteriorly (Figure 2). Since the small bowel is rarely present, an upper gastrointestinal series is of secondary importance. Most recent authors feel that pneumoperitoneum is not necessary and may be harmful.[4,6]

Controversy exists over the approach to repairing of the Morgagni defect.[4,10,12] The abdominal approach used in the case presented here allows reduction of large amounts of bowel with facility. Bilateral hernias and other abdominal anomalies can be repaired easily with this method. Nevertheless, some surgeons have continued to use the transthoracic repair. Comer and Clagett's series had no deaths or serious complications associated with the abdominal approach.[4]

In summary, this interesting type of diaphragmatic hernia is rare. However, when suspected it should be correctly diagnosed. If the patient is symptomatic, the benefits of repair are self-evident. When an asymptomatic anterior thoracic mass is present, surgical exploration will differentiate the Morgagni hernia from other potentially malignant pathology.

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Acknowledgment: Medical illustration courtesy of Don Powell.

It is well known to surgeons, that the nitrate of silver is one of the most powerful means of allaying irritability, when applied externally to painful and irritable sores. It is also well known that this medicine may be given internally to the extent of several grains daily, for months in succession, in cases of epilepsy, and that without producing any bad effect. Indeed, it is now almost the only remedy on which any dependence is placed in the above-mentioned formidable complaint. My attention was first excited towards its effects on the stomach and bowels, some years ago, while exhibiting it to a young gentleman employed in a public office of this metropolis, who laboured under epilepsy, and who, at the same time had the usual symptoms of dyspepsia, and great irritability of the stomach and bowels. Considering the latter complaint as one of minor consequence, I gave the nitrate of silver alone, beginning with half a grain thrice a day, in crumb of bread, and gradually increasing it to two grains thrice in the 24 hours, beyond which I did not carry the dose. After the first month he had no return of the epilepsy; but the medicine was continued till the expiration of three months when it was finally left off. He took no other medicine whatever; and in the course of the three months he was completely cured of all his dyspeptic symptoms. —*An Essay on Indigestion; or Morbid Sensibility of the Stomach & Bowels*, James Johnson, 1836, p 84.

Editorials

MEETING OF THE EXECUTIVE COUNCIL AT MID PINES
September 26, 1976

Although the calendar tells us that fall begins September 21, psychologically autumn is marked by the opening of school. For a few, however, the starting time is the day of the regular fall meeting of the executive council of the North Carolina Medical Society. So for them, fall dates from September 26 this year when president Jesse Caldwell, Jr., called the council to order and managed throughout to keep it orderly by gentle but firm application of the rules for parliamentary procedure, those directives which stand as reliable protocol for representative democratic procedure.

The council first stood to the escorting to the podium of Mrs. Martha Martinat, president of the auxiliary, who deftly described the enlightened advocacy by which the 51 organized auxiliaries in this state raise money for medical schools and student loans, stimulate communities and ensure good works. Membership now stands at 2,960 and has increased annually since 1970, sound testimony that the ladies have something to offer the state and each other, as well as to their physician husbands.

To be aware of the constantly changing definitions of the marketplace and of the government, it is essential if we as physicians are to maintain the flexible capacity to recognize and respond promptly to public and professional needs, one of the functions of the council on Review and Development. The report of the council, presented by chairman Frank Reynolds, reflected their realization that nothing endures without remodeling and their dedication to coping with the contradictory demands society imposes. After Dr. Reynolds' rather general report, it was, alas, necessary to attend to the specifics expounded by Dr. Tilghman Herring on behalf of the Committee on Finance. Fiscal legerdemain has enabled the society to maintain a balanced budget while also allowing an appropriate increase in salary for our watchdogs in Raleigh. In addition, it was voted to add the speaker of the house of delegates to the membership of the society's delegation to the AMA clinical session. While we now will have 15 possible members — delegates, alternate delegates, president, president-elect, immediate past-president, secretary and speaker —, many of them will wear more than one hat. The council also recognized the imminence of an increase in dues for members. We have not suffered an increase in nine years, budgetary requirements increase relentlessly and the adroitness of the committee has approached its outer limits.

The council, in keeping with recent changes in laws governing such matters, mandated certain alterations in our retirement plan for employees, properly because of our responsibility to them. It also assented to the establishment of a separate section on nuclear medicine, allowed the Committee on Sports Medicine to regain its old name (Committee on Medical Aspects of Sports), accepted the recommendation that Dr. Donald D. McNeill, Jr., be appointed to the Committee on Nominations to fill a vacancy and agreed to accept, through the North Carolina Medical Society Foundation, Inc., the resources of the Joseph Ward Hopper, Sr., Memorial Lectures Trust which will be appropriately expended for lectureships and in other ways for the purposes of medical education.

Having disposed of these matters, the council turned to information and actions generated by the separate commissions and their committees. As usual, and admirably, Dr. Josephine Newell informed us with dispatch that plans for the annual session in Pinehurst May 5-8, 1977, were well along. She also expressed some concern about the society's position in the medical education of its members as to who educates educators, how and when.

With its chairman, Dr. Reginald Harris, ailing abed, the Advisory and Study Commission managed to present its reports with care and succinctness. The council expressed some concern about an HEW pamphlet entitled "Credentialing Health Man Power," questioning its implications and wondering how lucidly HEW would express itself, having made a gerund, credentialing, from a noun without first legislating it into a verb. The commission further joined the auxiliary in urging support of the Health Education Bill to be introduced at the next legislative session and pointed out that the standards in the public schools needed to be raised and that qualified educators in this field were too, too few. The council then approved the resolution presented by Dr. James Davis' Committee on Medical Cost Containment (Dr. Jesse Meredith, Chairman) that we try to do something about it, pondering the ways and means and admitting perplexity. Dr. A. Hewitt Rose, Jr., then spoke briefly for the Administration Commission before we adjourned for lunch.

Bolstered by a good meal, the council returned to consider the deliberations of the eight-armed Public

Service Commission. When its chairman, Dr. Phillip G. Nelson, returned to his seat, the council had at his behest opposed unskilled, non-professional midwifery, blessed dissemination of the Uniform Tissue Donor Card and invited the auxiliary to participate in a program to this end, agreed to sponsor a statewide seminar on medicine and religion in 1978, urged proper utilization of Alcohol Beverage Control funds for programs for the control of alcoholism, discussed drug abuse and filed a number of items for future reference or for archival oblivion.

Since the physician works best one-to-one and may be dismayed when he is called upon by mass media, it is essential to be concerned about how we appear to the public, that we seem neither aloof nor groveling. Hence the committees comprising the Public Relations Commission find their work is never done. The Medical-Legal Committee, for example, reported that it is carefully observing maneuvers in another state where medical personnel are being urged to bear tales which might be exploited in litigation and so introduced the council to barratry. (Law. Persistent incitement of litigation). Information was also brought about legislation which may well be introduced into the next assembly to empower optometrists to write prescriptions for diagnostic purposes and concern was expressed about the adequacy of their preparation for such activity. If diagnosis be here, can therapy be far behind? The council exercised clear vision by opposing the giving of drug samples of ophthalmic preparations (except as related to contact lens) to nonphysicians as not being in the best interest of the public and by urging that the state of North Carolina not participate in sponsoring the establishment of a School of Optometry here or across our borders. The council also endorsed legislation to develop in 1977 a statewide physical fitness program without making participation by its members compulsory. Our president was empowered to urge our congressional representatives to oppose HR 4319 which would set federal quality standards for clinical laboratory medical testing, not because laboratory standards are opposed but because the bill as offered was both too restrictive and too discriminatory to achieve its purposes fairly. The commission presented as its finale Dr. John McCain from the Public Relations Committee, who offered a program as to what we should do now and tomorrow and tomorrow in this important field.

Dr. Frank Sohmer was then afforded the opportunity to finish the session by presenting a brisk and brief report, a challenge to which he responded admirably. After endorsing appropriate institutes and seminars at his request, the motion to adjourn was clearly heard and acted upon with unanimity.

THE WAYS OF THE SERPENT

From ancient mythology to modern science, the snake has maintained its status as symbol, threat and object of curiosity. Looking at Eden or at the caduceus, we find the snake has insinuated itself into both science and religion, into one as the symbol of benevolent knowledge, into the other as the herald of evil. So most of us give snakes a wide berth in nature but are fascinated when we read about them. Remember RIKKI-TIKKI-TAVI, the mongoose in Kipling's *Jungle Book* who thrilled us by killing "Nag, the big black cobra and he was five feet long from tongue to tail" and "Nagaina, Nag's wicked wife," the Lady Macbeth of the story, and consider cults who convert the handling of poisonous snakes into religious rites and get their day in the Supreme Court because of it.

Snakebites must have come before ritual because creatures aren't worshiped or incorporated into myth until they have behaved in the manner contrary to what is expected of them. As Carter and Bevin emphasize in this issue of the Journal, evidences of tissue damage appear so quickly after snakebite that it must have been easy for ancients to see something supernatural in a creature whose touch is so rapidly destructive to man. Now investigations by Warrell and his co-workers[1] have provided some explanation for the rapid necrosis and hemorrhage which is so characteristic of snakebite. They found, studying 14 patients bitten by the spitting cobra (Naja nigricollis), that clot lysis is prolonged, that there is often striking depletion of the third component of complement and that there is an increased urinary excretion of the products of fibrin degradation after injury. Interestingly, the serum complement of their first patient was found by Carter and Bevin to be at the lower limit of normal seven days after he was bitten. Unfortunately, complement was not measured earlier but by the 13th day its concentration was in the high normal range. This patient's course is also of particular interest because of the development of acute renal failure, an extremely rare complication of snakebite poisoning.[2] Perhaps complement depletion was involved in the development of the renal lesion; localization of complement in glomerular structures has been demonstrated in many processes by immunofluorescence. Prospective studies, including renal biopsy when indicated, may tell us more about the mechanism of injury by snake venom and repay some of the curiosity that snakes have stimulated in man through the centuries.

J.H.F.

References

1. Warrell DA, Greenwood BM, Davidson N McD, et al: Necrosis, hemorrhage and complement depletion following bites by the spitting cobra (Naja nigricollis). Quart J Med 45: 1-22, 1976.
2. Seedat YK, Reddy J, Elngton DA: Acute renal failure due to proliferative nephritis from snakebite poisoning. Nephron 13: 455-463, 1974

Correspondence

MUNCHAUSEN'S SYNDROME

To the Editor:

I am engaged in research on Munchausen's (hospital addiction) syndrome and its variants. I would like to correspond with other physicians who have had personal contact with such patients.

S. E. Hyler, M.D.
5620 Netherland Avenue
Riverdale, N.Y. 10471

Committees and Organizations

COMMITTEE ON COMMUNICATIONS

In response to increasing demands from the membership that the North Carolina Medical Society enrich and increase its public relations activity, the Committee on Public Relations has received Executive Council approval of several initiatives.

The recommendations were drawn up by a subcommittee composed of Drs. Elizabeth Kanof, Robert Bilbro and William Burch of Lake Lure after a visit by Dr. John McCain and Dan Finch to the Pennsylvania Medical Society's Department of Communications in August.

The Executive Council approved:

1. Changing the name of the Committee on Public Relations to the Committee on Communications, since the committee's efforts are directed at informing both physicians and the public.

2. Creation of a subcommittee to deal exclusively with public information. This should free the remainder of the committee to handle matters of internal information.

3. A series of weekly health columns to be distributed to daily and weekly newspapers across the state. The columns will include basic health care information and items of medical interest.

4. Preparation of public service announcements for use by radio stations in the state.

The Executive Council accepted as information a request for an additional $25,000 for communications when medical society dues are raised.

The committee also passed two resolutions which were favorably received by the Executive Council.

One calls for cooperation with the North Carolina Hospital Association in improving patient access to educational materials. Dr. Tom Marshburn, a committee member, will work on an innovative proposal from New Hanover Memorial Hospital involving closed-circuit television to take patient education programming into each hospital room.

The other resolution supports the work of the University of North Carolina School of Medicine in the production of health programs to be telecast over the UNC network. If the initial response is favorable, other series using faculty from the state's other medical schools will be prepared.

John L. McCain, M.D.
Chairman
Committee on Communications

Bulletin Board

NEW MEMBERS
of the State Society

Allan, James Thomas, Jr., MD (R), Rt. 3, Princeton Dr., Gastonia 28052
Bowman, Mr. James Thomas, (STUDENT) 3250-F Zuider Zee Dr., Winston-Salem 27107
Boyles, Larry Wayne, MD (N) UNC, 751 Clinical Sciences Bldg., Chapel Hill 27514
Braasch, Lesley Kriegman, MD (P) 4114 Deepwood Circle, Durham 27707
Burke, Mr. Jerry Wayne, (STUDENT) 1036 Avondale Road, Asheboro 27203
Campbell, Donald Barnes, MD (1M) 119 N. Boylan Ave., Raleigh 27603
Cooper, Herbert Asel, MD (CLP) UNC, Dept. of Pathology, Chapel Hill 27514
Daffner, Richard Howard, MD (DR) VA Hospital, Durham 27705
Dalto, Carmine, MD, (Intern-Resident) Apt. 2H, 311 LaSalle St., Durham 27705
Edmiston, Frank Gerald, MD (OM) 108 Hawkins Dr., Greensboro 27410
Elmore, Miles, MD, (1M) 88 Stratford Road, Asheville 28801
Ferguson, James Edward, II, (STUDENT) Student Box 240, Bowman Gray, Winston-Salem 27103
France, Randal Dennis, MD (Intern-Resident) Route 1, Box 200, Durham 27705
Frazier, Harold Leon, MD (P) Ste. 7, 891 W. Willow Dr., Chapel Hill 27514
Goodman, Donald Bruce, Jr., MD (FP) 3535 Randolph Road, Charlotte 28211
Hayward, James Neil, MD (N) UNC, 751 Clinical Sciences Bldg., Chapel Hill 27514
Holscher, Edward Charles, MD (P) Ste. 918, 1900 Randolph Rd., Charlotte 28207
Honeycutt, Lattie Fuller, MD (DR) 3002 St. Regis Rd., Greensboro 27408
Hoover, Mr. Charles Henry, III, (STUDENT) F-11 Carolina Apts., Carrboro 27510
Kelling, Douglas George, Jr., MD (1M) 512 Winfield Blvd., SE, Concord 28025
Labbate, Victor Anthony, MD, (RHU) 399 Biltmore Ave., Ste. G, Asheville 28801
Landau, Richard Lloyd, MD, (PTH) 3022 Courtland Dr., Gastonia 28052
LeBlang, Michael Neal, MD, (FP) 4101 Central Ave., Charlotte 28205
Lipsett, Percival Crafton, MD (OBG) 4029 Woodfox Drive, Matthews 28105
Mayo, James Perry, Jr., (STUDENT) 604 Sugarberry Rd., Chapel Hill 27514
Mazhar, Iqbal, MD (OPH) 422 Peacock St., Ahoskie 27910
McDonough, James Michael, MD (PS) 9 Swan St., Asheville 28803
McGrath, Hugh, Jr., MD (1M) 3535 Randolph Rd., Charlotte 28211
Metcalf, Douglas Lee, MD (Intern-Resident) 1225 Buckingham Ave., Wilmington 28401
Meyers, Ms. Marguerite Evelyn, (STUDENT) 1403 Alabama St., Durham 27705
Moore, Ronald Alvin, MD (1M) 241 Shoreline Dr., New Bern 28560
Morton, Duncan, Jr., MD (PDS) 4013 Beresford Road, Charlotte 28211
Ogle, Benjamin Caswell, MD (AN) 615 Vick Ave., Raleigh 27609
Parker, Charles Lawrence, MD (OBG) 507 Pollock St., New Bern 28560
Ram, Cecil Casper, MD (U) 750-D Hartness Rd., Statesville 28677
Rapoport, Ms. Gloria May, (STUDENT) 123 Barclay Rd., Chapel Hill 27514
Reeder, Alton Alfred, MD (1M) 217 Gatewood Ave., High Point 27262
Roberts, Surry Parker, MD (RHU) St. 118, 1001 Navaho Dr., Raleigh 27609
Ruderman, Robert Jay, MD (ORS) Box 3023, Duke Med. Ctr., Durham 27710
Selle, Jay Gregory, MD (RS) 1960 Randolph Road, Charlotte 28207
Shimm, Cynia Brown, MD (P) 923 Broad St., Durham 27705
Smith, Stephen Wayne, MD (1M) 735 6th Ave., West, Hendersonville 28739
Thomas, Fred Burgess, Jr., MD (Intern-Resident) 120 Taylor St., Chapel Hill 27514
Thrash, William Virgil, MD (1M) 520 Biltmore Ave., Asheville 28801
Thurston, Thomas Gardner, III, MD, (OBG) 315 Mocksville Ave., Salisbury 28144
Wilfong, Robert Farrington, MD (NS) Duke Med. Ctr., Div. of Neurosurgery, Durham, 27710

WHAT? WHEN? WHERE?
In Continuing Education

Please note: 1. The Continuing Medical Education Programs of the Bowman Gray, Duke and UNC Schools of Medicine are accredited by the American Medical Association. Therefore CME programs sponsored or co-sponsored by these schools automatically qualify for AMA Category 1 credit toward the AMA Physician's Recognition Award, and for North Carolina Medical Society Category "A" credit. Where AAFP credit has been requested or obtained, this also is indicated.

2. The "place" and "sponsor" are indicated for a program only when these differ from the place and source to write "for information."

PROGRAMS IN NORTH CAROLINA

January 12

First District Medical Society Postgraduate Course in Medicine (the first of six weekly sessions)
Sponsors: First District Medical Society and the Office of Continuing Education, UNC School of Medicine
Fee: $80 for all sessions or $15 per session
Credit: 12 hours; AAFP approval requested
For Information: David O. Wright, M.D., Secretary, Chowan Medical Center, Edenton 27932

January 21-22

Current Surgical Problems
Fee: $100
Credit: 12 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 26-28

Alcoholism—The Search for the Sources
Place: Governors Inn, Research Triangle Park
Sponsors: North Carolina Alcoholism Research Authority and North Carolina Medical Society
Fee: $30
Credit: 16½ hours approval requested
For Information: John A. Ewing, M.D., Executive Secretary,

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* WARNING
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Preexisting elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy.** Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium® (triamterene, SK&F Co.), and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotics to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion, since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

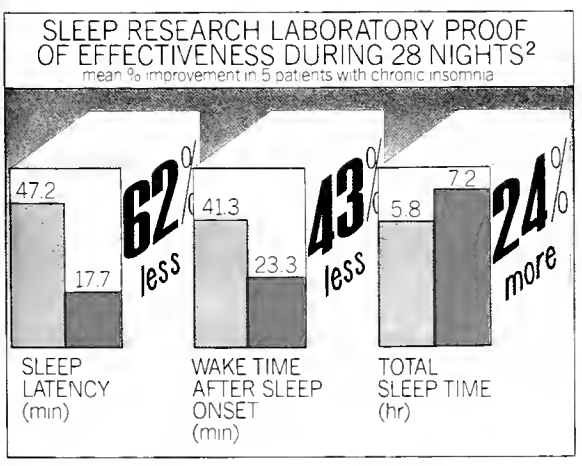
S M T W T F S

For insomnia that is a chronic problem...

Only Dalmane (flurazepam HCl) offers sleep laboratory proof of effectiveness for as long as 28 nights

Continued relief of insomnia in patients with chronic insomnia

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But when insomnia is a chronic or recurring problem, continued effectiveness is as important as initial effectiveness. Results of a recently published sleep research laboratory study[1] demonstrated that, while pentobarbital lost effectiveness within two weeks, Dalmane maintained effectiveness for 28 consecutive nights. Similar 28-night results with Dalmane, displayed below, were obtained by a second sleep research group.[2] In previous studies,[3] both chloral hydrate and glutethimide began to lose effectiveness after several nights, while Dalmane maintained effectiveness throughout the 14 medication nights. Whether the problem is difficulty falling asleep, staying asleep or sleeping long enough, consider these results when selecting a sleep medication.



Patient benefits include relative safety, infrequent morning "hang-over"

Dalmane is well tolerated, seldom causing morning drowsiness or grogginess.[4] No increase in dosage is required for continued effectiveness from night to night.[1-3] Should Dalmane be used repeatedly, periodic blood counts and liver and kidney function tests should be performed. The usual adult dose is 30 mg *h.s.*, but 15 mg may suffice for some patients and is recommended as a starting dose for the elderly and debilitated to help preclude oversedation, dizziness or ataxia.

Continued relief of insomnia: One more good reason to specify

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

whenever a hypnotic is needed

ROCHE

Please see following page for a summary of product information.

Objective proof: continued insomnia relief without increasing dosage...[1,2]

Dalmane®
(flurazepam HCl) ℞ IV

Objectively proved in the sleep research laboratory...

during 28 consecutive nights of administration:

- ☐ **effectiveness with a single 30-mg *h.s.* dose, maintained**
- ☐ **rapid sleep induction, maintained**
- ☐ **sleep for 7 to 8 hours, on average, maintained**
- ☐ **less time awake during the night, maintained**

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

Usage in Pregnancy: **Several studies of minor tranquilizers (chlordiazepoxide, diazepam, and meprobamate) suggest increased risk of congenital malformations during the first trimester of pregnancy. Dalmane, a benzodiazepine, has not been studied adequately to determine whether it may be associated with such an increased risk. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Not recommended for use in persons under 15 years of age. Though physical and psychic dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, limit initial dosage to 15 mg to preclude oversedation, dizziness and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase.

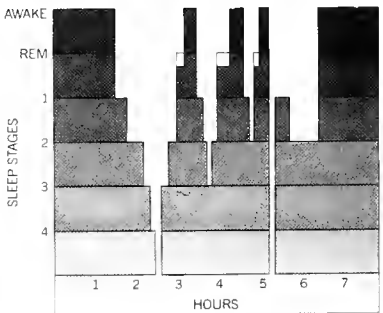
Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Kales A, *et al*: *Clin Pharmacol Ther* *18*:356-363, Sep 1975
2. Dement WC, *et al*: Long-term effectiveness of flurazepam 30 mg *h.s.* on chronic insomniacs. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, Jun 30-Jul 4, 1975
3. Kales A, *et al*: *Arch Gen Psychiatry* *23*:226-232, Sep 1970
4. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

For all common types of insomnia



ROCHE

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

North Carolina Research Authority, 623 E. Franklin St., Chapel Hill 27514

January 28-29

North Carolina Conference for Medical Leadership
Place: Royal Villa Hotel, Raleigh
Sponsor: North Carolina Medical Society
For Information: Mr. William N. Hilliard, Executive Director, North Carolina Medical Society, P.O. Box 27167, Raleigh 27611

February 5

Pediatric Symposium for the Practicing Physician
Place: Velvet Cloak Inn, Raleigh
Sponsors: Wake AHEC and Raleigh pediatricians
Fee: $35 for physicians and $15 for Housestaff
For Information: Mrs. Joann Phillips, C/O Wake AHEC, 3000 New Bern Av., Raleigh 27610

February 5-6

Update in Clinical Anesthesiology
Place: Berryhill Hall
Sponsors: UNC School of Medicine, Department of Anesthesiology and Department of Continuing Education
Fee: $10
Credit: AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

February 10-11

Cancer Control Activities in North Carolina
Place: Royal Villa Hotel, Greensboro
Fee: $20.00
For Information: Diane McGrath, Ph.D., 200 Atlas Street, Durham 27705

February 11-12

American College of Physicians — North Carolina Society of Internal Medicine Annual Meeting
Place: Sheraton Inn, Crabtree Valley Mall, Raleigh
For Information: John T. Sessions, Jr., Department of Medicine, UNC School of Medicine, Chapel Hill 27514

February 13-18

Annual Review Course in Electroencephalography
Place: Duke University Medical Center
For Information: William P. Wilson, M.D., P.O. Box 3838, Duke University Medical Center, Durham 27710

February 16

Wingate Johnson Memorial Lecture
Speaker: Eugene Braunwald, M.D., Harvard Medical School
Credit: 2 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 23-26

Workshop: Electrolyte and Acid-Base Disorders
Fee: $150
Credit: 21 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

February 24-25

Malignant Disease Symposium
Place: Clinic Auditorium, Chapel Hill
Credit: AMA Category 1; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean For Continuing Education, UNC School of Medicine, Chapel Hill 27514

February 26-27

Methods and Treatment in the Use of Psychotropic Drugs
Place: Duke University Medical Center
For Information: Joseph B. Parker, Jr., M.D., P.O. Box 3837, Duke University Medical Center, Durham 27710

March 9-12

Internal Medicine Annual Symposium '77
Place: Berryhill Hall
Fee: $150
Credit: 25 hours; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

March 11-12

Annual E. C. Hamblen Symposium in Reproductive Biology and Family Planning
Sponsors: Duke University Medical Center and the Department of Obstetrics and Gynecology
For Information: Charles B. Hammond, M.D., Box 3143, Duke University Medical Center, Durham 27710

March 12-13

Second Annual Radiology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 18

Myelodysplasia — Orthopedic Course
For Information: Robert J. Ruderman, M.D. Department of Orthopedics, Duke University Medical Center, Durham 27710

March 18-19

Frank R. Lock Obstetrics and Gynecology Seminar
Fee: $100
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

March 28-April 1

Radiology of Bones and Joints
Place: Downtowner Motor Inn, Durham
Fee: $300; registration limited to 100
Credit: 30 hours
For Information: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham 27710

April 1-2

Practical Pediatrics
Fee: $50
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

April 21

Gastrointestinal Bleeding — Wilson Memorial Hospital Postgraduate Symposium
Place: Wilson Memorial Hospital Learning Center
Sponsors: Wilson Memorial Hospital, Wilson Chapter, AAFP and A.H.E.C.
Credit: AMA Category 1; AAFP approval requested
For Information: William Banfield, M.D., Wilson Clinic, Wilson 27893

April 22-23

Third Annual Perinatology Postgraduate Course
Credit: AMA Category 1; AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

April 26-27

Annual Meeting of the North Carolina Thoracic Society
Place: Great Smokies Hilton, Asheville
Sponsor: North Carolina Thoracic Society
For Information: Mr. C. Scott Venable, Executive Director, North Carolina Lung Association, P.O. Box 127, Raleigh 27602

May 4-5

Breath of Spring '77 Respiratory Care Symposium
Fee: $35
Credit: 9 hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

May 5-8

123rd Annual Session of the North Carolina Medical Society
Place: Pinehurst Hotel and Country Club, Pinehurst
For Information: William N. Hilliard, Executive Director, North Carolina Medical Society, Box 27167, Raleigh 27611

May 18-19

The 28th Annual Scientific Sessions of the N.C. Heart Association
Place: Winston-Salem
For Information: Mebane M. Pritchett, 1 Heart Circle, P.O. Box 2408, Chapel Hill 27514

May 20-21

Infectious Disease Symposium
Place: Berryhill Hall
Credit: AAFP approval requested
For Information: Oscar L. Sapp III, M.D., Associate Dean For Continuing Education, UNC School of Medicine, Chapel Hill 27514

May 21-22

Pediatric Respiratory Disease Conference
Place: Duke University Medical Center
For Information: Alexander Spock, M.D., P.O. Box 2994, Duke University Medical Center, Durham 27710

June 13-15

North Carolina Hospital Association Annual Meeting
Place: Grove Park Inn, Asheville
For Information: Mrs. Diane Turner, North Carolina Hospital Association, P.O. Box 10937, Raleigh 27605

June 16-18

Twenty-Fourth Annual Mountaintop Medical Assembly
Place: Waynesville Country Club, Waynesville
Sponsor: Haywood County Chapter of AAFP
Fee: $50
Credit: 12 hours, AAFP approved
For Information: Clinton Border, M.D., 204 Depot St., Waynesville 28786

June 16-19

Seaboard Medical Asso. (of Virginia and North Carolina) Annual Meeting
Place: Holiday Inn, Kill Devil Hills
Credit: AMA Category 1; AAFP approval requested
For Information: Mrs. Annette S. Boutwell, P.O. Box 10387, Raleigh 27605

ITEMS OF SPECIAL INTEREST

January 2-15

Second Medical Refresher Cruise Seminar — (Yucatan Peninsula, Coast of Guatemala — Colombia, Montego Bay)
Sponsors: Bowman Gray School of Medicine and the Medical University of South Carolina
Fee: Tuition $200; other fees dependent upon accommodations
Credit: 21½ hours; AAFP approval requested
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

January 20-22

Small Intestine and Colon: An Update
Place: Ochsner Medical Institutions
Fee: $125
For Information: Continuing Education, Alton Ochsner Medical Foundation, 1516 Jefferson Highway, New Orleans, Louisiana 70121

February 3-5

Vascular Surgery — Updated
Place: Ochsner Medical Institutions
Fee: $125
For Information: Continuing Education, Alton Ochsner Medical Foundation, 1516 Jefferson Highway, New Orleans, Louisiana

February 7-18

Eighteenth Postgraduate Medical Seminar Cruise — (Willemstad, Caracas, St. George's, Bridgetown, Martinique and Charlotte Amalie)
Sponsors: Department of Postgraduate Medicine, Albany Medical College
Credit: AMA Category 1; AAFP approval requested
For Information: Frank M. Woolsey, Jr., M.D., Department of Postgraduate Medicine, Albany Medical College, Albany, New York 12208

February 26-March 5

Caribbean Cruise, Seminar on Alcoholism
For Information: John A. Ewing, M.D., Executive Secretary, North Carolina Alcohol Research Authority, 623 E. Franklin St., Chapel Hill 27514

June 8-10

Symposium on Common Pediatric Problems
Sponsors: Children's Hospital National Medical Center and George Washington University
For Information: Mrs. Susan Weiss, 13407 Brackley Terrace, Silver Spring, Maryland 20904

Instructional Materials Available on Problem-Oriented Medical Records

As part of a two-year project financed by the North Carolina Regional Medical Program, the UNC School of Nursing at Chapel Hill has developed two manuals designed to assist health personnel with implementation of the POMR system. These are:

—a Self-Instructional Manual on the Basic Components of POMR, designed for nurses (46 pages)

—Guidelines for Implementation of the POMRS (53 pages), which includes a bibliography on POMR, a section on obstacles to implementation and questions.

The manuals are available for $1.00 each plus postage. A variety of videotapes, demonstrating the use of POMR to nurses, slides, and a film produced by Lawrence Weed, M.D. and Associates, on POMR, may be borrowed for training.

For more information contact: Ruth J. Harris, Assistant Professor, School of Nursing, UNC-CH, Chapel Hill 27514

ANNOUNCING

Free Training Workshops for Physicians and Nurses in S.A.F.E. Office Sex Counseling and Therapy, offered through the Office of

Continuing Medical Education, University of Kentucky Medical Center.
Credit: 24 hours
For Information: Linda Carpenter, M.S., Coordinator, Center of Rational Behavior Therapy Training, Office of Continuing Medical Education, University of Kentucky Medical Center, Lexington, Kentucky 40506

Courses In Ultrasound

The last of a series of three ten-week postgraduate courses in Sonic Medicine at Bowman Gray School of Medicine will be offered on the following dates: January 10-March 18, 1977, and April 11-June 17, 1977. These courses are designed to provide background, techniques, experience and knowledge so that the individual will be able to set up both an ultrasonic laboratory and a training program. Participants may attend the entire course or only those portions which are of interest to them. Enrollment is limited. Graduates receive 30 credit hours per week in Category 1.

The program will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy planning, the urinary tract and the nervous system.

For further information, please write to: James F. Martin, M.D., Director, Post-graduate Medical Sonics, Bowman Gray School of Medicine, Winston-Salem 27103.

PROGRAMS IN CONTIGUOUS STATES

February 25-26

Virginia Chapter, American Academy of Pediatrics and The Virginia Pediatric Society Annual Meeting
Place: Williamsburg, Virginia
For Information: Douglas E. Pierce, M.D., 1201 Third St., S.W. Roanoke, Virginia 24016

April 7-8

Southeastern Regional Meeting of American Group Practice — Quality Assurance and Ambiltory Care
Place: Calloway Gardens, Georgia
Credit: AMA Category I, approval requested
For Information: Luther W. Kelly, Jr., M.D., Nalle Clinic, 1350 South Kings Drive, Charlotte 28207

The items listed in the above column are for the six months immediately following the month of publication. Requests for listing should be received by "WHAT? WHEN? WHERE?", P.O. Box 27167, Raleigh 27611, by the 10th of the month prior to the month in which they are to appear. A "Request for Listing" form is available on request.

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

AUXILIARY REPORT TO THE EXECUTIVE COUNCIL
September 26, 1976

I am pleased to report on the progress of the Auxiliary to the North Carolina Medical Society and to tell you what we hope to accomplish during the coming year. We rely on the guidance of your Advisory Council to us and are grateful for your contribution of $5,400 toward our working budget. During the past few years, the auxiliary has been included in meetings of your Executive Councils, both on state and local levels, and this has resulted in an increased use of the auxiliary as a program extension arm of the society. Especially effective use was made last year of our telephone communications "Legs Line" during last year's legislative crisis, as well as the letter-writing campaign generated among friends and neighbors.

Mrs. Charles Herring, last year's president, presented a comprehensive report to you in May at the annual convention. A few final figures are now in, however, which are as follows:

AMA-ERF: Contributions to AMA-ERF reached an all time high of $26,661.19. In June, four unrestricted grants were given to North Carolina medical schools. Because of important changes suggested by AMA-ERF legal counselors in Chicago, we will stress direct contributions this year rather than the selling of articles.

Student Loan Fund: Eight loans of $500 were made. We have increased the maximum amount of the loan to $1,000. Since July, one $500 loan and two $1,000 loans have been made. There are 65 loans of $500 and two of $1,000 now out, none overdue.

Membership: Our membership has hit an all time high of 2,960. Other states have written asking how we have managed a steady increase in membership every year since 1970. To maintain this increase, we have appointed two co-chairmen of members-at-large and have obtained the home addresses of the 338 wives of society members who live in counties where there is no auxiliary. A letter has been mailed to these wives. Since our membership gap of approximately 700 obviously exists in counties with organized auxiliaries, we have selected one such area, Durham-Orange, and are beginning a pilot membership project at the request of the local president. Our number of organized auxiliaries stands at 51, having lost Haywood and gained Lincoln. A complete membership roster has been printed and it promises to be a valuable membership tool.

Mental Health Research Endowment: This paid-up endowment continues to yield $1,350 for use by the Department of Psychiatry at the University of North Carolina Medical School.

Health Education: Our state theme is "Child Health Advocacy" with emphasis on nutrition, safety, parenting, learning disabilities and immunization. We are concerned with enforcement of minimum safety standards for day care centers and the requiring of certified water safety personnel at summer camps. It is becoming evident that the adolescent child is the one needing advocates. The auxiliary is planning seminars, spot public service announcements on TV and radio and programs to address the problems of almost epidemic increase in incidence of venereal disease, drug and alcohol use, teenage pregnancy and unwanted and abused children, and the mental and emotional problems leading to runaways and suicide. A demonstration seminar on "Infectious Disease," the first of three, was held in Winston-Salem in August, sponsored by the school system, the medical school, and the state and local auxiliaries. One hundred and fifty teachers and auxiliary members heard members of the Forsyth County Medical Society discuss "Venereal Disease," "Swine Flu," "Immunization," and "Community Resources." Teachers were given recertification credit by the school system for attending. Other auxiliaries are reaching school children through

health education fairs and museums. Later on you will hear about the need to implement legislation to improve health education in North Carolina schools. Please know that the auxiliary stands ready to give time and effort to explain the need for such legislation to civic groups and toward gaining the support of local legislators.

Film Bank: A new project called the "Film Bank" has been instigated to secure educational films, not readily available through other auspices, to be used by society and auxiliary. These films are donated to the N.C. Medical Society Foundation and housed at headquarters in Raleigh. Our first film, "The Heimlich Maneuver," is booked through February. Another film, "New Pulse of Life," has been purchased for use by the 10 or more auxiliaries planning CPR courses for their communities.

Bicentennial Projects: These include framing the pictures of the past presidents of the Medical Society and placing the two volume set, *History of Medicine in North Carolina*, in public and school libraries.

We are grateful to the Society for sharing its expertise in the training of our county leaders at workshops. Dr. Archie Johnson spoke to us on "Needs of North Carolina Children" and Dr. Harvey Estes spoke on "The Fifteen-Year Syndrome," addressing the current crisis in medical marriage in May. At one of our two recent fall workshops, Dr. Ed Beddingfield spoke on "Legislation."

MRS. E. H. MARTINAT, President

News Notes from the

UNIVERSITY OF NORTH CAROLINA-CHAPEL HILL SCHOOL OF MEDICINE AND NORTH CAROLINA MEMORIAL HOSPITAL

A great deal has been said and written about how to prevent rape and about rapists. A new book by a psychiatrist at the University of North Carolina at Chapel Hill looks at the subject from a different angle — the needs of the victim and her family.

The Rape Victim, by Dr. Elaine Hilberman of the UNC-CH School of Medicine, was published recently by the American Psychiatric Association.

The book was written as part of a project of the Committee on Women of the American Psychiatric Association, of which Dr. Hilberman is a member.

It discusses such topics as the sociocultural context of rape, legal and medical aspects, reactions to rape, the child as a victim of rape, counseling and treatment of victims and the roles of the psychiatrist, hospital and community rape crisis center.

In addition, five appendices present guidelines for hospital programs to follow in dealing with rape victims: for example, guidelines for management of suspected rape, care of the adult victims, hospital care of child victims, reactions to rape and a note to those closest to rape victims.

* * *

Dr. Margaret L. Moore, professor of physical therapy in the department of medical allied health professions at the UNC-CH School of Medicine, was one of two persons to receive the first Distinguished Educator Awards given by the American Physical Therapy Association.

The award recognized Moore for excellence in physical therapy education. She received the award from the association's section on education at the national meeting in New Orleans.

Moore has been project director for a study to develop guidelines for clinical education in physical therapy. The final report from that project is entitled *Clinical Education in Physical Therapy: Present Status/Future Needs.*

She has also recently edited an annotated bibliography on clinical education in the health professions.

* * *

Selwyn Taylor, surgeon and senior lecturer at the Royal Postgraduate School of Medicine at Hammersmith Hospital in London, was the 1976 Hunter Sweaney Visiting Professor of Surgery at the medical schools of the University of North Carolina at Chapel Hill and Duke University.

Dr. Taylor was in Chapel Hill from Sept. 30 through Oct. 3 for the joint professorship, which was endowed by the late Durham surgeon Dr. Hunter Sweaney.

A member of Great Britain's General Medical Council, Taylor is an examiner in surgery at the apothecaries and universities of Oxford, Manchester, Leeds, London, Belfast and Dublin. He has published numerous articles and books on thyroid, parathyroid and general surgery.

Educated at Oxford and King's College Hospital, London, he was a surgeon with the Royal Navy during World War II. He has served as consultant surgeon to Belgrave Hospital for Children, King's College Hospital and Hammersmith Hospital.

* * *

Dr. Charles A. Janeway, internationally renowned pediatrician and immunologist, delivered the 1976 Merrimon Lecture, "Vision and Reality: Medicine Faces our Third Century," on Oct. 13 at the UNC-CH School of Medcine.

Janeway is Thomas Morgan Rotch Professor of Pediatrics, Emeritus, at Harvard University. A graduate of Yale University, he obtained his medical education from Cornell and Johns Hopkins Universities and his postgraduate medical training in internal medicine from Boston City and Johns Hopkins hospitals.

During his 28 years as physician-in-chief of Boston Children's Hospital, the institution became an internationally recognized center for the study and care of

diseases of altered host resistance. He has also contributed to our understanding of the body's immune systems and to improvements in pediatric kidney transplantation and bone marrow transplantation.

His contributions to medical education and to primary medical care have been as far-reaching as those to scientific knowledge. Seeing a need for family-oriented medical education, Janeway established the Family Health Care program at Children's Hospital in 1954. This became a model for more recent developments in the delivery of primary medical care.

* * *

A team of psychologists and psychiatrists from the UNC-CH School of Medicine recently conducted four weekend workshops on "Helping Children Learn to Cope" at the invitation of the N.C. Mental Health Association.

The workshops started a three-year program, sponsored by the association, that will focus on the mental health of children. The workshops were held in Durham, Fayetteville, Charlotte and Greenville.

Two hundred community leaders and professionals participated in an examination of methods that parents, teachers and others can use to strengthen children's and youths' personality development.

* * *

Dr. George Johnson Jr., chief, Division of General Surgery (Vascular, Trauma, Transplantation) in the School of Medicine, participated in a symposium on diabetes in Raleigh Oct. 8. He discussed the management of diseases of the lower extremity in patients with diabetes. On Nov. 6 he was the Visiting Professor of Surgery at Wilmington Medical Center at Wilmington, Del. He presented a paper entitled, "Non-Invasive Evaluation of the Patient with Peripheral Vascular Disease."

* * *

Dr. Jack Peacock, a member of the Trauma Section of the department of surgery presented a paper entitled, "Factors Limiting Extremity Function Following Vascular Injury" at the annual meeting of the American Association for the Surgery of Trauma. This was a presentation of work performed during the last two years with Dr. Herbert Proctor, head of the Section of Trauma.

* * *

Faculty and alumni of the University of North Carolina at Chapel Hill School of Medicine presented a Distinguished Service Award to Dr. Isaac M. Taylor Oct. 30.

Taylor, former dean of the medical school, received the school's highest honor at a dinner held in his behalf. Established in 1955, the award recognizes those individuals whose distinguished careers and unselfish contributions have added prestige to the medical school.

Taylor was cited for innovatively leading the school

"through a critical period of expansion." He was also recognized for programs in biomedical research, medical education and primary medical care initiated under his leadership.

News Notes from the—
DUKE UNIVERSITY MEDICAL CENTER

Dr. Robert H. Wilkins has returned to Duke as professor and chief of the Division of Neurosurgery.

For the past year, Wilkins has been associate professor of neurosurgery at the University of Pittsburgh.

Wilkins, 42, will succeed Dr. Guy L. Odom, James B. Duke Professor of Neurosurgery, who became division chief in 1969. Odom is giving up his administrative responsibilities to devote all his time to surgery and teaching.

Wilkins received B.S. and M.D. degrees at the University of Pittsburgh in 1955 and 1959, respectively. He completed his internship here in 1960, and in 1968, after finishing a neurosurgical residency here, joined the Duke faculty as assistant professor.

Between 1972 and 1975, he was clinical assistant professor of neurosurgery at the University of Texas Medical Branch in Galveston and clinical instructor at Southwestern Medical School in Dallas.

* * *

Dr. Eugene A. Stead Jr., professor of medicine, has received the American Heart Association's Gold Heart Award, its highest award for leadership in programs aimed at conquering diseases of the heart and blood vessels.

Stead, chairman of the Department of Medicine from 1947-67 and second president of the North Carolina Heart Association in 1950-51, received the award at the annual dinner of the American Heart Association, Nov. 18 in Miami Beach.

Stead was cited for "enduring contributions to cardiovascular medicine through his research accomplishments, his teaching and his ability to develop future leaders" and for a "profound influence on the growth and success" of the Heart Association.

* * *

Distinguished Teaching and Distinguished Alumni awards were presented during Duke's annual Medical Alumni Weekend.

Receiving Distinguished Teaching Awards from the alumni association were:

* Dr. George J. Baylin, professor of radiology and otolaryngology at Duke. Baylin, 65, earned his undergraduate degree at Johns Hopkins and his M.D. at Duke in 1937. He has been teaching here since 1941.

* Dr. David T. Smith, James B. Duke Professor Emeritus of Microbiology. Smith, 78, received an A.B. degree at Furman and an M.D. at Johns Hopkins in 1922. One of the original Duke medical faculty members, he chaired the Department of Microbiology from 1952-58.

The medical center presented Distinguished Alumni Awards to:

* Dr. James M. Ingram, professor and chairman of the Department of Obstetrics and Gynecology at the University of South Florida in Tampa. Ingram, 55, attended the University of Tampa and Duke and received his M.D. at Duke in 1943.

* Dr. David M. Kipnis, chairman of the Department of Internal Medicine at Washington University School of Medicine in St. Louis. Kipnis, 49, earned A.B. and M.A. degrees at Johns Hopkins and an M.D. at the University of Maryland in 1951. He did postgraduate training as a resident in medicine at Duke from 1952-54.

* Dr. John P. McGovern, director of the McGovern Allergy Clinic in Houston. McGovern, 55, earned a B.S. degree at Duke and his M.D. at Duke in 1945.

* * *

Dr. R. Wayne Rundles, a professor of medicine and a member of the Comprehensive Cancer Center, is the new national president-elect of the American Cancer Society (ACS).

Rundles, one of the first scientists to develop drug treatments for bone marrow cancers, has served on ACS committees at the state and national level for 20 years.

He is a member of the society's North Carolina Division Board of Directors, chairman of the national ACS Medical and Scientific Executive Committee and a national director-at-large. Earlier, he was a member of the national ACS committees on therapy research and personnel.

* * *

Dr. Harvey Jay Cohen, associate professor of medicine, director of the serum protein laboratory and a member of the Comprehensive Cancer Center, has been appointed chief of medical service at the Durham VA Hospital.

* * *

Two scientists studying cardiovascular disease at the medical center have received Established Investigatorship Awards from the American Heart Association.

The awards have gone to Dr. Frederick R. Cobb, assistant professor of medicine and director of the Coronary Care Unit at the Durham VA Hospital, and Dr. John J. Gallagher, assistant professor of medicine and director of the Clinical Electrophysiology Lab at Duke.

The awards provide salary support for five years for selected medical faculty members who spend at least 75 per cent of their time in cardiovascular research.

* * *

Five medical center doctors have been named to committees of the North Carolina Medical Association. They are:

Dr. Samuel L. Katz, W. C. Davison professor of pediatrics, committee on swine flu vaccine; Dr. Thomas E. Frothingham, professor of pediatrics and community health sciences and associate director of the Area Health Education Center, committee on child health and infectious disease; Dr. Frank W. Clippinger, professor of orthopaedic surgery, committee on disease and emergency medical care and the committee on sports medicine; Dr. Sarah J. Dent, professor of anesthesiology, committee on disaster and emergency medicine; and Dr. Kenneth Rockwell, professor of psychiatry and community health sciences, chairman of the committee on drug abuse.

* * *

The National Heart, Lung and Blood Institute has awarded a $270,000 grant to a Duke scientist who is trying to find a possible link between diabetes and atherosclerosis, the most common disease among middle-aged men in this country.

The grant from the institute's atherosclerosis branch was made to Dr. David B. Gilbert, assistant professor of medicine.

* * *

Dr. Gordon K. Klintworth, professor of pathology, delivered papers at the Eastern Ophthalmic Pathology Society meeting in Montreal, Canada, Sept. 9-11 and at the International Society for Eye Research in Jerusalem, Israel, Sept. 12-17. He is co-author with Dr. M. W. Landers III, associate professor of ophthalmology, of a new book entitled **The Eye Structure and Function in Disease.**

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

Plans for an $18 million expansion program at the Bowman Gray School of Medicine — North Carolina Baptist Hospital Medical Center have been announced.

The program, to be completed in three years, will include the construction of a 112,000-square-foot Family Practice Building and a 96,000-square-foot Focus Building.

Also planned are alterations to existing buildings; the construction of a system of external corridors to facilitate the flow of pedestrian traffic and services throughout the center; and the expansion of chilled water facilities.

The medical center also announced a Challenge Fund Campaign to support the construction. John F. Watlington Jr., chairman and chief executive officer of Wachovia Corp. and Wachovia Bank and Trust Co., was named general chairman of the campaign.

The Challenge Program is designed to enable the medical center to meet some of the serious health care challenges facing the community, the region and the state.

The program's primary objectives are to provide improved access to proper health care in under-served areas of North Carolina and to meet the increasing demands for medical services at the medical center.

To meet the objectives, the medical center plans to expand its academic facilities, build larger facilities for its new family practice unit and expand facilities for clinical support services. No additional hospital beds are required.

* * *

The Bowman Gray School of Medicine has received a one-year $96,000 grant from the Public Health Service to establish a Comprehensive Hemophilia Center. The grant is the only one awarded by the Public Health Service in the southeastern United States.

Dr. Christine Johnson, assistant professor of pediatrics, is director of the center, which will serve primarily western North Carolina and adjacent states.

A hemophilia clinic has been set up as part of the center. It is staffed by pediatric and adult hematologists, an orthopedic surgeon, a general surgeon, a nurse coordinator, a geneticist, a dentist, a psychologist, an educational counselor and a physical therapist.

Educational programs for physicians and the general public as well as rehabilitation programs for pa-

tients also are part of the center's comprehensive approach.

* * *

Dr. Wayne A. Cline of Salisbury was installed as president of the Bowman Gray Medical Alumni Association during the association's annual meeting.

Dr. Livingston Johnson of Shelby was elected president elect. Miss Katherine Davis, assistant to the director of the medical center, was re-elected secretary of the association.

Elected to seats on the association's Alumni Council were Dr. Robert L. Garrison of Charlotte; Dr. Hervy B. Kornegay Sr. of Mount Olive; Dr. Alan Scott of Salisbury; Dr. Eleanor Stafford of Chattanooga, Tenn.; and Dr. Murphy Townsend Jr., of Greensboro.

Receiving Distinguished Alumni Lecturer awards were Dr. W. Eugene Cornatzer, professor and chairman of the Department of Biochemistry at the University of North Dakota School of Medicine; Dr. Marcus M. Gulley, associate professor of psychiatry at Bowman Gray; Dr. William Hudson, professor and chief of the Division of Otolaryngology at Duke Medical Center; and Dr. William T. McLean, associate professor of neurology and pediatrics at Bowman Gray.

* * *

Dr. Eben Alexander Jr., professor of neurosurgery, has been installed as second vice president of the American College of Surgeons.

* * *

Dr. Paul C. Bucy, clinical professor of neurology and neurosurgery, has been named to serve on the Stroke and Trauma Program Advisory Committee of the National Institute of Neurological and Communicative Disorders and Stroke.

* * *

Dr. Frederick W. Glass, assistant professor of surgery, has been elected president of the North Carolina Chapter of the American College of Emergency Physicians.

* * *

Clyde T. Hardy, associate dean for patient services at Bowman Gray, has been named to the Editorial Advisory Board for the book *OPH-Start, Guidelines: Selecting and Starting a Practice in Ophthalmology*.

* * *

Dr. James F. Martin, professor of medical sonics, has been re-elected secretary of the American Roentgen Ray Society.

* * *

Dr. Clark E. Vincent, professor of sociology, has been appointed to the Ad Hoc Committee on Sex Therapy Standards of the American Association of Marriage and Family Counselors. He also has been appointed to the Ad Hoc Committee on Sex Research Methodology, Applied Research Grants, National Institute of Mental Health.

Dr. Marvin B. Sussman, professor of sociology and chairman of the Department of Medical Social Science and Marital Health, has been appointed to the Editorial Committee for the journal, *Sage Studies in International Society*.

* * *

Dr. James F. Toole, professor and chairman of the Department of Neurology, has been appointed to serve on the Food and Drug Administration's Neurologic Drug Advisory Committee.

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

Dr. George Podgorny of Winston-Salem was elected vice president of the American College of Emergency Physicians at its annual meeting in New Orleans in October.

He is director of the Department of Emergency Medicine at Forsyth Memorial Hospital and assistant professor of clinical surgery (Emergency Medical Services) at Bowman Gray School of Medicine in Winston-Salem.

AMERICAN LUNG ASSOCIATION

Dr. H. Stuart Willis of Chapel Hill, superintendent and medical director of the North Carolina Sanatorium System from 1947 to 1968 and clinical professor at the University of North Carolina Medical School 1959-1969, has been awarded The Edward Livingston Trudeau Medal, highest scientific honor of the American Lung Association. Dr. Willis, a North Carolina native, has had a long and active career in the crusade against tuberculosis, having suffered from the disease, studied it at the bench and at the bedside and planned effective programs for its control. Besides having been chairman of the TB study section of the U.S. Public Health Service from 1946-1948, he has written numerous articles and books about his medical endeavors.

NORTH CAROLINA HEART ASSOCIATION

The North Carolina Heart Association has set a deadline of January 15 for receiving applications for research grants-in-aid up to $5,000. The grants are awarded to encourage pre-doctoral and post-doctoral scientists in research careers. Preference will be given to junior investigators.

Applications may be forwarded to L. Earl Watts, M.D., Chairman, Research Review Subcommittee, North Carolina Heart Association, Post Office Box 2408, Chapel Hill, North Carolina 27514.

The grants are one phase of the Heart Association's research program supported by public contributions to the annual Heart Fund campaign.

The North Carolina program is separate from that of the American Heart Association, which annually makes numerous research grants to scientists within the state. Information about the national program can be obtained by writing to the American Heart Association, 7320 Greenville Avenue, Dallas, Texas 75231.

Month in Washington

The post-Watergate 94th Congress refused to adopt any major new federal ventures into the health field.

Nor did the lawmakers vote to impose added controls on providers in an effort to get a handle on soaring costs.

Here is the final status of selected major health and health-related legislation in the 94th Congress:

Subject; Number	House, Senate Action Committee	Floor	Conference	Presidential Action
1) Manpower				
HR 5546	6/7/75	7/11/75	Completed; sent	P.L. 94-484
S. 3239	5/14/76	7/1/76 (HR 5546)	to White House	
2) HMO Amendments				
HR 9019	8/26/75	11/7/75	Completed; sent	P.L. 94-460
S. 1926	5/13/76	6/14/76 (HR 9019)	to White House	
3) CLIA				
HR 14319	9/8/76	—		
S. 1737	4/26/76	4/29/76 (Died)		
4) Indian Health				
HR 2525	4/9, 5/10, 5/12/76	7/30/76 (S. 522)	Avoided; sent to White House	P.L. 94-437
S. 522	5/13/75	5/16/75		
5) EMS (and biomedical research)				
HR 12664	5/5/76	8/24, 10/1/76	Avoided; sent	P.L. 94-573
S. 2548	5/14/76	6/10, 10/1/76 (S. 2548)	to White House	
6) HEW Appropriations				
HR 14232	6/8/76	6/24/76	Completed; sent	Veto overridden; P.L. 94-439
Senate-HR 14232	6/26/76	6/30/76	to White House; Vetoed	
7) Lobby Reform				
HR 15	9/2/76	9/21/76 (Died)		
S. 2477	4/26/76	6/15/76		
8) Admin. Rule-making				
HR 12048	4/6/76	Suspension vote failed (Died)		
S. 3297	Pending			
9) Medicare, Medicaid Reform Act				
HR 13080	Pending	(Died)		
S. 3205	Pending			
10) NHI				
HR - various	Pending	(Died)		
S. - various				
11) HEW Inspector General (rider)				
HR 11347	—	9/29/76 (House) 9/28/76 (Senate)	None needed; sent to White House	P.L. 94-505

Two important bills bit the dust. One, the Clinical Laboratory Improvement Act, would have set up strict federal standards and licensing for clinical laboratories. The other, the Medicaid Fraud and Abuse Bill, would have strengthened the Health, Education and Welfare Department's policing of medicaid abuse and increase penalties for violations. Both of these bills cleared Senate and House committees, but backers were unable to salvage them in the torrent of last-minute action on legislation.

Squeaking through during the final days were bills to set up an Inspector General at HEW to oversee fraud and abuse, especially in medical programs; to continue federal assistance to help states and localities establish emergency medical systems; and to broaden federal aid for Indian health.

Casualties included bills to impose stricter clean air standards, to revise the lobbying laws to require additional reporting and to change the way the government issues regulations to carry out laws.

* * *

The three-year, $2 billion aid-for-medical education bill has been signed into law by President Ford who said it "virtually assures that no individual will be denied a medical education for financial reasons."

The Health Professions Education Assistance Act creates a new Health Professions Student Loan Guarantee Program and a loan insurance fund through fiscal 1978.

It continues and expands current medical scholarship programs. In return, recipients will be required to serve in a health manpower shortage area for at least two years.

In a statement released with the signing, Ford said a government study had shown there were alarming signs that this country was facing two growing problems:

- Not enough doctors in rural and inner city areas;
- A continuing decline in the number of doctors practicing primary care because too many medical students are specializing instead of becoming general practitioners.

The bill requires medical schools receiving government capitation grants to provide annually an increasing percentage of residency positions for individuals in primary care specialties such as internal medicine, pediatrics and family medicine.

The compromise legislation strengthens the National Health Service Corps. Before passage, the measure was stripped of many federal control provisions fought by the American Medical Association.

* * *

President Ford has also signed into law a bill designed to stimulate establishment and growth of Health Maintenance Organizations (HMOs). Thrust of the new law is to relax many previous restrictions on HMOs including the requirement that they must have "open enrollment" so that everyone could join

regardless of health or financial circumstances.

The required benefit package was trimmed slightly, but the final version of the measure retained the requirement that rehabilitative treatment for alcoholism and drug abuse be offered.

The old ban on private physicians participating in an HMO on a part-time basis was lifted.

The law makes it easier for HMOs to receive federal financial assistance.

The AMA had contended that effect of the legislation was to negate the original concept of the HMO as a new type of delivery system open to everyone and to distort the program into a simple subsidy for prepaid group practice plans.

The new law permits:

HMOs to contract directly with individual practitioners or groups of health professionals that do not qualify as medical groups or individual practice associations provided that the amount of services so contracted for does not exceed 30% of the dollar value of the total physician compensation paid by a rural HMO, or 15% of such dollar value in the case of a non-rural HMO.

A previous requirement for medical groups that provide care for HMO enrollees is that the provision of such care must be the group's "principal professional activity." The bill provides that, for a three-year period, the HMO could provide services through medical groups whose members do not offer such services as their principal professional activity. After the three-year period, only medical groups whose members have a substantial responsibility for the delivery of services to HMO enrollees could be utilized. Substantial responsibility is defined as devoting at least 30% of the health professional's time to such enrollees.

* * *

Total spending on health care in this country is estimated to jump from the current $140 billion to $223.5 billion in five years, according to an actuarial study prepared for HEW.

The study, which figures to be often cited during next year's congressional consideration of National Health Insurance (NHI) proposals, also predicts that any NHI plan will add at least $10 billion to the overall expenditures on health. The "induced" spending would come from "encouraging more use of health services covered by the plan, adding administrative expenses for the extra insurance and paying for bad debts and charity services," among other factors, the report said.

The impact on spending of six major NHI plans — those of the AMA, the American Hospital Association (AHA), the Health Insurance Association of America (HIAA), the Labor-Kennedy forces, Sens. Russell Long (D-La.) and Abraham Ribicoff (D-Conn.), and the Nixon Administration (CHIP) was compared.

The Gordon R. Trapnell actuarial firm forecast that the Long-Ribicoff measure focusing on catastrophic expenses would add the least to overall health spending by fiscal 1980 if put into effect next year — $9.8 billion.

Next on the list was the plan by the health insurance companies — $11 billion, followed by CHIP, $11.3 billion; the AMA plan, $20.3 billion; the Labor-Kennedy Program, $24.8 billion; and the AHA plan, $25.1 billion.

The study said Long-Ribicoff, CHIP and the HIAA plans "tend to use a variety of cost-sharing mechanisms, limit preventive services to children, and concentrate most of their additional spending on the poor, while the AMA, AHA, and Health Security (Kennedy-Labor) proposals tend to have little or no cost-sharing, provide preventive services to everyone and increase insurance coverage broadly for the general population."

All six plans would add several billion dollars to the federal health care budget primarily to provide improved health services for the poor. But the range of some $10 billion (Long-Ribicoff) to $130 billion (Labor-Kennedy) in additional federal spending reflects largely the extent to which health insurance funds for the general population are funneled through a federal health insurance mechanism or through private health insurance, according to the report.

Without any type of NHI total spending for personal health services will increase from $140.4 billion in fiscal 1976 to $223.5 billion in 1980, the report forecast.

* * *

The government's powers to move against quack remedies suffered a setback when the Federal Appeals Court in Denver, Colo., recently refused to overturn a District Court decision allowing a cancer patient to buy and transport the questionable anti-cancer product, Laetrile.

The Appeals Court did not rule on the question of whether Laetrile was effective or whether the Food and Drug Administration had the right to bar it from the market. The FDA record on Laetrile was "grossly inadequate," the Court said. "The question whether this is a new drug presents a mixed question of fact and law which should be fully tried," said the Appeals Court. The FDA was ordered to "develop a record supportive of the agency's determination."

The FDA had no immediate comment on the decision. Staff lawyers were unsure how to proceed. However, the Appeals Court muddied the waters on the legal statutes of the controversial drug which has served as a focus for complaints that FDA is overstepping its authority in cracking down on non-authorized drugs or products.

An Oklahoma City District Court judge had ruled earlier that Laetrile was effective and that the FDA was acting unconstitutionally in seeking to prohibit it.

* * *

The charter class of 32 at the Uniformed Services University of the Health Sciences was welcomed at

ceremonies in Washington, D.C. The five women and 27 men were selected from more than 1,700 applicants.

Authorized by congress in 1972, the school will prepare physicians to practice medicine for the three military services and the public health service. It has received provisional academic accreditation from the liaison committee on medical education.

Permanent medical school facilities are under construction at the National Naval Medical Center in Bethesda, Md., near the National Institutes of Health and the National Library of Medicine.

The university students are members of Uniformed Services paid at the level of a Second Lieutenant, Ensign or Junior Assistant Health Officer in the public health service. In return for their education, graduates will incur a minimum obligation of seven years of medical practice in one of the services.

Classified Ads

PHYSICIAN LOANS BY MAIL Signature only, $5,000 to $25,000. Use for Starting New Practice, Equipment Purchase, Investment, etc. For information in strict confidence write: W. Vern Britton, Pres., Financial Resources Co., Box 502, Richmond, Virginia 23204

PHYSICIAN EXTENDER II (Nurse Practitioner/Physician's Assistant), Western Carolina University, Cullowhee, N.C. 28723, Starting Salary — $15,624. This challenging WCU position in the picturesque mountains of Western North Carolina requires graduation from an acceptable type A Physician's Assistant program and at least one year of experience working under direct supervision of a physician. Or: graduation from a recognized nurse practitioner program including at least six months of formal classroom training and a six month's preceptorship and at least one year of experience as a physician's assistant (graduation from an accredited nursing school and licensure from the State Board of Nurse Examiners is a prerequisite). Applicant must have interest practicing in University setting, as well as general and family practice. Applicants should forward their resumes including personal education and employment history by December 31, 1976, to the Personnel Office, Western Carolina University, Cullowhee, North Carolina 28723. AN EQUAL OPPORTUNITY EMPLOYER M/F

EMERGENCY PHYSICIANS WANTED: Hospital seeking to begin full time emergency physician coverage. Need two men at this time. Prefer Emergency Medical Trained Men; however, not necessary. Graduate of American Medical School. Salary, $50,000 range. Excellent area for hunting, fishing, water sports, etc. Contact: John P. Davis, Administrator, Beaufort County Hospital, East 12th Street, Washington, N.C. 27889.

LOCUM TENENS IN RADIOLOGY WANTED in North Carolina beginning December, 1976. Board Certified in Radiology in 1951. 20 Years experience, associated with University and large private hospital. Have N.C. license and insurance. Phone: (919) 579-2214 or write W. A. Tosick, Route 1, Box 289, Sunset Beach, N.C. 28459.

TAX DEDUCTIBLE VACATIONS FOR MEDICAL PROFESSIONALS. Over 500 listings of national/international meetings in the medical sciences for 1977. Send a $10 check or money order payable to Professional Calendars, P.O. Box 40083, Washington, D.C. 20016.

PHYSICIANS NEEDED: M.D.'s having completed or near completion of internships or residencies for hospital/clinics/flight surgeon duties. Choice of duty station, $30,000-40,000 starting salary, travel and relocation expenses paid, 30 days paid vacation annually, duty rotation allows excellent family life. Contact LT. Ron Hewett, Navy Physician Programs, Navy Recruiting District, P.O. Box 18568, Raleigh, N.C. 27609 or call collect (919) 872-2547.

EMERGENCY MEDICINE: Northeastern North Carolina; four, 12-hour evening rotations per week. Paid malpractice, vacation, professional dues. $45,000 annual remuneration. Contact Drs. Cooper or Spurgeon toll free 1-800-325-3982.

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KEY TO ABBREVIATIONS

C—Correspondence
ED—Editorials
EMS—Emergency Medical Services
C&O—Committees & Organizations
BR—Book Review

AUTHORS

SUBJECTS

EDITORIALS

ORGANIZATIONS AND INSTITUTIONS

IN MEMORIAM

THE ANXIETY-SPECIFIC.

- a predictable pattern of patient response
- seldom associated with serious side effects, in proper dosage
- rarely interferes with mental acuity
- used concomitantly with many primary medications
- three dosage strengths meet most patient needs

LIBRIUM® Ⓒ IV

chlordiazepoxide HCl/Roche

5mg, 10mg, 25mg capsules

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage, withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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THE ANXIETY-SPECIFIC.

Since its discovery in the research laboratories at Roche, Librium has been the object of ongoing pharmacologic and clinical investigation.

The published record on Librium is enormous. So large, in fact, we put it into a computer literature retrieval system to make it more accessible in answering your inquiries.*

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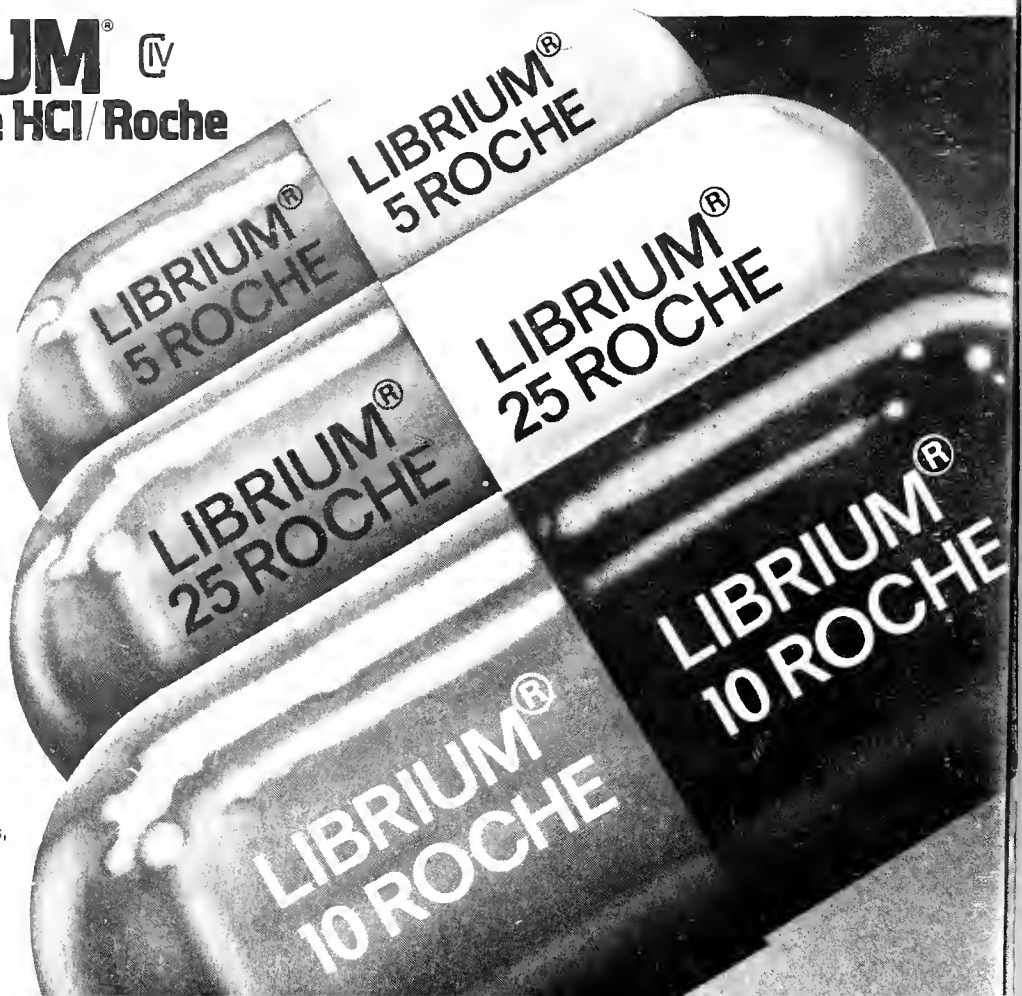

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Please see preceding page for a summary of product information.

NORTH CAROLINA MEDICAL SOCIETY

TRANSACTIONS

One Hundred Twenty-Second Annual Session
held at
Pinehurst, North Carolina
May 6-9, 1976

Briefed and Abridged by
William N. Hilliard, Executive Director
North Carolina Medical Society
222 North Person Street, Raleigh, North Carolina 27611

NORTH CAROLINA MEDICAL SOCIETY

TRANSACTIONS

One Hundred Twenty-Second Annual Session
held at
Pinehurst, North Carolina

May 6-9, 1976

OFFICERS—1976-1977

President ..... Jesse Caldwell, Jr., M.D., 114 W. 3rd Ave., Gastonia 28052
President-Elect ..... E. Harvey Estes, Jr., M.D., Duke Univ. Med. Ctr., Box 2914, Durham 27710
First Vice-President ..... J. Benjamin Warren, M.D., Box 1465, New Bern 28560
Second Vice-President ..... John C. Grier, M.D., Box 791, Pinehurst 28374
Secretary ..... Jack Hughes, M.D., 923 Broad St., Durham 27705 (1979)
Speaker ..... Marvin N. Lymberis, M.D., 1600 E. 3rd St., Charlotte 28204
Vice-Speaker ..... Henry J. Carr, Jr., M.D., 603 Beamon St., Clinton 28328
Past-President ..... James E. Davis, M.D., 1200 Broad St., Durham 27705
Executive Director ..... William N. Hilliard, 222 N. Person St., Raleigh 27611

COUNCILORS AND VICE-COUNCILORS—1976-1977

First District: Edward G. Bond, M.D., Chowan Med. Center, Edenton 27932 (1977)
Vice-Councilor: Joseph A. Gill, M.D., 1202 Carolina Ave., Elizabeth City 27909 (1977)

Second District: Charles P. Nicholson, Jr., M.D., 3108 Arendell St., Morehead City 28557 (1979)
Vice-Councilor: J. Elliott Dixon, M.D., 215 E. 2nd St., Ayden 28513 (1979)

Third District: E. Thomas Marshburn, Jr., M.D., 1515 Doctors Circle, Wilmington 28401 (1979)
Vice-Councilor: Charles M. Hicks, M.D., 1914 Glen Meade Rd., Wilmington 28401 (1979)

Fourth District: Harry H. Weathers, M.D., P.O. Box 1146, Roanoke Rapids 27870 (1977)
Vice-Councilor: Robert H. Shackelford, M.D., P.O. Box 649, Mt. Olive 28365 (1977)

Fifth District: August Oelrich, M.D., Box 1169, Sanford 27330 (1978)
Vice-Councilor: Bruce B. Blackmon, M.D., P.O. Box 8, Buies Creek 27506 (1978)

Sixth District: J. Kempton Jones, M.D., 1001 S. Hamilton Rd., Chapel Hill 27514 (1977)
Vice-Councilor: W. Beverly Tucker, M.D., Ruin Creek Rd., Henderson 27536 (1977)

Seventh District: William T. Raby, M.D., 1900 Randolph Rd., Charlotte 28207 (1978)
Vice-Councilor: J. Dewey Dorsett, Jr., M.D., 1851 E. Third St., Charlotte 28204 (1978)

Eighth District: Ernest B. Spangler, M.D., Drawer X3, Greensboro 27402 (1979)
Vice-Councilor: Shahane R. Taylor, Jr., M.D., 348 N. Elm St., Greensboro 27408 (1979)

Ninth District: Jack C. Evans, M.D., 244 Fairview Dr., Lexington 27292 (1979)
Vice-Councilor: Benjamin W. Goodman, M.D., 24 2nd Ave., NE, Hickory 28601 (1979)

Tenth District: Kenneth E. Cosgrove, M.D., 510 7th Ave., W., Hendersonville 28739 (1978)
Vice-Councilor: Otis B. Michael, M.D., Suite 208, Doctors Bldg., Asheville 28801 (1978)

SECTION CHAIRMEN—1976-1977

Anesthesiology: Jack H. Welch, M.D., Physician's Quadrangle, Greenville 27834
Dermatology: Elizabeth P. Kanof, M.D., 1300 St. Mary's St., Raleigh 27605
Emergency Medicine: Frederick W. Glass, M.D., Bowman Gray, Winston-Salem 27103
Family Practice: Charles H. Duckett, M.D., Bowman Gray, Winston-Salem 27103
Internal Medicine: William W. Fore, M.D., 1705 W. 6th St., Greenville 27834
Neurology & Psychiatry: Martin A. Hatcher, M.D., 1305 W. Wendover Ave., Greensboro 27408
Neurological Surgery: David L. Kelly, Jr., M.D., Bowman Gray, Winston-Salem 27103
Obstetrics & Gynecology: R. Pinkney Rankin, Jr., M.D., 1851 E. 3rd St., Charlotte 28204
Ophthalmology: Harold N. Jacklin, M.D., 1014 N. Elm St., Greensboro 27401
Orthopaedics: Frank W. Clippinger, Jr., M.D., Duke Medical Center, Durham 27710
Otolaryngology & Maxillofacial Surgery: B. Ray Olinger, M.D., 131 McDowell St., Asheville 28801
Pathology:
Pediatrics: Archie T. Johnson, Jr., M.D., 701 Vick Ave., Raleigh 27609
Public Health & Education: William L. Fleming, M.D., UNC School of Med., Chapel Hill 27514
Radiology:
Surgery: William W. Shingleton, M.D., Duke Univ. Med. Ctr., Box 3814, Durham 27710
Urology: Charles A. Hoffman, M.D., 348 Valley Rd., Fayetteville 28305
Students, Medical:

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

JAMES E. DAVIS, M.D., 1200 Broad St., Durham 27705—2 year term (January 1, 1977 to December 31, 1978)

JOHN GLASSON, M.D., 306 S. Gregson St., Durham 27701—2 year term (January 1, 1977 to December 31, 1978)

DAVID G. WELTON, M.D., 3535 Randolph Road, Charlotte 28211—2 year term (January 1, 1976 to December 31, 1977)

EDGAR T. BEDDINGFIELD, JR., M.D., Wilson Clinic, Wilson 27893—2 year term (January 1, 1976 to December 31, 1977)

FRANK R. REYNOLDS, M.D., 1613 Dock St., Wilmington 28401—2 year term (January 1, 1977 to December 31, 1978)

ALTERNATES TO THE AMERICAN MEDICAL ASSOCIATION

GEORGE G. GILBERT, M.D., 1 Doctor's Park, Asheville 28801—2 year term (January 1, 1977 to December 31, 1978)

LOUIS DES. SHAFFNER, M.D., Bowman Gray, Winston-Salem 27103—2 year term (January 1, 1977 to December 31, 1978)

CHARLES W. STYRON, M.D., 615 St. Mary's St., Raleigh 27605—2 year term (January 1, 1976 to December 31, 1977)

D. E. WARD, JR., M.D., 2604 N. Elm St., Lumberton 28358—2 year term (January 1, 1976 to December 31, 1977)

JESSE CALDWELL, JR., M.D., 114 W. 3rd Ave., Gastonia 28052 —2 year term (January 1, 1977 to December 31, 1978)

STAFF OF HEADQUARTERS OFFICE

Executive Director—MR. WILLIAM N. HILLIARD

Assist. to Ex. Dir. & Convention Coordinator—MRS. LARUE A. KING

Controller—MR. GARLAND R. PACE

Director, Field Service—MR. GENE LANE SAULS

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Field Service—MRS. LUCY GROSS

Auxiliary and NCSIM—MRS. JACKIE CUTRELL

STAFF (Outside Headquarters Office)

JOHN H. FELTS, M.D., *Editor*—NORTH CAROLINA MEDICAL JOURNAL
Winston-Salem

RON W. DAVIS, Ed.D., Consultant, Medical Education, Durham

1976

Compilation of Annual Reports

INDEX TO REPORTS

Compilation of Annual Reports

CONSTITUTIONAL SECRETARY

The North Carolina Medical Society continues its previously noted growth. There is a total increase of 445 members since last year. The end of year membership figures for the past three years are as follows:

	1973	1974	1975
Total Members	4297	4475	4787
Life Members:	286	286	
Voluntary dues paying			14
Not paying dues			303
Student Members	108	106	153
Intern/Resident Members	28	48	98
Honorary Members	15	15	14
Total AMA Membership	3690	3841	4044

The past year has seen the beginning of an effective postgraduate education program sponsored by the Society. The educational sessions at the Annual Meeting were superb and attendance was at an all time high.

In going over the four thousand mark for AMA Membership, the Society earned a fifth delegate and alternate delegate to the AMA.

E. Harvey Estes, Jr., M.D., Secretary

REPORT OF THE EXECUTIVE DIRECTOR

Problems relating to the availability of professional liability insurance for the medical profession in North Carolina have continued to dominate the concern of both staff and society members during the Medical Society year encompassing the period of this report. Thus the pressures of the last Society year have continued and even intensified in this regard. A major portion of the working hours, and even a major portion of the waking hours, of the staff have revolved around this problem and the organization of the Society sponsored Medical Liability Mutual Insurance Company of North Carolina. The employment of a manager for the company should certainly enable the staff to return its efforts to the more routine, but nevertheless important, duties of the Society.

A copy of the Auditor's Report is contained in this Compilation of Annual Reports reflecting that all funds and assets of the Society have been properly accounted for on the books of the Society in conformity with generally accepted accounting principles for non-profit organizations. The Audit Report as submitted by A. T. Allen & Company, dated January 21, 1976, stands as a self-explanatory report of my responsibility as Treasurer for the calendar year 1975 and is recommended for your approval.

The Audit Report also reflects the 1975 management of *The North Carolina Medical Journal* and this portion of the Audit Report is offered as a report of the business affairs of the Journal from the Business Manager. There was a very slight increase in both local and national advertising revenue, but for the most part advertising income remains on a plateau. This reflection of sharply curtailed advertising budgets appears to be typical of the experience of most State Journals. The expense of publishing the Journal was only slightly increased, a major task in the face of inflationary pressures for the products and consumed items necessary to the production of the Journal.

Some 41 County Medical Societies were visited during the year by a member of the staff, in addition to three District Medical Society Meetings. The staff stands ready to assist any county medical society in its local efforts insofar as staff time permits.

In the opinion of the Executive Director, the entire staff has served the Society in a very commendable fashion, frequently beyond the call of duty. The State Medical Society is fortunate in having a capable and energetic staff to assist your Executive Director, all of whom have participated fully and willingly in the various projects assigned to them. In most cases they have been completely responsible for various projects, but where more than a single staff person was involved they have worked well together as a team.

Mr. Dan Finch was employed as a second Field Representative on December 1, 1975, following the resignation of Mr. John M. Evanson effective June 16, 1975. We have found him quick to learn new assignments and is considered a real asset to the staff.

All of the staff members, along with the secretarial, graphic art, and filing staff are capable and loyal to the Medical Society needs. They continue to deserve your support and appreciation.

In addition to the continuation of most annual projects and activities of the Society, the staff during the year coordinated arrangements for five "Listen-To" meetings scheduled by President Davis in an effort to improve communications at the local level with the Society membership.

On December 31, 1975, the membership of the State Society stood at 4,787 as compared with 4,475 on that same date for 1974. As of March 1, 1976, there were 3831 members of the State Society after taking into account deceased members during the past year and members who have moved out-of-state. As of March 1, 1975 there were 3912 members of the State Society. This marks the first time in a number of years that Society membership has not shown a net increase at this time of year when compared with the prior year. One must recognize that there are a few slow paying members who have not yet paid their 1976 dues, but we hope that the

membership figures reflect only a delay in the payment of dues and not a trend in membership.

All levels of medical organizations need a strong membership now more than ever before. Your support is urgently needed to make non-members aware of the benefits of memberships and the importance of strength in numbers in order for the State Society to more adequately represent the medical profession.

Including Student and Intern-Resident members, 134 new members have already joined the Society this year, 24 fewer than the number of new members for the same period in 1975.

American Medical Association membership among members of the North Carolina Medical Society stood at 4,044 o December 31, 1975, exceeding 4,000 AMA members for th first time and thereby became eligible for a fifth AMA Dele gate. The AMA membership must be maintained at the 4,00 level or over in order to retain the fifth AMA Delegate. You continued support and active efforts are needed to furthe increase the AMA membership.

In conclusion, we wish to emphasize that every effort wil be continued to carry out the work of the Society as effi ciently as possible toward whatever goals may be set by th appropriate officials of the Society.

Respectfully submitted,

William N. Hilliard, Executive Directo

ACCOUNTANTS' REPORT

NORTH CAROLINA MEDICAL SOCIETY
Raleigh, North Carolina
For the Year 1975

OFFICERS

James E. Davis, M.D.	President	Durham
Jesse Caldwell, Jr., M.D.	President-Elect	Gastonia
John L. McCain, M.D.	First Vice-President	Wilson
T. Reginald Harris, M.D.	Second Vice-President	Shelby
E. Harvey Estes, Jr., M.D.	Secretary	Durham
Chalmers R. Carr, M.D.	Speaker of the House	Charlotte
Henry J. Carr, Jr., M.D.	Vice-Speaker of the House	Clinton
Frank R. Reynolds, M.D.	Past President	Wilmington
William N. Hilliard	Executive Director	Raleigh

Chairman and Members of the Finance Committee
North Carolina Medical Society
Raleigh, North Carolina

Gentlemen:

We have examined the balance sheet of the North Carolina Medical Society, Raleigh, North Carolina at December 31, 1975, and the related statement of fund balances, the statement of income and expenses, and the statement of source and application of funds for the year ended December 31, 1975. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying financial statements present fairly the financial position of the North Carolina Medical Society, Raleigh, North Carolina at December 31, 1975, and the results of its operations for the twelve months period ended December 31, 1975, in conformity with generally accepted accounting principles and applied on a basis consistent with that of the preceding year.

Respectfully submitted,
A. T. ALLEN & COMPANY
CERTIFIED PUBLIC ACCOUNTS
Raleigh, North Carolina
January 21, 1976

NORTH CAROLINA MEDICAL SOCIETY
Raleigh, North Carolina

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NORTH CAROLINA MEDICAL SOCIETY
Raleigh, North Carolina

STATEMENT OF SIGNIFICANT FINANCIAL POLICIES
For the Year 1975

The North Carolina Medical Society is a nonprofit corporation composed of physicians organized to promote the best interests of the medical profession and to assure quality in the delivery of health care.

Membership dues are the primary source of revenues for the Society; however, revenues are obtained from journal advertising, rental receipts on the headquarters facility and other related activities.

The Society operates under an approved annual budgetary accounting system. Data processing is handled on an in-house computer.

The Society maintains a capital fund for holding fixed assets. Fixed assets include land, buildings, and office furniture and fixtures. Fixed assets are currently being depreciated on a straight line basis.

The House of Delegates approved the establishment of an operating reserve account to generate, as funds avail themselves, a reserve equivalent to one year of normal operating expenses, consistent with good business principles. The operating reserve fund has now accumulated $269,768.13, after a three year period.

International Developers, Inc., was indebted to the Society for the purchase of 51 acres of land on Highway 70 West of Raleigh, North Carolina. The note was cancelled and the property foreclosed during the year. The land was transferred back to the North Carolina Medical Society for the outstanding indebtedness of $179,172.42.

EXHIBIT "A"
NORTH CAROLINA MEDICAL SOCIETY

COMPARATIVE BALANCE SHEET
For the Year 1975
(With Comparative Figures for 1974)

ASSETS:	1975	1974
CURRENT OPERATING FUND:		
Cash on Hand and in Banks—(Schedule—1)	$ 679,965.98	$ 574,087.38
Accounts Receivable—Regular	4,692.36	8,016.58
Accounts Receivable—National Advertising	4,306.01	2,846.69
Accrued Interest Receivable—On Savings Certificates	.00	8,956.22
Air Travel Deposit	425.00	425.00
Notes Receivable—International Developers, Inc.	.00	179,172.42
Prepaid Supplies	2,227.37	.00
TOTAL CURRENT OPERATING FUND	$ 691,616.72	$ 773,504.29
CAPITAL OR NONOPERATING FUND:		
Real Estate—Land—Lane and Person streets, Raleigh, North Carolina	$ 227,733.90	$ 227,733.90
Real Estate—Headquarters Building, Raleigh, North Carolina	1,044,302.06	1,044,302.06
Real Estate—51 Acres—Highway 70 West, Raleigh, North Carolina	179,172.42	.00
Real Estate—Two Houses and Lots, Raleigh, North Carolina	34,674.40	34,674.40
Office Furniture and Fixtures	83,835.19	77,873.47
Capital Stock—Common—State Medical Journal Advertising Bureau, Inc.	.00	200.00
Total	$1,569,717.97	$1,384,783.83
LESS: Accumulated Depreciation	133,489.03	106,185.47
TOTAL CAPITAL OR NONOPERATING FUND	$1,436,228.94	$1,278,598.36
TOTAL ASSETS	$2,127,845.66	$2,052,102.65

LIABILITIES, RESERVES AND FUND BALANCES:	1975	1974
LIABILITIES:		
Accounts Payable—Trade	$ 9,251.18	$ 10,833.18
Dues to be Refunded	4,249.50	2,714.00
Due American Medical Association	197,905.00	114,115.00
Due County Medical Associations	50,523.00	58,455.00
Due MEDPAC	5,490.00	6,780.00
Federal and State Income Tax Withheld	1,874.00	3,998.24
Payroll Taxes Payable	44.38	1,213.41
TOTAL LIABILITIES	$ 269,337.06	$ 198,108.83
DEFERRED CREDITS:		
Advance Payments on Technical Exhibit Space at Convention	$ 2,040.00	$ 4,100.00
Advance Payment on State Membership Dues	103,775.00	130,088.00
Advance Rent from Tenant on Rental Income	2,288.99	.00
TOTAL DEFERRED CREDITS	$ 108,103.99	$ 134,188.00
RESERVES:		
Reserve for Traffic Liability Safety Program	$ 50.55	$ 135.28
Reserve for Claims Review	1,261.39	.00
Reserve for Mental Health State Conference Programs	.00	596.63
Reserve for Mental Health Contactorama Programs	2,404.95	3,539.92
Reserve for Operating Reserve	269,768.13	203,216.00
Reserve for Purchase of Equipment	2,000.00	500.00
Reserve for Medical Education	229.00	.00
Reserve for Leadership Conference	188.00	.00
TOTAL RESERVES	$ 275,902.02	$ 207,987.83
FUND BALANCES:		
Current Operating Fund—(Exhibit "B")	$ 38,273.65	$ 233,219.63
Capital Fund—(Exhibit "B")	1,436,228.94	1,278,598.36*
TOTAL FUND BALANCES	$1,474,502.59	$1,511,817.99
TOTAL LIABILITIES, RESERVES AND FUND BALANCES	$2,127,845.66	$2,052,102.65

* Prior Year Figures Adjusted for Comparability Purposes.

EXHIBIT "B"
COMPARATIVE STATEMENT OF FUND BALANCES
For the Year 1975
(With Comparative Figures for 1974)

	1975	1974
CURRENT OPERATING FUND:		
Balance—Beginning of Year	$ 233,219.63	$ 249,796.51
ADD: Net Profit from Operations (Deficit)	(9,413.96)	24,027.28*
	$ 223,805.67	$ 273,823.79
LESS: Office Furniture and Equipment Transferred to Capital Fund	$ 6,359.60	$ 3,522.26
Construction in Progress	.00	1,907.50
House and Lot—Fonville Property	.00	16,330.00
House and Lot—Partin Property	.00	18,344.40
Transfer to Reserve for Purchase of Equipment	.00	500.00
Notes Receivable—International Developers, Inc.—Cancelled—Property on Highway 70 Foreclosed Land Transferred to Capital Fund	179,172.42	.00
	$ 185,532.02	$ 40,604.16
TOTAL CURRENT OPERATING FUND—TO EXHIBIT "A"	$ 38,273.65	$ 233,219.63
CAPITAL FUND:		
Balance—Beginning of Year	$1,278,598.36*	$1,345,055.02
ADD: Capital Expenditures from Current Operating Fund	6,359.60	3,522.26
Construction in Progress—From Current Operating Fund	.00	1,907.50
House and Lot—Fonville Property	.00	16,330.00
House and Lot—Partin Property	.00	18,344.40
Property on Highway 70—51 Acres of Land	179,172.42	.00
	$1,464,130.38	$1,385,159.18
LESS: Equipment Disposed of During the Year	$ 397.88	$ 375.35
Stock in State Medical Journal Advertising Bureau, Inc.—Written Off	200.00	.00
Prior Year's Depreciation Adjustment	.00	106,185.47*
Current Year's Depreciation	27,303.56	.00
	$ 27,901.44	$ 106,560.82
TOTAL CAPITAL FUND—TO EXHIBIT "A"	$1,436,228.94	$1,278,598.36*
TOTAL FUND BALANCES—END OF YEAR	$1,474,502.59	$1,511,817.99

EXHIBIT "C"

COMPARATIVE STATEMENT OF INCOME AND EXPENSES
For the Year 1975
(With Comparative Figures for 1974)

SUMMARY:	1975		1974	
TOTAL INCOME		$609,026.58		$608,197.66
LESS: EXPENSES:				
Executive Budget	$262,465.33		$218,676.45	
Journal Budget	81,813.41		83,597.99	
Intra-Functional Activity Budget	33,571.15		26,989.66	
Extra-Functional Activity Budget	21,731.11		17,161.72	
Public Relations Budget	7,091.57		5,460.17	
Annual Sessions Convention Budget	25,524.19		19,999.42	
Miscellaneous Budget	67,413.21		45,809.59	
Headquarters Facility Budget	58,638.04		59,681.64	
Operating Budget Reserves	66,552.13	624,800.14	110,316.00*	587,692.64
EXCESS OF INCOME OVER EXPENSES (DEFICIT)		$ (15,773.56)		$ 20,505.02
ADD: Capital Expenditures from Current Funds (Included Above)		6,359.60		3,522.26
NET MARGIN FROM OPERATIONS—(DEFICIT)		$ (9,413.96)		$ 24,027.28*

* Prior Year Figures Adjusted for Comparability Purposes.

EXHIBIT "C"

STATEMENT OF INCOME AND EXPENSES
For the Year 1975

DETAILED:	Budget Provisions	Actual	Difference Over (Under)
INCOME:			
Membership Dues—Current and Prior Years	$445,000.00	$454,031.00	$ 9,031.00
Sales of Journals, Rosters and Value Scales	5,600.00	6,940.48	1,340.48
Revenue Unexpected	5,000.00	9,728.07	4,728.07
Sales of Technical Exhibit Space	10,500.00	11,480.00	980.00
Journal Advertising—Local	9,500.00	12,576.88	3,076.88
Journal Advertising—National	25,000.00	22,105.33	(2,894.67)
Commission (1%) from AMA for Dues Collected	10,000.00	9,400.26	(599.74)
Commission (1%) from MEDPAC for Dues Collected	250.00	250.95	.95
Rental Income—New Headquarters Facility	53,691.00	57,850.19	4,159.19
Rental Income—Residential Property	1,800.00	3,233.76	1,433.76
Interest Income from Note (Sale of Property)	12,679.00	.00	(12,679.00)
Interest Income on Reserve Fund	8,500.00	8,727.13	227.13
Interest Income on Operating Funds	9,000.00	11,927.53	2,927.53
Book Proceeds—"Medicine in North Carolina"	.00	775.00	775.00
Estimated Balance January 1, 1975	60,000.00	.00	(60,000.00)
TOTAL INCOME	$656,520.00	$609,026.58	$(47,493.42)
EXPENSES:	**Executive Budget:**		
A- 1 Expense—President	$ 8,000.00	$ 8,739.95	$ 739.95
A- 2 President's Secretarial Assistance	4,000.00	4,787.78	787.78
A- 3 Travel—Secretary	1,000.00	.00	(1,000.00)
A- 4 Salary—Executive Director—Treasurer	31,000.00	31,000.00	.00
A- 5 Travel—Executive Director—Treasurer	6,500.00	7,116.55	616.55
A- 6 Executive Office—Secretarial and Clerical Assistance	61,000.00	58,978.78	(2,021.22)
A- 7 Executive Office—Equipment and Replacements	4,000.00	6,359.60	2,359.60
A-7(a) Reserve for Future Equipment Replacements	2,000.00	1,500.00	(500.00)
A- 8 Expenses—Executive Office	21,600.00	25,999.05	4,399.05
A- 9 Bonding (In Effect to 1975)	1,200.00	93.00	(1,107.00)
A-10 Auditing (Quarterly and Annual)	2,400.00	3,240.96	840.96
A-11 Taxes (Salary Tax)	9,100.00	9,165.62	65.62
A-12 Insurance	2,200.00	2,171.00	(29.00)
A-13 Membership Record System and Machine Rental	10,700.00	10,245.18	(454.82)
A-14 Publications, Reports and Executive Aids	350.00	353.07	3.07
A-17 Salary—Assistant to Executive Director	17,250.00	17,250.00	.00
A-18 Salary—Field Representative	10,200.00	10,200.00	.00
A-19 Salary—Field Representative	11,000.00	5,862.54	(5,137.46)
A-20 Travel—Director, Field Services	3,000.00	2,437.95	(562.05)
A-21 Travel—Director of Governmental Affairs	2,000.00	2,468.20	468.20
A-22 Salary—Controller	19,090.00	19,090.00	.00
A-23 Salary—Director, Field Services	16,675.00	16,675.00	.00
A-24 Salary—Director, Governmental Affairs	14,950.00	14,950.00	.00
A-25 Travel—Field Representatives	5,000.00	3,781.10	(1,218.90)
Total Executive Budget	$264,215.00	$262,465.33	$ (1,749.67)
Journal Budget:			
B- 1 Publication of Journal	$63,000.00	$62,101.28	$ (898.72)
B- 5 Expenses—Editorial Office	850.00	1,422.88	572.88
B- 6 Expenses—Business Manager's Office	925.00	724.43	(200.57)
B- 7 Equipment—Business Manager's Office	100.00	.00	(100.00)
B- 8 Travel for Journal	100.00	.00	(100.00)
B- 9 Payroll Taxes	1,250.00	974.95	(275.05)
B-10 Sales Tax on Journal and Roster Sales	2,400.00	2,203.75	(196.25)
B-11 Journal Salaries (Editor, Assistant Editor and Ad Secretary)	21,000.00	14,386.12	(6,613.88)
Total Journal Budget	$89,625.00	$81,813.41	$(7,811.59)
Intra-Functional Activity Budget:			
C- 1 Expenses—Executive Council	$ 4,500.00	$ 7,606.12	$ 3,106.12
C- 2 Expenses—Publication Council Minutes	5,800.00	6,555.27	755.27
C- 3 Expenses—Legislative Committees	6,500.00	8,057.07	1,557.07
C- 4 Expenses—Maternal Health Committee	300.00	600.00	300.00
C- 5 Expenses—Drug Abuse Committee	200.00	.00	(200.00)

C- 7 Expenses—Scientific Exhibits Committee	1,250.00	1,090.09	(159.91)
C- 8 Expenses—Mental Health Committee	400.00	.00	(400.00)
C- 9 Expenses—Mediation Committee	1,000.00	2,748.24	1,748.24
C-11 Expenses—Committees in General	4,500.00	3,972.78	(527.22)
C-13 Expenses—Committee on Occupational and Environmental Health	200.00	.00	(200.00)
C-15 Expenses—Relative Value Studies Committee	400.00	259.12	(140.88)
C-17 Expenses—Student AMA Committee	1,725.00	436.24	(1,288.76)
C-18 Expenses—Disaster Emergency Medical Care Committee	600.00	17.00	(583.00)
C-20 Expenses—Constitution and Bylaws Committee	500.00	124.48	(375.52)
C-24 Expenses—Anesthesia Study Committee	350.00	341.05	(8.95)
C-30 Expenses—Liaison to Insurance Industry Committee	200.00	23.60	(176.40)
C-31 Expenses—Community Health Committee	500.00	538.40	38.40
C-36 Expenses—Family Marriage Counseling Committee	500.00	.00	(500.00)
C-37 Expenses—Medicine and Religion Committee	500.00	117.52	(382.48)
C-49 Expenses—Medical Education Committee	4,000.00	256.33	(3,743.67)
C-51 Expenses—Medical Aspects of Sports Committee	1,000.00	708.27	(291.73)
C-61 Expenses—Audiovisual Programs Committee	300.00	119.57	(180.43)
Total Intra-Functional Activity Budget	$ 35,225.00	$ 33,571.15	$ (1,653.85)
Extra-Functional Activity Budget:			
D-1 Expenses—Delegates to AMA	$ 11,500.00	$ 10,637.83	$ (862.17)
D-2 Expenses—Conference Dues	250.00	247.50	(2.50)
D-3 Expenses—Woman's Auxiliary	5,400.00	5,400.00	.00
D-5 Expenses—President's Communications (Newsletter)	1,375.00	3,700.14	2,325.14
D-6 Purchases—Relative Value Studies (CMA)	.00	1,745.64	1,745.64
Total Extra-Functional Activity Budget	$ 18,525.00	$ 21,731.11	$ 3,206.11
Public Relations Budget:			
E- 3 Committee Chairman—Out of State Travel	$ 500.00	$ 238.66	$ (261.34)
E- 9 Audiovisual Distributions—Material	100.00	.00	(100.00)
E-10 Educational Distributions—Materials	300.00	307.68	7.68
E-11 News and Press Releases	200.00	58.50	(141.50)
E-12 Public Relations Bulletin	4,300.00	3,916.07	(383.93)
E-13 State High School Science Fair Program	160.00	150.00	(10.00)
E-14 Exhibits and Displays	500.00	.00	(500.00)
E-15 Medical Leadership Conference	1,500.00	1,555.87	55.87
E-17 Today's Health Magazine Subscriptions	1,300.00	270.00	(1,030.00)
E-18 Collateral Public Relations	500.00	519.28	19.28
E-19 N. C. Rescue Squad First Aid Trophies	200.00	75.51	(124.49)
Total Public Relations Budget	$ 9,560.00	$ 7,091.57	$ (2,468.43)
Annual Sessions (121st) Convention Budget:			
F- 1 Program Production	$ 2,500.00	$ 2,971.78	$ 471.78
F- 2 Hotel and Auditorium Expense	6,000.00	6,420.15	420.15
F- 3 Expenses—Publicity Promotion	600.00	669.18	69.18
F- 4 Entertainment	1,200.00	1,016.78	(183.22)
F- 5 Orchestra and Floor Entertainment	2,500.00	1,100.00	(1,400.00)
F- 6 Guest Speakers	2,500.00	3,395.83	895.83
F- 9 Booth Installation and Supplies	5,000.00	4,741.00	(259.00)
F-10 Projection Expense	800.00	606.48	(193.52)
F-11 Badges	250.00	191.32	(58.68)
F-12 Transactions Reporting Service	2,500.00	3,020.27	520.27
F-13 Rental—Extra Facilities	200.00	123.87	(76.13)
F-14 Exhibitors Entertainment	1,000.00	845.33	(154.67)
F-15 Banquet Expense	200.00	174.20	(25.80)
F-16 Police Security	400.00	248.00	(152.00)
Total Annual Sessions (121st) Convention Budget	$ 25,650.00	$ 25,524.19	$ (125.81)
Miscellaneous Budget:			
G- 1 Legal Counsel Retainer Fees	$ 20,000.00	$ 27,206.97	$ 7,206.97
G- 2 Reporting (Executive Council, Etc.)	2,000.00	2,607.13	607.13
G- 3 Fifty Year Club (Pins, Etc.)	400.00	599.26	199.26
G- 4 Contingency and Emergency	1,215.00	3,084.16	1,869.16
G- 5 Employees Retirement System	17,700.00	17,986.91	286.91
G- 6 Ad Valorem Taxes	950.00	824.82	(125.18)
G-6(a) Prior Year Taxes on Highway 70 Property (Foreclosure by Medical Society)	.00	3,422.05	3,422.05
G- 7 Association of Professions	200.00	200.00	.00
G-10 Expense of Commissioners	1,500.00	1,346.97	(153.03)
G-11 Expenses of Executive Committee	300.00	290.05	(9.95)

G-12 Expenses of Officers to National Meetings	2,000.00	2,161.81	161.81
G-13 Travel and Maintenance, Expense of Essential Staff—Out of State Sessions	2,500.00	2,249.29	(250.71)
G-14 N.C.M.S. Headquarters Staff Hospitalization	2,980.00	3,261.52	281.52
G-15 Other Property Taxes and Insurance	252.00	474.16	222.16
G-16 Residential Property Repairs	500.00	1,666.18	1,166.18
G-17 Sales Tax—"Medicine in North Carolina"	.00	31.93	31.93
Total Miscellaneous Budget	$ 52,497.00	$ 67,413.21	$ 14,916.21
Headquarters Facility Budget:			
M- 5 Utilities	$ 18,000.00	$ 21,184.96	$ 3,184.96
M- 6 Insurance	1,750.00	1,847.00	97.00
M- 7 Taxes (Real Property)	17,000.00	16,852.71	(147.29)
M- 8 Water	550.00	577.16	27.16
M- 9 Janitorial Services	14,000.00	12,294.31	(1,705.69)
M-10 Grounds Maintenance	1,500.00	1,320.53	(179.47)
M-11 Building Repairs and Maintenance	4,000.00	1,871.45	(2,128.55)
M-12 Heating and Air Conditioning Repairs and Maintenance	3,500.00	2,689.92	(810.08)
Total Headquarters Facility—Budget	$ 60,300.00	$ 58,638.04	$ (1,661.96)
Operating Budget Reserves: (Allocations to Operating Reserve Fund)			
R-1 Interest on Notes Receivable—(Property)	$ 12,679.00	$ .00	$(12,679.00)
R-2 Interest on Reserve Fund	8,500.00	8,727.13	227.13
R-3 Extra Dues for Reserve Fund	52,000.00	57,825.00	5,825.00
R-4 5% of Operating Budget	27,744.00	.00	(27,744.00)
Total Operating Budget Reserves	$100,923.00	$ 66,552.13	$(34,370.87)
TOTAL EXPENSES	$656,520.00	$624,800.14	$(31,719.86)

EXHIBIT "D"
NORTH CAROLINA MEDICAL SOCIETY
STATEMENT OF SOURCE AND APPLICATION OF FUNDS
For the Year 1975

SOURCE OF FUNDS:		
Decrease in Working Capital (See Below)		$127,031.79
Increase in Reserve for Claims Review		1,261.39
Increase in Reserve for Medical Education		229.00
Increase in Reserve for Leadership Conference		188.00
TOTAL SOURCE OF FUNDS		$128,710.18
APPLICATION OF FUNDS:		
Net Deficit from Operations (See Exhibit "C")		$ 15,773.56
Notes Receivable—International Developers, Inc.—51 Acres of Land—Highway 70 West of Raleigh—Foreclosed on Property		179,172.42
Decrease in Reserve for Traffic Liability Safety Program		84.73
Decrease in Reserve for Mental Health State Conference Program		596.63
Decrease in Reserve for Mental Health Contactorama Program		1,134.97
		$196,762.31
LESS: Noncash Requirements for Increases in Following Reserve Accounts:		
Reserve for Operating Reserve	$ 66,552.13	
Reserve for Purchase of Equipment	1,500.00	68,052.13
TOTAL APPLICATION OF FUNDS		$128,710.18

CHANGES IN WORKING CAPITAL:

	1975	1974	Working Capital Increase	Working Capital Decrease
Current Operating Fund:				
Cash on Hand and in Banks	$679,965.98	$574,087.38	$105,878.60	$
Accounts Receivable—Regular	4,692.36	8,016.58		3,324.22
Accounts Receivable—National	4,306.01	2,846.69	1,459.32	
Accrued Interest Receivable	.00	8,956.22		8,956.22
Air Travel Deposit	425.00	425.00	.00	
Notes Receivable—I.D.I.	.00	179,172.42		179,172.42
Prepaid Supplies	2,227.37	.00	2,227.37	
	$691,616.72	$773,504.29		
Liabilities	$269,337.06	$198,108.83		71,228.23
Deferred Credits	108,103.99	134,188.00	26,084.01	
	$377,441.05	$332,296.83		
NET WORKING CAPITAL	$314,175.67	$441,207.46		
DECREASE IN WORKING CAPITAL			127,031.79	
			$262,681.09	$262,681.09

NORTH CAROLINA MEDICAL SOCIETY

CASH ON HAND AND IN BANKS (INCLUDING SAVINGS)
December 31, 1975

FIRST-CITIZENS BANK & TRUST COMPANY—RALEIGH, NORTH CAROLINA:		
Checking Account—Number 12-03-643	$362,346.86	
Savings Account—Number 0861010544	207,175.93	
Certificate of Deposit—Number 40576-U	23,218.29	$592,741.08
FIRST FEDERAL SAVINGS AND LOAN ASSOCIATION—RALEIGH, NORTH CAROLINA:		
Certificate of Deposit—Number 1-17-091413	$ 23,417.06	
Certificate of Deposit—Number 1-09-092819	20,160.35	43,577.41
RALEIGH SAVINGS AND LOAN ASSOCIATION—RALEIGH, NORTH CAROLINA:		
Certificate of Deposit—Number 986085-2	$ 23,412.14	
Certificate of Deposit—Number 987240-6	20,160.35	43,572.49
PETTY CASH FUND—OFFICE		75.00
TOTAL		$679,965.98

AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

1975-76 has been a year showing that we are Ambassadors for Health and Husbands.

At our annual meeting in May 1975 in my inaugural remarks I asked that each of the auxiliaries join forces with other organizations and work for the betterment of health care and education in their community. Also I asked that there be better communication between the county society and county auxiliary in utilizing their resources and working together for health care and education. Realizing the validity of the maxim, "You can't sell it unless you tell it," we have increased our efforts to create an awareness of the contributions made to society by doctors and their wives.

In order to COMMUNICATE to their members and to other organizations, many of our auxiliaries have inaugurated newsletters. This is our second year of having the opportunity and privilege of putting in pertinent information in the North Carolina Journal of Medicine which reaches over 4,000 members of the Medical Society. Our Auxiliary newspaper, *Tarheel Tandem*, is sent to our membership, to the leading newspapers over the state, Auxiliary Presidents in other states, and to organizations in our state and country. Our newspaper is looked upon by other state auxiliaries as one of the best newspapers put out by a state auxiliary. The national AMA Auxiliary gives many compliments to this newspaper and is recommended as an example for other states.

COOPERATION has been one of the keys to this year's work. There has been cooperation shown with our medical schools, medical societies and other organizations. The Auxiliary was extended an invitation to share in the Leadership Workshop that the Medical Society had on January 31, 1976. We are working with a committee from the Medical Society on the North Carolina Conference on Children-Age 0-7 that is to be held on March 30, 1976. We have been asked by Lt. Governor Hunt to have a representative to attend a conference on television programming that he will be having the end of March. The Auxiliary has a committee of five members that will be meeting on March 3, 1976 along with a committee from the Medical Society at a meeting with the Department of Public Instruction. This is just a few of the things that our Auxiliary is doing. Auxiliary members are working actively in all areas in their community, serving on Boards of practically every community organization.

The cooperation we have received from the Headquarters staff has been outstanding. My particular thanks to Mrs. LaRue King, for the guidance and cooperation she has given to me this year. Also a special thanks to Mr. Gene Sauls for helping me with the Midwinter Workshop and a special thanks to Mr. William Hilliard for his support and helping to provide me with the services I have asked for. Needless to say, we do depend upon the Medical Headquarters for their support and help. We have enjoyed using the Auxiliary office for several committee meetings.

Dr. Gloria Graham, Chairman of the Advisory Committee has been extremely interested and enthusiastic over Auxiliary accomplishments, and most helpful with her guidance and suggestions. The Advisory Committee and the Medical Society have been most gracious and generous to both the Auxiliary and me.

Dr. James E. Davis, President of the Medical Society, has been a stalwart supporter of Auxiliary, generous with both his time and knowledge. He has been a great supporter of getting the county societies and auxiliaries to communicate with each other and work together. He has extended the invitation to me to attend all the Medical Society Executive Council Meetings and has kept me informed of pertinent material that deals with the medical society. It has indeed been a pleasure to work with him.

Realizing that our Auxiliary is the vital link between the AMA Auxiliary and the county auxiliaries, we have constantly worked to strengthen these ties. We have utilized the material and manpower of the AMA Auxiliary to train leaders to go back to their communities and implement the aims of our Medical Society and Auxiliary.

WORKSHOPS: In order to assist incoming county officers in planning their year's work we held a Program Planning Workshop at our Annual Convention in May 1975. Areas of emphasis were Projects Bank, Health Education, and Community and Family Health. The attendance was very good and included Hazel J. Lewis, Executive Director of the AMA Auxiliary, and Mrs. Linus Hewit, Southern Regional Vice President of the AMA Auxiliary.

In the fall we held two workshops — one being in Winston-Salem for Districts 6-10 and in Kinston for Districts 1-5. All phases of Auxiliary work were presented by the respective State Chairmen. The total registration was 160.

On January 31, 1976 in co-junction with the Society's Midwinter Leadership Conference, the Auxiliary held a Leadership Workshop. Our main speaker on the program was Mrs. Jo Ann Flair, Coordinator of the In-Service Patient Education Center at North Carolina Memorial Hospital in Chapel Hill. She gave a most informative program with many ideas for the members to take back to their community. Also on the program were five county president-elects that had attended a Leadership Conference in Chicago in October. Their part on the program was most informative and interesting as they gave reports on seminars they had attended in Membership, Rape, Child Abuse, Emergency Medical Services, and Communications. With their enthusiasm, poise, and the way they presented their material they put the icing on the cake, so to speak. All of these workshops have been "open" to all Auxiliary members, and we have had a very good attendance and enthusiasm has been created.

MEMBERSHIP: Realizing that membership is the cornerstone of all our activities, we have placed special emphasis on recruitment, training, and retention of members.

We are still trying the same approaches that were done last year: (1) Encouraged several small auxiliaries to combine into one auxiliary (2) Encouraged active auxiliaries to take Members-at-Large and faltering auxiliaries into their auxiliary. (3) Worked with Members-at-Large to reorganize counties which have disbanded in the past. At the time of this writing, (February 18), we have organized one new auxiliary. WE possibly have one or two more in the making. Our membership as of February 18 is 2,700. We have a goal of 3200 for this year so you see we still have much work ahead of us to reach that goal.

AMA-ERF: The American Medical Association-Education REsearch Foundation continues to be the only philanthropic endeavor sponsored by the AMA Auxiliary. Every county auxiliary contributes in some manner to this project. North Carolina has also become part of "Project Credit" where all donations from North Carolina will go on record for our Auxiliary if so stipulated by the donor that he would like it this way. The Advisory Committee of the Medical Society has wholeheartedly supported our efforts by asking that write-ups be put into the N.C. Journal of Medicine, the President's Newsletter and the Medical Society News Bulletin during the month of December. At this time, our total for 1975-76 donation to AMA/ERF is $14,488.85. Donations to this are acceptable until the end of

May so we hope by the end of May we will be reaching up toward the $20,000 mark.

STUDENT LOAN: We have felt that this fund has not been utilized this year to its greatest effect. Since July 1st we have given out 4 student loans at $500.00 each. I appointed a committee at our Executive Board Meeting in January to visit each of the medical school deans and to report back at the next executive meeting how we might utilize this better. Local scholarships and loans to students in health fields continue to be the most frequently mentioned project of our county auxiliaries.

MENTAL HEALTH RESEARCH ENDOWMENT FUND: Our Mental Health Research Endowment Fund is complete at $20,700.00. The interest continues to go to the Department of Psychiatry, University of North Carolina at Chapel Hill. This money is being used in the child mental health area.

SANATORIAL BEDS: The Auxiliary continues to support four endowed beds at our state Sanatoria. The total endowment for these four beds is $42,000.00. The proposed guidelines that were approved by the Board of Directors last year have been reviewed and each sanatorium has been visited and each administrator has been talked to and explained in detail in regard to the guidelines. We feel that with the communication that has been done this year that we will see these funds utilized in a much greater way.

LEGISLATION: We have worked closely with Mr. Steve Morrisette of Headquarters on Legislation, as well as utilizing our own letterwriting network on crucial legislation. There is much to be done in the legislative way in the next few months. There is an insert in the Winter issue of *Tarheel Tandem* on Legislative material that is of much interest to us in the medical profession.

COMMUNITY HEALTH AND FAMILY HEALTH: Much work has been done in these two interrelated fields. Many auxiliaries assisted with Bloodmobile (one auxiliary is on call to maintain the bloodmobile with help, rides and etc.), GEMS program being taught in the Jr. High (this being a baby sitting course), programs against V.D., Drugs, Child Abuse, Rape, and many more. Auxiliaries are having the Cardiopulmonary Resuscitation Program as one of their meetings. One auxiliary has worked with the In-Service Program of their local hospital, the Cancer Society in getting Self-Breast Examination Clinics started in their community. Many auxiliaries through out the state work with the Health Careers Clubs in the high schools of their counties. Health Fairs have mushroomed and has created much interest among the children in our state. So many other areas that I could go into but there just isn't enough space alloted to go into detail.

HEALTH EDUCATION: Last year we were asked by the Department of Public Instruction if we would cooperate with them by having a committee from the Medical Auxiliary and Medical Society to meet with them in helping to deplore and develop effective curricula and teaching methods for the public schools. I am happy to say that on March 3, 1976 these two committees will meet with the Department of Public Instruction. We are eagerly looking forward to the discussion that will come forth from this meeting.

Our full quota of delegates attended both the AMA Auxiliary Convention in Atlantic City and the National Fall Leadership Conference in Chicago. Mrs. Edwin Martinat, Mrs. Robert Andrews, and I will be attending the Southern Regional Meeting in Atlanta for the Presidents and President-elects of each southern state. I have attended so far all District and County Auxiliary meetings to which I have been invited and I have thoroughly enjoyed every minute of my travels. I have also represented the Auxiliary at other meetings throughout the state and other states.

Since this is the day for changes it seems, I am going to try for the first time to have a medical educational clinical program included in our program for the annual meeting in Pinehurst. With the gracious help of the North Carolina Heart Association and Dr. Douglas Ira Hammer there will be a Cardiopulmonary Resuscitation Program for those attending the Annual Meeting. This is by no means trying to certify anyone to be an instructor but to acquaint you with the procedure necessary to save life, at times, and I hope will be a stimulus in wanting you to go back to your community and try to get such a course started.

This has been a busy, challenging year. My Executive Committee and Board of Directors have been of invaluable help to me. They have given me support and many endless hours of work. I am indeed grateful to the members of the Auxiliary to the North Carolina Medical Society for the opportunity of serving as their president and for their support. It has been a very broadening experience for me and one full of memories (great ones, I might add) that I shall always treasure.

It is impossible to tell you all about the activities of the Auxiliary this year. They are indeed striving and are AMBASSADORS FOR HEALTH AND HUSBANDS in the year 1975-76.

Mrs. Charles L. Herring (Shirley),
President

REPORT OF COUNCILORS

FIRST MEDICAL DISTRICT

Malpractice Insurance has been the main concern of physicians in our area this year and thanks to the Medical Liability Mutual Insurance Company of North Carolina, coverage is now available to all our members (even though the premiums are high). All legislators in our area support efforts to improve the insurance climate in North Carolina.

At this writing, we are concerned that no physician "providers" have been elected from region "R" to the Regional HSA Board. This has not come about by lack of physician interest. Hopefully this poor situation can be improved by selection of some physician providers.

We are glad to have the UNC Post Graduate Courses again this year, assisted by the UNC Medical School "Air Force." Attendance is up, possibly prompted by the mandated need for "brownie points."

The AHEC program is increasing their beneficial effect in our area with educational support to nursing and medical staffs, and the paramedical personnel.

A great need continues for physician involvement in community and statewide programs, especially in health matters. This is particularly true since so many "non physician providers" of health care are operative in various directions.

The need in our area for primary physicians continues, although needed specialty services in our area are increasing.

Edward G. Bond, M.D., Councilor

SECOND MEDICAL DISTRICT

If one subtracts medical liability problems from the events and occurrences in the Second District, we can consider that the Second District has had a very quiet year. We have more physicians and we have a medical school gaining in the area.

I would like to take note that this is the last and sixth year of service as District Councilor. The work has been interesting and it has been a pleasure to serve with the other fine officers of the North Carolina Medical Society over the past six years. The unselfish dedication of my colleagues and the fine work done by the headquarters staff has been an inspiration to me over these years.

J. B. Warren, M.D., Councilor

THIRD MEDICAL DISTRICT

This past year has presented many challenges to the physicians in the Third Medical District, the utmost of which has been to maintain professional liability insurance and, therefore, continue to provide medical service to the population. The physicians of this District have supported well the formation of the Medical Liability Mutual Insurance Company of North Carolina by subscribing to guarantee capital certificates as well as buying the policies as offered.

There has continued to be a great influx of new physicians to the District, most concerned with subspecialty representation in larger towns and cities or with a regional medical center. Many primary care physicians have opened up new offices in the District.

Members have been made well aware of their responsibilities in maintaining concurrent medical education and peer review activities.

Considerable support has been extended to the state legislators of the District urging them to support the proposed changes in tort law.

E. Thomas Marshburn, Jr., M.D., Councilor

FOURTH MEDICAL DISTRICT

The Fourth District had no specific problems last year other than those associated with medicine in general, in these trying and difficult times.

I attended all Council meetings.

Harry H. Weathers, M.D., Councilor

FIFTH MEDICAL DISTRICT

(No Report as of 3/30/76)

SIXTH MEDICAL DISTRICT

During this past year, the Councilor has attended all called and regular meetings of the Executive Council and participated in organizing our Society sponsored medical liability insurance company.

Membership in our District has increased and interest in the State Society has grown.

J. Kempton Jones, M.D., Councilor

SEVENTH MEDICAL DISTRICT

The Seventh District had a quiet year except for the medical liability insurance crisis and indictments of five doctors in the District accused of improper prescribing of Class II drugs. Two of these physicians were not members of the component county medical society. One physician was tried and found not guilty. One physician, not a member of the county or state medical society, died with charges still pending. The Councilor was available for advice to any medical society member seeking advice. None of the involved doctors elected to do so.

Capitalization funds for the Medical Liability Mutual Insurance Company of North Carolina were actively solicited. At least two physicians in the district closed their offices temporarily for lack of liability insurance and resumed practice after insurance was made available by the MLMICNC.

All physicians living in the Seventh District were invited to a meeting for information on the MLMICNC and for information concerning legislative proposals for implementation of same. The Councilor attended all regular and called meetings of the Executive Council.

William T. Raby, M.D., Councilor

EIGHT MEDICAL DISTRICT

(No Report as of 3/30/76)

NINTH MEDICAL DISTRICT

I attended the State Medical Society Meeting, two regular Council meetings of the Executive Council and one special meeting. I also attended a special meeting held in Hickory for doctors of this area which Dr. James Davis was the principle speaker.

The main concerns of the Ninth District have been PSRO and Liability Insurance.

I attended a Legislature Meeting held in Boone.

No other unusual happenings have been reported in this District.

Verne H. Blackwelder, M.D., Councilor

TENTH MEDICAL DISTRICT

1. The Annual Tenth District social "get-together" was held at the Asheville Country Club in early April 1975. This was enjoyed by more than 150 physicians and their wives. This happy occasion is becoming a friendly tradition in this district.
2. The Western North Carolina Peer Review Foundation has been properly organized and presently is under contract to administer the HARP (now called Peers) program in WNC. This Foundation has established an office in Asheville and employs three people and has been responsible for training 65 non-physicians personnel to conduct Medicaid review in our 29 acute care hospitals. Seventy physicians providing over 185 hours as consultants have participated in this review. Dr. Irving Plaisance of Asheville is President of this activity.
3. The Mountain Area Health Education center now has a staff of 21 people including a medical faculty of 7. Monthly seminars have been physician oriented, nurses and physician's assistants have also attended. Regular programs have also been held in Spruce Pine, Brevard, and Cullowhee.

   A nurse practitioner program was started in October 1975. In March a class of 10 nurses will have completed their academic training and will be assigned to preceptors for clinical experience.

   The family practice center will be occupied and seeing patients in March 1976. Five second-year level and six

first-year level residents will rotate through this clinic beginning in July.

Construction of the Mountain Center Educational Building is on schedule. This will be completed in early 1977. The bridge spanning Biltmore Avenue was erected February 1976.

4. The WNC Health Systems Agency was organized in October 1975. A 46 member Board of Directors consisting of one-third providers, one-third consumers, one-third elected officials has been selected. Physician members of this Board are T. Reginald Harris, K. G. Bartels, Thomas Rardin, John Folger, Hugh Matthews. No action has been taken by this agency other than to apply for a funding grant of approximately $400,000.

Many young and well trained physicians are settling in western North Carolina. This area of North Carolina is growing, "almost too fast"!

Kenneth E. Cosgrove, M.D., Councilor

ADMINISTRATION COMMISSION

All committees under the administrative commission have carried out their duties well for the year. For details of their activities, see under the individual committee reports.

A. Hewitt Rose, M.D., Chairman

ADVISORY AND STUDY COMMISSION

The ADVISORY AND STUDY COMMISSION has been extremely active during the past year. Many of these Committees have met several times during the year and all Committees were in session at the Committee Conclave in September.

Anesthesia Study Committee — reviewed all operating room and recovery room deaths in detail and have made significant suggestions to further improve the reporting and study of these deaths.

Committee Advisory to Auxiliary — as always, has been very active and the Medical Society is ever indebted to the Auxiliary for the great help they render to the Society.

Committee on Cancer — under the chairmanship of Dr. Rose Pully, is one of the most active committees. This Committee was instrumental in having the Governor reappoint a Committee on Study of Cancer and the Governor, through the Department of Human Resources, has appointed such a Committee. One of the main functions of this Committee will be to try to coordinate the various groups and agencies that are doing such fine work in the study of cancer and its treatment.

Constitution and Bylaws Committee — has reviewed the entire Constitution and Bylaws and will present several recommend changes to the House of Delegates at the Annual Meeting in May.

Committee Advisory to Medical Students — representatives from the three medical schools were invited to meet with this Committee at the Committee Conclave. All three medical schools were represented. Efforts have been made to increase the interest of the medical students in organized medicine and find ways in which the Society may better serve the interest of the medical students.

Committee on Traffic Safety — under Dr. Edgar T. Beddingfield has had several meetings. The very excellent work of this Committee is certainly to be commended and the separate report of this Committee will indicate their many positive steps taken to improve traffic safety.

ad hoc Committee on Relative Value Study — this committee completed its study regarding whether or not the Society should update its Relative Value Studies and presented a recommendation to the Executive Council at its meeting September 28. This was a monumental task involving the labors of many, many physicians both on and off the Committee.

Space does not permit detailed accounts of the many activities of these various committees, but much thanks is due to all of the Chairmen and members for very active, dedicated and valuable service to this Society.

Marvin N. Lymberis, M.D., Chairman

ANNUAL CONVENTION COMMISSION

The members of this Commission are well pleased with the response of the membership of the North Carolina Medical Society to the changing format of the Annual Meeting. There is general agreement of all committees that the excellence of the General Sessions, as presented by the medical schools has greatly increased the interest in the Annual Meeting.

The Commission has decided to limit the scientific and technical exhibits time to two days only at the Annual Meeting — (Friday and Saturday). A "general information" meeting, patterned after those meetings introduced by President James E. Davis, will be scheduled immediately after the first meeting of the House of Delegates — (Thursday).

At the request of the membership, the agenda of the Reference Committees will be staggered. This will allow the interested members to attend major issues of both sessions.

The following motion was recommended and passed by the Executive Council:

> "ONLY MEMBERS OF THE NORTH CAROLINA MEDICAL SOCIETY OR ITS AUXILIARY ARE ELIGIBLE FOR PRIZES IN THE GOLF AND TENNIS TOURNAMENTS."

It was recommended and passed by the Executive Council that the following awards be made for excellence of scientific exhibits:

1. Best Exhibit — $500
2. Second Best Exhibit — $250
3. Third Best Exhibit — $250

The following rules were established by the Committee on Medical Education:

1. The first cycle on medical education, required for membership in North Carolina Medical Society began on January 1, 1975 and will end on December 31, 1977. (a three-year period, reportable annually)
2. A new member's reporting period will begin on the January 1 following his admission to the North Carolina Medical Society and will end on December 31, three years later.
3. Any request for approval of programs, for credit, from a non-accredited institution will be referred to a local agency or institution (already accredited) for possible co-sponsorship or approval.
4. There will be *no* exemptions from the requirement of continuing medical education for physicians who are actively employed in the field of medicine.
5. Any application for exemption, because of hardship or disability, will be studied by the physician's local medical society with this society's verification and recommendation to the North Carolina Medical Society.

The Commission recommended that the Council on Review and Development study the Committee on Awards. It is believed that this Committee has served well. Because of

the changed format of the Annual Meeting, the Committee may not be needed in the future.

Josephine E. Newell, M.D., Chairman

PROFESSIONAL SERVICE COMMISSION

The Professional Service Commission now consists of 7 committees, the Committee on Social Services Programs having been added at mid-year when Commission VII was abolished.

The Industrial Commission, Blue Shield and Insurance Industry Committees are concerned primarily with claims review, are busy, and functioning reasonably well. Proposed changes in the composition and selection of the Blue Shield Committee, if passed, should increase the Committee's efficiency. The Industrial Commission fee schedule has been updated and probably will be revised every 2 years to keep it current.

Committees on Crippled Children's Programs and Physical and Vocational Rehabilitation serve a useful purpose although not at all busy. Combining the two should be considered.

The Committee on Hospital and Professional Relations and Liaison to North Carolina Hospital Association has had very little to do in recent years. This inaction probably indicates the good interprofessional and professional-hospital relations that we enjoy and the committees philosophy of action only in response to a problem.

The Committee on Social Service Programs is active, particularly in the area of HAS-Medicaid. Things seem to be getting better but only time will tell.

Jack Hughes, M.D., Commissioner

PUBLIC RELATIONS COMMISSION

All of the Committees of the Public Relations Commission met in Southern Pines during the Committee Conclave in September, 1975. Several of the committees have met since then. Each of these meetings were well attended and productive as indicated by the reports of the Committee Chairman listed separately. A brief report of the activities of the Committees of the Public Relations Commission at the Committee Conclave is outlined below:

Medical-Legal Committee — Julius A. Howell, M.D., Chairman

Recommended that the North Carolina Medical Society publish a brochure on tips to avoid a malpractice suit.

Eye Care and Eye Bank Committee — E. W. Larkin, M.D., Chairman

1. Recognizes the duty and responsibility of all physicians to assist in the care of the medically indigent citizens.
2. Recommends the endorsement of the concept of responsibility for care.
3. Recommends that all Ophthalmologists be allowed and encouraged to participate in the Blind Commission clinics on an equal basis.
4. Mr. John Anderson was requested to look into the status of soft contact lenses to see if they are considered to be a drug.

Committee Liaison to the North Carolina Pharmaceutical Association — Charles W. Byrd, M.D., Chairman

1. Recommended opposition to the "MAC" regulations of the Department of HEW, because the regulations interfere with the physician's ability to use his best medical judgement in prescribing drugs.
2. Recommended the continued support of the presen North Carolina law on the substitution of drugs.
3. Recommended that the North Carolina Medical Soc iety identify and support appropriate physicians fo representation on governing boards of HSA's. Also that all conveners of the HSA's be written to explain the value of multiple physician representation o their boards.

Committee on Disaster and Emergency Medical Care — George A. Watson, M.D., Chairman

1. Recommended the approval of the concept of a six month study by the Department of Emergency Medical Services to determine (in conjunction with local medical and paramedical) emergency medical service capability in one selected health area.
2. Recommended the endorsement of the concept o postgraduate education for physicians working in emergency rooms and specifically the program established by ECU in cooperation with Forsyth Emergency Services.

Committee on Legislation — H. David Bruton, M.D. Chairman

1. Recommended a Legislative Reception in May, 197 with the final decision left up to the Chairman of the Committee on Legislation.
2. Recommended a Washington pilgrimage to visit ou N.C. Congressman and entertain them at a luncheon — travel expense to be at the physician's expense.
3. Recommended extending the weekly *Legislativ Newsletter* to all legislative contacts and any othe physicians the Chairman of the Legislative Committee feels necessary to receive the Newsletter.
4. Recommended the endorsement of the experimen of the HMO's as a concept but not to adopt H.R 7847 at this time.

Committee on Community Medical Care — J. Kempton Jones, M.D., Chairman

Feels the curriculum of postgraduate education for physicians working in Emergency Rooms as sponsored by ECU is unrealistic to complete in two weeks.

Committee on Public Relations — John L. McCain, M.D. Chairman

1. Recommended that County Medical Society Member who are non-AMA members and non-State Society members be invited to the Leadership Conference to be held in January in order to acquaint them with the workings on organized medicine.
2. Recommended that, upon request by a County Medical Society and aided by the North Carolina Medical Society headquarters staff, a questionnaire be sent ou for preparation of a roster of physicians available to see new patients.
3. Recommended that the Executive Council of the North Carolina Medical Society consider having a Practice Management Workshop sponsored by the AMA in conjunction with the North Carolina Medical Society Annual Meeting.
4. Announced that North Carolina Conference for Children is to be held March 30, 1976 under the direction o Dr. Clement Lucas of Edenton and three requested convenors, the Governor, Lt. Governor and the North Carolina Medical Society and co-sponsored by al State Agencies and Volunteer Agencies involved with children. This will be a one day symposium.

For detailed accounts of committee activities, please see the respective committee chairman's report.

The Public Relations Commission has been very active

his year. The committees with their excellent leadership ave made significant achievements. To the headquarters taff, my appreciation for the many services they have per-ormed on behalf of the Public Relations Commission.

Marshall S. Redding, M.D., Chairman

PUBLIC SERVICE COMMISSION

(No Report as of 3/30/76)

REPORT ON COMMITTEES

COMMITTEE ON ALLIED HEALTH PROFESSIONALS

The Committee on Allied Health Professions met at Southern Pines, North Carolina on September 26, 1975.

Mr. Chris Gentile, Assistance Chief, Office of Emergency Medical Services, reported on Career Mobility in the Emergency Medical Service. The various career opportunities available to this particular group of paramedical specialists were delineated and discussed. Mr. Gentile emphasized that the objective of the program was to improve the quality and availability of emergency medical care prior to the arrival of the physician.

Current confusion over certain legal aspects of Physicians' Assistants' activity was considered. The following points were reiterated:

1) The P.A. works under the *direct* supervision of a physician.
2) A single physician can have no more than two Physicians' Assistants.
3) In all acts performed by a P.A., the supervising physician to whom he is assigned is the responsible party.

The six Task Force Reports of the North Carolina Joint Practice Committee were reviewed. The purpose of these reports is to assist the subcommittee of the Board of Medical Examiners and the Board of Nursing in formulating policies governing the activities of Nurse Practitioners and Physicians' Assistants acting in an Expanded Role. The Task Force Reports include: Nurse Manned Clinics, School Health Services, Occupational Health Services, Emergency Care Services and Maternity and Family Planning Services, including midwifery.

The following motion was passed:

THE COMMITTEE ON ALLIED HEALTH PROFESSIONALS RESOLVED TO PROVIDE COMMISSIONER MARVIN N. LYMBERIS, M.D. WITH COPIES OF THE JOINT PRACTICE COMMITTEE'S TASK FORCE REPORTS TO BE SUBMITTED TO THE NORTH CAROLINA MEDICAL SOCIETY FOR THEIR INFORMATION.

Recent North Carolina State Legislation authorizing Nurse Practitioners and Physicians' Assistants to prescribe and dispense drugs and medications was reviewed. The Subcommittee of the Board of Medical Examiners and the Board of Nursing is actively engaged in establishing guidelines to implement this legislation.

Once again, an invitation was extended to Physicians' Assistants to attend the Scientific Sessions of the North Carolina Medical Society.

W. Benson McCutcheon, Jr., M.D., Chairman

COMMITTEE ON ANESTHESIA STUDY

The Anesthesia Study Committee received approximately 150 notices of death during or following an operation in North Carolina in 1974, of which 110 were investigated. Included in this total were 57 operative deaths. From information obtained from returned questionnaires, the Committee felt that 16 of these deaths (11 intra-operative and 5 post-operative) had some relationship to anesthesia. This relationship ranged from the interaction of the patient's disease or condition to the anesthetic agent, to that of anesthetic management — such as pulmonary aspiration on induction and failure to stay with an anesthetized patient.

The use of the Medical Examiner system in Operating Room Deaths was analyzed. Although the Medical Examiner made a report to this Committee in about a third of operating room deaths, the Medical Examiner made a report in 7 of the 11 unexpected operating room deaths. In addition, the Medical Examiner was involved in 4 of the 5 deaths outside the operating room that were directly attributed to an event that occurred in the operating room. The Committee has insufficient data in regard to how often the Medical Examiner is notified since the response to this question has been infrequent, but from the analysis, we can surmise that in most expected deaths the Medical Examiner has not been involved. Rather, the Medical Examiner's participation has been in the area suspicious or unexpected operative or para-operative deaths. However, it has been disturbing that 30% of anesthetic-related deaths were not reported by the Medical Examiner in 1974 (although death may have been anticipated in some of these). Therefore, we urge that all physicians take advantage of the Medical Examiner system. All operating room deaths must be reported to the Medical Examiner by law. The Medical Examiner can then decide how to handle the investigation. Additional information from an investigation can be helpful not only to this Committee, but also to the physician involved in a death.

Albert A. Bechtoldt, Jr., M.D., Chairman

COMMITTEE ON ARRANGEMENTS

The Committee met in Southern Pines on September 25, 1975, with good attendance.

The May 1975 meeting was reviewed, and particular note was made of the unusually good programs, and the resulting good attendance at the general sessions. The plans for the 1976 annual meeting were reviewed. Time and place of future meetings was discussed. The desire of the membership for continuation in Pinehurst was noted, but other potential sites were reviewed. It was noted that the cost of these newer sites is considerably more than we are currently expending.

E. Harvey Estes, Jr., M.D., Chairman

COMMITTEE ON ASSOCIATION OF PROFESSIONS

The Association of Professions continues to bring people, interests, and issues together to promote a better understanding and working relationship between our professional organizations in the state. This has been demonstrated in the past years, but especially during the past year. We now have an AD HOC committee, composed of Raleigh representatives, of each member group to serve as an overall planning and implementation of Association programs and activities as approved by the Association's officers and board of directors. It has been my privilege to serve you, the physicians, on this committee. The close association with other committee members and having the opportunity to meet frequently with this committee has clearly demonstrated the effectiveness of this "sharing" ideas to arrive at a common understanding and approach to issues brought before the Association. This is the aim and objective of the Association of

Professions and it has worked and will continue to work if we all participate.

Legislation was a major emphasis during the first half of 1975. The Association was asked by its members groups to support pertinent issues and bills, which it did, and did effectively. We do not expect as much legislative activity at the state level in 1976, but association leaders will be preparing for the 1977 legislative session. Contacts have been frequent with our Congressional leaders concerning national legislative issues. One of these has been P.L. 93-641, the establishment of Area Health Services Agencies, of which we now have six in North Carolina. We have Association members named to each of these Area Boards resulting from the contacts made by our members.

Veterinary School for North Carolina — We are encouraged by reports from state legislators and the UNC Board of Governors that the Veterinary School will be established in 1976 at N.C. State University. This has been a major interest to our NCAP group. Appreciation is expressed to our own Mayne Allbright, Attorney, who has worked closely with the Association and its legislative programs during the year. The Association has established a legislative network of members across the state for the purpose of channeling information. This worked very well during the 1975 General Assembly and we hope to strengthen this chain of communications in preparation for the 1977 General Assembly.

Malpractice insurance has also been a concern for our association members. We realize that this issue is not limited to physicians, but to all of the professional groups. Current issues, such as proposals of the Federal Trade Commission on publicizing fees, prices, and other confidential information is a threat to our professional practices. The ever increasing restrictions, regulations, guidelines and unnecessary paper work required of our members is a growing problem, and unified effort is needed to cope with the frustrations.

The communications between member groups and the association members has been improved through our News Bulletins, legislative reports, and articles appearing to Newsletters and Journals of the member societies all are helping to promote the effectiveness of our Association.

Representing the N.C. Medical Society on the board this past year have been:

Edward K. Isbey, Jr., M.D.
George G. Gilbert, M.D.
Thomas G. Thurston, M.D.
John H. Hall, M.D.
John S. Rhodes, Sr., M.D.

The Annual Meeting will be held March 25, 1976, at the Governor's Inn, Research Triangle Park. We will have the Deans of each professional school, including our own Dean Fordham, to speak about Admissions, then our President will be given an opportunity to comment on pertinent issues which they wish to share with our association members, and Dr. Ben Fountain, Head of the Community Colleges for North Carolina, will report on the expansion of paraprofessional training programs and manpower supply resulting from these training programs. Dr. John T. Caldwell will address the luncheon session on the proposed plans for establishing an Advanced Studies Center at the Research Triangle Park.

Thomas G. Thurston, M.D., Chairman

COMMITTEE ON AUDIO VISUAL PROGRAMS

The Committee on Audio-Visual Programs met in Southern Pines during the Committee Conclave and reported a good attendance at the Audio-Visual showings during t 1975 Annual Meeting.

The program for the Audio-Visual Sessions has be completed and will be mailed to the membership with t March issue of the BULLETIN. The Sessions are schedul for Thursday and Friday, May 6 & 7 — 9 a.m. to 5 p.m. in t HMS Bounty Room, Pinehurst Hotel, Pinehurst.

G. P. Henderson, Jr., M.D., Chairma

COMMITTEE ADVISORY TO AUXILIARY

The Annual Meeting of the Committee was held Thur day, September 25 at the Mid Pines Club in Southern Pine Mrs. Shirley Herring, Auxiliary President, reported th membership was at an all time high of 2,890 members in t state; 2,867 members in national and 23 members-at-larg There are now 51 auxiliaries and of the 100 counties in t state 69 counties are organized. The theme for the past ye has been Ambassadors for Health and Husbands. Tw workshops were held during the year with a total attendan of 150. A mini-workshop in Legislation, Family & Comm nity Health, and Health Education was held at the Ma Convention in Pinehurst. There was an increase in AM ERF Funds over the previous year. The total reported w $23,950.71. Five student loans were given during the pa year at $500 each and since June 5, student loans have be given. A total of sixty of the loans are out now and none a past due. Twenty-eight loans have been paid back in t amount of $13,450 and the cash balance is $15,925.59 (Fe 1976). Four sanitoria beds are completely endowed wi assets of $42,000. A total of $2,820.52 from interest is to b put into the student loan fund. The Mental Health Researc Endowment Fund is complete at $20,700. This year's i terest of $1,350.00 has been given to the Department Psychiatry at the University of North Carolina, to be used the child mental health area.

The emphasis for this year has been: (1) Get young mer bers and members of longstanding to work together; (2) G the county medical societies and county auxiliaries to wo together; (3) AMA-ERF; (4) Legislation. Mrs. Charl Hoffman has worked closely with Steve Morrisette, Dire tor of Governmental Affairs of the North Carolina Medic Society on legislative matters and especially in the area malpractice legislation; (5) Health Education. Emphasis on improving the qualifications of teachers who are teachin health courses and improving health education in t schools. This has been stimulated by the work of Mr Edwin H. (Martha) Martinat, President-Elect of the Au iliary, who compiled a report during the previous year on t teaching of health education in the school systems. The were also many health fairs presented throughout the sta by auxiliaries from elementary age to high school student (6) Family and Community Health. The Auxiliary is promo ing a new series for adolescents called SELF, INCORP RATED, and members have been urged to become involve in the community with other organizations in their heal related endeavors. There has also been interest in areas suc as drugs, rape, child abuse, testing and screening, wi emphasis on learning disabilities, self-breast examinati clinics, cardiac resusitation clinics and blood banks. In r gard to the Bicentennial, Auxiliaries were asked to brin their histories of all auxiliaries and medical societies up-t date and to try to have a special program during the ye related to the Bicentennial. Mrs. Herring stressed that t Auxiliary was ready to help the Medical Society in any wa possible.

Mrs. Edwin H. Martinat, President-Elect of the Auxiliar

ported that three inactive auxiliaries have been re-ganized: Rockingham, Cleveland, and Haywood Coun-s. There are still 29 counties in North Carolina without uxiliaries and 23 members-at-large from these counties. ie Auxiliary is the 8th in national membership and there e 192 auxiliary members who are members of MedPac. As airman of the Project Bank, she explained that this is a stem of storing and communicating information of proj-ts attempted and completed on a state and national level. is can prove very helpful for auxiliaries in determining ich projects they wish to undertake.

Mrs. William (Avis) Corpening, Auxiliary Consultant for MA-ERF, reported that the medical schools had received ,016, 392.74 in unrestricted funds from AMA-ERF, as of arch 1975. North Carolina contributed $23,950.71. The n for this year was to increase efforts to make opportunity reach every doctor's wife and inform and educate her in e problems, the privileges and the responsibilities of "in-lligent giving." The Christmas Sharing Card is to be essed. Forty per cent of the sales go to AMA-ERF and ere are cards provided by AMA-ERF as a means of thank-g a physician for kindness and services to honor someone d in lieu of flowers as a memorial. The AMA-ERF checks e not being held for any length of time this year and ncelled checks should be returned promptly. It was de-ded that an article be written for the BULLETIN for licitation of AMA-ERF funds in the December issue and r. Davis agreed to comment on this in the President's ewsletter. The Auxiliary was grateful for the additional 00 which had been requested from the Finance Committee r help with the publication, Tar Heel Tandem. It was not lt that an additional amount would be needed this year.

A motion was made during the meeting that the Commit-e Advisory to the Auxiliary will investigate the idea of oviding funds from the North Carolina Medical Founda-on or other sources annually to the medical school within ie state that has the highest percentage of its faculty as embers of the North Carolina Medical Society.

The members of the committee who were present at the eadership Conference met for a short meeting on January 1, 1976, to consider a Resolution, which had been submit-ed from the Executive Council of the Auxiliary. A resolu-on was passed that the Auxiliary be encouraged to stimu-te its individual members to educate the voters of North arolina concerning the issues on the constitutional ques-ons to be presented at the March 23 Primary and actively articipate in discussion on these issues according to their wn viewpoint. Those in attendance at this called meeting ere the Chairman, Dr. Gloria F. Graham, Dr. A. J. Crutch-eld, Dr. Bruce B. Blackmon, and Dr. Charles Herring.

I would like to congratulate Shirley Herring, President, nd her committee chairmen and all members of the Aux-iary who have worked so diligently during the past year to ccomplish the many aims and goals of this fine group who tand ready and willing to help their medical mates in any ay possible.

The Mid-Winter Workshop was held on January 31, 1976. Ms. Joann Flair, Coordinator for Patient Education Center t North Carolina Memorial Hospital, gave an address, "Trends in Patient Education." Seminars were also held on hild abuse, emergency medical service, communication, he imparied physician, membership, health education, and ape. Mrs. Edwin H. Martinat moderated a round-table iscussion of mutual problems by auxiliaries of similar size.

Gloria F. Graham, M.D., Chairman

COMMITTEE ON SCIENTIFIC AWARDS

The Committee on Scientific Awards chose as the recipient of the first Durham-Orange County Medical Society Award Dr. Kevin J. Soden who had submitted a paper entitled "The Impact of Automated Multiphasic Health Testing on the Future of Traditional Medical Practice." Dr. Soden is a resident in Family Practice at the Charlotte Memorial Hospital and Medical Center.

The Committee met on September 26, 1975 to discuss mechanisms for improving participation in the awards process. It was decided that each Section Chairman should be requested to urge participants in the respective Section meetings to submit their papers to the Committee for consideration for awards.

No papers were submitted by the Sections, therefore no papers were available for selection by the Committee for the Moore County Award or the Wake County Award for the year 1975.

The Committee expressed its appreciation to the Durham-Orange County Medical Society, the Moore County Medical Society, and the Wake County Medical Society for making possible these annual awards.

David S. Citron, M.D., Chairman

COMMITTEE ON BLUE SHIELD

The Blue Shield Committee held four scheduled meetings during the past year with excellent attendance of committee members and other Medical Society officials. These meeting dates were established in advance; the entire society membership was notified of the meeting schedule through bulletin by the Headquarters Office and informed that any member could present matters for committee consideration. In addition, the Claims Review Subcommittee met eleven times, and there were several called meetings of the ad hoc Committees appointed to consider special issues.

At the present time the thirty-two person Blue Shield Committee is composed of two representatives from each of sixteen specialty sections. The House of Delegates at the May 1975 Annual Meeting revised the structure of the Committee, effective May 1976, as follows:

> "A Committee on Blue Shield consisting of at least one member representing each major practice specialty shall be appointed by the President for one year terms subject to reappointment, except that no member may serve more than five terms in any eight year period. The President shall seek recommendations for membership from the specialty sections, and shall endeavor to ensure as full a geographic and specialty representation as practical for proper functioning of the Committee."

Rapid increases in the complexity of diagnostic and therapeutic techniques and increased use of paramedical personnel necessitated consideration made feasible only by extra effort of consultants and appointed ad hoc Special Committees. Specialty members acted in a liaison capacity between the Committee and specialty groups to help resolve problems involving new and unusual services. Among many matters involving problems or special consideration were: co-attending care, medical emergency care, tendon procedure modifications, and ad hoc committees were appointed to establish administrative and benefit allowance guidelines for procedures and services in the specialties of Psychiatry, Cardiovascular Surgery, Cardiology, and Orthopaedics.

A special ad hoc Committee for Free-standing Ambulat-

ory Surgical Facilities (Surgicenters) was appointed, including the following members: Arthur E. Davis, Jr., M.D., James E. Davis, M.D., William W. Farley, M.D., Charles L. Herring, M.D., Jack Hughes, M.D., John H. Monroe, M.D., Robert D. Connor, M.D., Wilbur T. Shearin, Jr., M.D., C. Carl Warren, Jr., M.D., and Mr. William N. Hilliard and Mr. I. O. Wilkerson, Director, Division of Facility Services, North Carolina Department of Human Resources. This Committee and the Committee on Blue Shield made recommendations to the Board of Trustees of Blue Cross Blue Shield of North Carolina. The recommendations were unanimously accepted by the Board of Trustees at its October 1975 meeting with the following motion being passed unanimously:

> That provision of benefits for services other than professional rendered in freestanding ambulatory surgical facilities be contingent upon the existence and availability of licensing and accrediting agencies.

Blue Cross Blue Shield of North Carolina has called to the attention of appropriate individuals in the public and private sectors the need for accrediting and licensing procedures of freestanding ambulatory surgical facilities. The Division of Facility Services has initiated research as to how licensing of "Surgicenters" is handled in other states.

The Committee on Blue Shield maintains effective communications between the Plan and the medical profession. The Committee acts to protect the interest of the public, who are Plan subscribers, and doctors providing necessary and ethical services.

Serving on the Claims Review Subcommittee with me are Doctors Edwin L. Bryan, William F. Crutchley, Jr., John W. Foust, Angus M. McBryde, and John H. Monroe. All members of the Committee were invited to meet at least once with the Claims Review Subcommittee; they and the consultants met with the Subcommittee to advise on specific problem areas and obtain an overview of the adjudication activities. During the eleven meetings approximately 200 cases were formally adjudicated. Issues from which important precedents, schedule modifications, and general guidelines relating to charges and the customary medical practices emerged and were referred to the full Committee for final approval. Claims were reviewed at the request of the individual physician, Blue Shield subscriber, or the Plan when there was a question about the type and amount of benefits applicable or when a procedure or service was provided on which benefits had not been established. Subcommittee members frequently consulted Committee consultants and specialists on an advisory basis when specialized knowledge was needed.

Committee members and consultants have given generously of their time serving as advisors in problems relating to their specialty. There have been more than 2,000 communications with the Plan about customary medical care and Blue Shield professional benefits.

Dr. Jack Hughes, Commissioner, has attended most Claims Adjudication meetings and has been most helpful in establishing better communications with physicians and in the improvement of the Claims Review function.

Blue Cross Blue Shield of North Carolina has been cooperative and responsive at all times and the committee is grateful for the active support of Committee functions by Mr. Thomas A. Rose, President, Dr. Stuart Sessoms, Senior Vice-President, and physician members of the Board of Trustees; and to Mr. K. G. Beeston, Vice President of Blue Shield Activities, for his continued help in the capacity of Secretary and staff support.

The Committee is appreciative of the interest, participation, and frequent meeting attendance of Dr. James E. Davis, President; Dr. Jesse Caldwell, Jr., President-Elect; Dr. Frank R. Reynolds, Past President; Dr. Jack Hughes, Commissioner; and Mr. William N. Hilliard, Executive Director of the North Carolina Medical Society.

R. Bertram Williams, M.D., Chairman

PHYSICIAN TRUSTEES BLUE CROSS AND BLUE SHIELD OF NORTH CAROLINA TO NORTH CAROLINA MEDICAL SOCIETY

The Physician Trustees of the North Carolina Blue Cross and Blue Shield have actively participated in all the activities of the Board of Trustees. Attendance has been excellent at all of the Board Meetings and Physicians have participated in the Committee work and other duties of the Board.

Because of the restructuring of the Board of Trustees, it was, unfortunately, necessary to reduce the number of physicians on the Board by two members. We thus lost the very valuable services of Drs. Alfred Hamilton and Joe Stevens. These two physicians have rendered invaluable service to the Society and to the Board of Trustees during their many years of active service on the Board. Their presence and contributions will certainly be missed on the Board.

North Carolina Blue Cross and Blue Shield has continued to grow during the past year and has significantly shortened the time intervals between submission of claims and the payment of claims. Great effort is being made to further shorten this time interval and to improve the efficiency of the operation. President Tom Rose has maintained close liaison with the North Carolina Medical Society and with the Physician Trustees and has been available always to physicians to our mutual advantage.

Marketing for the new Major Medical coverage, with a $250,000 lifetime maximum benefit began in 1975, and the response has been good. Including the group program for North Carolina State employees, there are now nearly 300,000 certificates with this coverage, protecting approximately 675,000 people.

During the December 1975 Board of Trustees meeting S. M. Sessoms, M.D., was appointed to the new position of Senior Vice President of Blue Cross and Blue Shield of North Carolina. Doctor Sessoms has overall responsibility for four of the Plan's ten divisions. These divisions handle relations with physicians, hospitals and other institutional providers of health services, claims administration and government programs, and claims payments, respectively. In addition, Doctor Sessoms will have broad responsibility throughout the entire organization in policymaking matters and all matters affecting the administration of the Plan.

The Blue Shield Activities Division added an eighth Professional Relations representative, enabling the Plan to provide more adequately for liaison with North Carolina M.D.'s.

The Physician Trustees feel that the close cooperation between the physician, hospital administrator, and lay trustees has been of great benefit in making NCBCBS responsive to the needs of the people of North Carolina. It has been a pleasure and privilege to serve on this Board.

Frederick A. Blount, M.D.
Roy S. Bigham, M.D.
James E. Davis, M.D.
H. Fleming Fuller, M.D.
Marvin N. Lymberis, M.D.
Kenneth D. Weeks, M.D.

COMMITTEE ON CANCER

The Cancer Committee met at Southern Pines on September 25, 1975 and at the Medical Society Headquarters building in Raleigh on January 3, 1976. One of the duties of the Cancer Committee is to serve as a consultant to the Division of Health Services of the North Carolina Department of Human Resources. In this capacity, action taken by the Cancer Committee included the following:

(1) Approval of the Memorial Hospital in Danville, Virginia, and the hospital in Gainesville, Georgia for the Cancer Diagnostic Program of the Division of Health Services for North Carolina patients.
(2) Approve Chemotherapy funding up to a maximum of $200 per patient per year for treatment of lymphatic metastases from cancer of the breast.
(3) Approval of the concept of out-patient diagnostic procedures, including rectosigmoidoscopy, cystoscopy, colposcopy, bronchoscopy, cryosurgery of cervix and esophogastroscopy for funding by the cancer diagnostic and treatment program.
(4) Dissemination of the information that the screening clinic pap smears are available to local pathologists for examination.

Other actions taken by the Cancer Committee included:

(1) A motion stating opposition to the out-of-state mobile screening clinics that enter the state to monitor the health of the citizens of North Carolina. The committee is concerned that sufficient safeguards are not provided under the present laws of North Carolina.
(2) With the approval of the Executive Council, the Cancer Committee recommends endorsement proposed legislation to segregate smokers and nonsmokers in public meetings in government buildings.
(3) Co-operation with the Cancer Information Service designed to disseminate information to both lay and professional public via a toll free telephone number by the Cancer Information Service of the Duke Comprehensive Cancer Center.

Rose Pully, M.D., Chairman

COMMITTEE ON CHILD HEALTH AND INFECTIOUS DISEASES

The Committee met in Pinehurst on September 26, 1975. After discussion, the following motions were adopted for presentation to the Executive Council:

"The Committee on Child Health and Infectious Diseases recommends that the fee schedule for Early Periodic Screening, Diagnosis and Treatment Program should be renegotiated to levels consistent with current charges in view of the increased cost of medical practice."

"The Committee recommended that the Executive Council of the North Carolina Medical Society endorse the concern of the North Carolina Chapter of the American Academy of Pediatrics and their plan of action with regard to assurance of evaluation of the statewide prekindergarten screening program."

This latter resolution resulted from concern that the proposed screening program be undertaken by the North Carolina Department of Human Resources should not be begun without adequate evaluation of the results of the screening program and assessment of impact of the program.

Following a long discussion on PKU Testing, the Committee passed the following motion:

"The Committee recommends to the Executive Council that the attending physician be notified by registered mail and that the hospital and health departments be notified by regular mail for insufficient samples and when PKU levels are above 3.6 mgm% and that the physician be telephoned for all distinctly abnormal values."

A resolution submitted by Dr. Frank Loda of the University of North Carolina School of Medicine was passed as follows:

"The North Carolina Medical Society recognizes that Child Abuse and Neglect is a major problem in North Carolina resulting in significant morbidity and mortality. Physicians should be aware of, and comply with, the mandatory Child Abuse Reporting Law which requires that they report suspected cases of child abuse and neglect to the County Department of Social Services. However, the responsibility of physicians to the welfare of children does not cease with reporting. It is important that appropriate medical services be made available to these children and their families. The purpose of intervention with abusing families is to provide therapeutic help, not punishment, in order that the child remain in their own home whenever possible. To achieve this goal, medical and psychiatric help is frequently required by the children and their families. The Medical Society particularly approves of the efforts of local coordinating groups to develop comprehensive programs to help abusing families and urges physician participation in such county groups.

The North Carolina Medical Society particularly emphasizes the need of families in which significant emotional abuse and neglect occurs. Such abuse can be as damaging to the child as physical abuse. Particularly in these cases there is need for participation of mental health professionals in the evaluation and therapy of these children and their families.

The North Carolina Medical Society supports the need these children have for legal representation when their cases are considered in court. Neither attorneys for the parents nor the county departments of social services are felt to represent fully the interest of the child, and the children should have the full benefit of legal counsel."

William L. London, M.D., Chairman

COMMITTEE ON CHRONIC ILLNESS, TB, AND HEART DISEASE

The Committee On Chronic Illness met on September 24, 1975 at the Annual Conclave of Committees in Southern Pines, North Carolina.

After presentation by Dr. Roy Berry regarding "Classification of Tuberculosis and other Mycobacterial Diseases," the committee recommended:

1. IMPLEMENTATION OF THE 1974 AMERICAN THORACIC SOCIETY "DIAGNOSTIC STANDARDS AND CLASSIFICATION OF TUBERCULOSIS" IN NORTH CAROLINA.
2. ALL PERSONS INFECTED WITH TUBERCULOSIS WITHOUT EVIDENCE OF DISEASE, INCLUDING THOSE RECENTLY EXPOSED TO AN INFECTIOUS CASE, BE CONSIDERED FOR PREVENTIVE TREATMENT IN ACCORDANCE WITH RECOMMENDATIONS OF THE CENTER FOR DISEASE CONTROL, USPHS, ALREADY ENDORSED BY THE EXECUTIVE COUNCIL.
3. PERSONS INFECTED WITH TUBERCULOSIS WHO ARE FOUND TO HAVE EVIDENCE OF DISEASE BE NOTIFIED TO PUBLIC HEALTH AUTHORITIES AS CASES, IF POSITIVE BACTERIOLOGY IS FOUND OR TREATMENT WITH

TWO OR MORE ANTI-TUBERCULOSIS DRUGS IS STARTED.

4. PHYSICIANS TREATING TUBERCULOSIS CASES AS DEFINED ABOVE KEEP PUBLIC HEALTH AUTHORITIES INFORMED AS TO TREATMENT PRESCRIBED, PATIENT COOPERATION IN ADHERING TO THE TREATMENT REGIMEN AND RESPONSE TO IT, DURATION AND FINAL NOTIFICATION OF COMPLETION OF TREATMENT, PROGNOSIS IN TERMS OF LASTING CURE AND WHETHER CASE CONTACTS ARE BEING INVESTIGATED AND RECEIVING FOLLOW-UP SURVEILLANCE.
5. TO BRING THIS TO THE ATTENTION OF THE COUNTY MEDICAL SOCIETY FOR APPROPRIATE ACTION.

The remaining portion of the meeting was used to review again the appropriateness of patient placement in hospitals and long-term care institutions. After presentations by Dr. A. L. VanHorn, Research Assistant, Department of Hospital Administration, UNC, Mrs. Jean Barker, R.N., Director of Long-term Care Services, North Carolina Medical Peer Review Foundation, and Dr. W. J. Steininger, Medical Director, McCain Hospital, it was clear to the committee members that, although progress is made in the proper placement of patients, some inadequacies still exist as a result of misunderstanding of guidelines, unavailability of beds at certain levels of care, and unrealistic guidelines by federal agencies. Therefore the following resolution was passed:

"THE COMMITTEE ON CHRONIC ILLNESS HAS TAKEN NOTICE OF THE REPORTS STUDYING THE APPROPRIATENESS OF PATIENT PLACEMENT AND HAS TAKEN NOTICE OF THE POLICIES DETERMINING THE PLACEMENT OF PATIENTS IN LONG-TERM CARE INSTITUTIONS. THE COMMITTEE RECOGNIZES THAT UNCERTAINTIES CONTINUE TO EXIST AND THAT ADJUSTMENTS IN POLICIES HAVE TO BE MADE. THE COMMITTEE FEELS THAT, IN FORMULATING THESE POLICIES, REPRESENTATIVES OF THE NORTH CAROLINA MEDICAL SOCIETY SHOULD BE HEARD."

Dirk Verhoeff, M.D., Chairman

COMMITTEE ON COMMUNITY MEDICAL CARE

Our committee held its annual meeting at Mid Pines Club on September 26, 1975.

Mr. Glenn Wilson discussed the AHEC program with us at length. The committee expressed especial interest in the parts of the program that take the medical students and residents out into the smaller communities of our state.

Mr. Jim Bernstein reported on progress with the Governor's Rural Health Clinics programs and on his efforts to recruit more physicians for the rural areas of our state.

Representatives from each of our state's medical schools spoke next about their respective programs related to community medical care.

All of the above items provoked much discussion by the committee.

During the year the committee chairman has attended the regular meetings of the State Task Force for Rural Health.

J. Kempton Jones, M.D., Chairman

COMMITTEE ON COMPREHENSIVE HEALTH SERVICE PLANNING

The Committee on Comprehensive Health Service Planning and the ad hoc Committee to Study P.L. 93-641 met jointly during the Committee Conclave in September.

By action of the Executive Council on September 28, 1976, these two committees were combined and became a new committee known as the COMMITTEE ON HEALTH PLANNING AND DEVELOPMENT.

Robert C. Moffatt, M.D., Chairman

COMMITTEE ON CONSTITUTION AND BYLAWS

The Committee on Constitution and Bylaws will present wording to the House of Delegates which will put into effect the following proposed changes;

1. Deletion of the Commission on Developing Government Health Programs.
2. Deletion of the Peer Review Committee.
3. Change the name of the section to the Section on Family Practice.
4. Requirement that every member designate the section in which he wishes to be a voting member.
5. The President shall be an ex officio member of all committees which he appoints.
6. The Executive Council shall fill any vacancy in the office of President Elect.
7. Add a Section on Emergency Medicine.

The Committee is continuing its work on rewriting the bylaws. It is anticipated that these will not be ready for circulation until the Spring of 1977.

Louis Shaffner, M.D., Chairman

COMMITTEE ON CREDENTIALS

The Committee on Credentials agreed to continue the procedure put into practice at the 1975 annual meeting in certifying delegates.

Each delegate will present his credentials card at the time of registration at the regular registration desk, and after being checked off against a prepared list of elected delegates (certified by the county medical societies, specialty sections and student societies) will be issued a Delegates' Badge — (red ribbon with the word "Delegate" imprinted attached.) When the House of Delegates is convened and the Speaker calls for a delegate count, the Credentials Committee will merely make an announcement as to the number of registered delegates and the number of delegates seated in the House can be counted by a visual check to ascertain that a quorum is present. A further visual check can be made to make sure that all persons seated in the House are wearing either a delegate or an alternate delegate ribbon in order to qualify for voting.

A member of the Credentials Committee will be present at the Desk in the Registration Booth on Thursday morning, May 6 from 8:30 a.m. to 12:30 p.m. to handle any problems that might arise regarding any questionable case, such as a person not having a duly signed credentials card.

It was recommended that a letter from the Headquarters Office be sent to the Delegates and delegates-at-large advising of the change in the procedure for certifying delegates at the meetings of the House of Delegates, also, emphasizing that badges must be worn to be seated in the House of Delegates.

John A. Payne III, M.D., Chairman

COMMITTEE ADVISORY TO THE CRIPPLED CHILDREN'S PROGRAM

This committee had its only meeting of the year on September 24, 1975. After considerable discussion it was the recommendation of this committee that request for all orders of equipment and services have the signature of a rostered physician. It also was the feeling of this committee that a rostered physician be in attendance at all Crippled Children's Clinics.

Due to steadily increasing need for special services it was the feeling that the Advisory Committee should have increased representation from other fields. Therefore it was recommended that a Cardiologist, Plastic Surgeon and a Urologist be added to the present committee.

Any problems members might have with services being rendered by The Crippled Children's Program should be forwarded to the committee chairman. If matters require attention that cannot wait until the fall conclave the committee will be called into session during the annual meeting in May.

Robert G. Underdal, M.D., Chairman

COUNCIL ON REVIEW AND DEVELOPMENT

The Council on Review and Development met at the time of the annual Committee Conclave on September 27, 1975.

Mr. William Hilliard, Executive Director of the North Carolina Medical Society, updated the implementation of previous policies laid down by the Committee in regard to the "Hand Book of Committee Guidelines."

Serious consideration was given of a new innovative document recommended by President-Elect Jesse Caldwell. This would be known as "The Administrative Code of the North Carolina Medical Society." It would incorporate the activities, functions, and responsibilities of all the important facets of the Society and bring together in one document information which now has to be sought in many different areas. The Committee accepted responsibility for studying the best ways to achieve this goal.

An ongoing project of the Committee has been to study the best way to set up a library for the historical records of the Society. Considerable information has been collected as to the logistics to be involved and it was decided to recommend that the North Carolina Medical Society Foundation undertake this project along with its funding, assuming the Foundation would accept this recommendation.

In keeping with its charge the Council on Review and Development recommended several changes in keeping with the times as to Committee's Structure of the Society. Detailed considerations and recommendations were also made as to the structure of Specialty Sections and the Council agreed not to recommend that a new Council on Specialty Medicine be formed.

Important further considerations for ongoing activity of the Council were decided upon prior to adjournment.

George G. Gilbert, M.D., Chairman

COMMITTEE ON DISASTER & EMERGENCY MEDICAL CARE

During the reporting year there was an administrative change in the State Office of Emergency Medical Services. Colonel Charles Speed who has for many years worked in this field, assumed control of this office.

At the fall conclave this committee met jointly with the Committee on Traffic Safety to hear a report by Colonel Speed and his staff on Emergency Medical Services. Their proposal to test a concept called, The Emergency Treatment Center was outlined by the assistant chief. As a result of this, the following motion was passed:

> That the Committee on Disaster and Emergency Medical Care of the North Carolina Medical Society recommends to the Executive Council that the North Carolina Medical Society approve the concept of a six month study by the Department of Emergency Medical Services to determine (in conjunction with local medical and para-medical) emergency medical service capability in one selected health service area. The purpose of the study is to be educational data gathering both for the Department of Emergency Medical Service and local personnel. This is presented for information only, and also to be utilized for further federal funding for emergency medical service.

Mr. Nelson Aldman discussed the post-graduate training course for Emergency Room Physicians being sponsored by East Carolina University. Under a federal grant, training is offered to physicians and nurses in eastern Carolina. Continuing education at East Carolina University is augmented by a concentrated two week course at Forsyth Memorial Hospital in Winston-Salem. The Committee approved a motion that:

> The Committee on Disaster and Emergency Medical Care of the North Carolina Medical Society recommends to the Executive Council of the North Carolina Medical Society that it endorse the concept of post-graduate education for physicians working in emergency rooms and specifically recommends that the council endorse the program established by East Carolina University in Cooperation with Forsyth Emergency Services.

An update on the M.A.S.T. Program was given by Dr. Herbert Proctor and Mr. William Henderson gave a follow up report on his plan for placement of full-time Emergency Room Physicians.

George A. Watson, M.D., Chairman

COMMITTEE ON DRUG ABUSE

The Committee on Drug Abuse dealt with matters of drug abuse of interest to the Medical Society through its members and as a Committee. Individual members were consulted in their own localities on various drug abuse issues. The Committee also provided comment on a number of pieces of proposed legislation.

There were no special meetings of the Committee.

The Committee as a whole met at Southern Pines on September 26, 1975. It should be noted that at that meeting the Committee discussed whether or not alcohol should be included among the drugs of abuse with which the committee should begin to deal and it was decided that this could be properly done without conflict with the subcommittee on alcohol abuse.

William J. K. Rockwell, M.D., Chairman

COMMITTEE ON EXHIBITS

The Committee on Exhibits was able to present an impressive group of exhibits at the 1975 Annual Meeting.

The following awards have been approved for excellence of Scientific Exhibits at the 1976 session:

1. Best exhibit — $500
2. Second best exhibit — $250
3. Third best exhibit — $250

The Committee agreed to limit the time period for the Scientific and Technical Exhibits to two days only at the Annual meeting.

Josephine E. Newell, M.D., Chairman

COMMITTEE ON EYE CARE & EYE BANK

The Eye Care Committee has acted on several requests from the Blue Cross-Blue Shield people in relation to setting fees for some of the newer ophthalmic surgery procedures. We have also made recommendations to the N.C. State Commission for the Blind in relation to bringing in some new ophthalmologists to hold Blind Commission clinics, and have appeared before the commission in an effort to prevent optometric encroachment in the handling of Blind Commission clients.

E. W. Larkin, Jr., M.D., Chairman

COMMITTEE ON FINANCE

The Finance Committee met in late August and prepared the Budget Estimates for 1976. In order to balance the Budget it was necessary to eliminate the contribution of 5% operating income to the Reserve account for both 1975 and 1976.

The contribution of the extra dues of new members to the Reserve Fund was continued.

In order to defer as long as possible any change in the dues the Finance Committee has not suggested that the Executive Council ask the House of Delegates to increase the dues for 1977. It is believed that a dues increase by 1978 will be mandatory as the activities and expenses of the Society continue to increase.

The purchasers of the Highway 70 property defaulted in payment of the December 1974 installment on the mortgage and all subsequent installments. The Society has regained a clear title to the entire property at an expense of about $4,300.00 in legal fees and back taxes and is engaged in trying to find a new buyer for the property.

T. Tilghman Herring, M.D., Chairman

GOVERNOR'S COORDINATING COUNCIL ON AGING

Meetings of the Council since your representative was appointed have been held in July, September and November. Principal activities have been discussing and appraising proposals submitted by the Executive Director — The Administrative Staff seems efficient and dedicated in their work.

The Council members exhibit an interest in the proposals and their discussions are germane.

No problems directly relating to medical care have been presented.

Arthur H. London, Jr., M.D., Representative

COMMITTEE ON HOSPITAL & PROFESSIONAL RELATIONS & LIAISON TO NORTH CAROLINA HOSPITAL ASSOCIATION

The work of the Committee on Hospital & Professional Relations & Liaison to the North Carolina Hospital Association has dealt primarily with three areas: (1) Contractual relations between hospital based physicians and hospital: (2) The employment by hospitals of physician assistants in emergency room and (3) Planning with the North Carolina Association to meet the mutual problem of rising numbers of malpractice claims.

The Committee has been involved in offering suggestions in resolving points of difference between hospitals and hospital based physician. The Committee felt that we could not provide input into direct contract negotiations but when such a difference arises, the involved physician should contact his speciality organization for guidance and also the State Medical Society's legal counsel on questions of a legal nature.

In reference to a hospital hiring physician's assistants on a full time basis to work in the emergency room, it was pointed out by the Committee that the physician's assistant should always be assigned to a physician who would be responsible for supervision and guidance and assume responsibility for the physician's assistants actions.

This Committee is happy to report that we have not been appriased of any serious problem in professional relations and are further happy to report that generally throughout the state there continues to be a very good relationship between physicians and hospitals.

Charles L. Herring, M.D., Chairman

COMMITTEE TO WORK WITH NORTH CAROLINA INDUSTRIAL COMMISSION

1975 was another active year for the Industrial Commission and saw the publication of a new fee schedule which became effective on December 1. This is the red-bound book which surplants the yellow-bound book which was distributed in 1973. It is still the plan of the Committee to update the schedule every two years. A supplementary schedule was issued in June of 1975 as an interim measure. The annual fall meeting at Southern Pines was well attended and we were pleased to have Robert S. Brown, Chairman of the Commission with us. Also attending were the following members of the Commission staff: William H. Stephenson, Forest Shuford, II, B. J. Moore, and Eleanor Ross. In the last three months of 1975 the Commission reviewed 51,802 medical claims and approximately 8.5% of these were reduced. It is hoped with the new fee schedule that this reduction rate will decrease.

Jack B. Hobson has been appointed to serve as a member of our Committee representing the internists in our state. The members of the Committee are to be commended for their prompt and thorough work which allows the Committee to function in a proper manner. To Dr. John Morris and to the paid staff of the Industrial Commission, the Committee is indebted for their cooperation and untiring efforts to make our work more pleasant and effective.

Ernest B. Spangler, M.D., Chairman

INSURANCE INDUSTRY COMMITTEE

The Insurance Industry Committee met four times during 1975 with good attendance by both physicians and insurance industry representatives. Some 110 cases were presented to the committee for review and decisions were made relative to allowable insurance expense in the context of usual customary and reasonable.

Special cases were presented by the Mediation Committee of the Medical Society for determination of allowable charges. Conflicts in terminology within letters from insurance companies to physicians as to "allowable charges" were studied and significant reform within the insurance company is underway. Several other significant mediation

problems between insurance carriers and physicians in North Carolina were settled.

Charles H. Duckett, M.D., Chairman

COMMITTEE ON LEGISLATION

The work of The Legislation Committee continues to expand exponentially. Most of the specific bills worked on have been reported to the membership via our Legislative Newsletter and Mr. Morrisette's excellent Legislative Summary. They will not be reported here.

A successful major activity of the committee was our practical politics seminar held September 12-14 at The Center for Continuing Education, Appalachian State University in Boone. There we brought together leaders of the General Assembly and physicians for some frank, useful talk about the political system. We continue to have positive fallout from this meeting.

Obviously, most of our legislative efforts during 1975 related to the medical liability insurance problem. It should not go unnoted that The General Assembly's Legislative Study Commission's report after months of hard work by men on both sides of the issue is largely the program the medical society would like presented to the legislature.

Our current efforts are totally devoted toward translating this report into law. Mr. Morrisette has been relieved of all other medical society duties to devote full time to travel about the state causing physicians and their representatives to discuss the proposals before the May 3rd meeting of the General Assembly. Our plan is to make the liability insurance crisis work for us. Not only to solve this problem, but to strengthen our on-going legislative efforts in behalf of the society.

Consideration of National Health Insurance was slowed down in 1975 by the national economy and important jurisdictional problems in the congress. We expect activity to pick up in this area post the presidential election. The physicians of North Carolina should be proud that the legislative spokesman for American medicine during this period will be our own Ed Beddingfield. I think the fact that Ed will be the Chairman of the AMA Council on Legislation during this crucial time is another example of the often pointed to fact that America seems to find the right man at her times of national crisis.

H. David Bruton, M.D., Chairman

COMMITTEE ON MARRIAGE COUNSELLING AND FAMILY LIFE EDUCATION

The Committee decided at its meeting in September of 1975 to continue to press for the support and passage in the N.C. State Legislature of a bill allowing physicians to prescribe contraceptives for minors without the knowledge or consent of their parents.

The resolution was forwarded to Commissioner Nelson for onward passage in the Society. I have had discussions with Commissioner Marshall Redding and Commissioner Philip Nelson as well as Dr. David Bruton expressing the Committee's support of this action through the usual legislative lobbying efforts of the Society.

The Committee wishes to go on record and to circulate to all County Medical Societies that the officer named for public information from the Society be aware that in each Society we would hope there would be a member who would be willing to discuss sex education with responsible local groups in his community. We see the Society as having a pool of members with sexual expertise in matters relating to sexual education and we would hope that this would be a part of the Society's ongoing public relations efforts.

The Committee once again expressed informally its non-support of the model bill that is being proposed by the American Association of Family and Marriage Counseling which would limit severely those authorized to practice marriage counseling in the state. There bill would exclude many physicians who incorporate a degree of marriage counseling in their practice as a method of treating the whole patient. The Committee stands ready to do whatever is necessary to continue to be available as a resource group on any matters on which the Medical Society may wish their expertise.

John Reckless, M.D., Chairman

COMMITTEE ON MATERNAL HEALTH

The Committee on Maternal Health has served in consultative capacity to the Medical Society. It has served to bring information to local situations where efforts were being made to improve the quality of maternal and infant care. The annual meeting was held during the Conclave of Meetings in September at Mid Pines where specific problems in management were discussed and the Committee was brought up to date on the development of regionalization of maternal and infant care in North Carolina. We have continued to actively investigate and analyze the maternal deaths which occur in North Carolina.

An analysis of the maternal deaths occurring in North Carolina reveals that the report period for 1975 included those deaths reported to us by the Vital Records Branch in transmittal letters dated November 22, 1974 through December 1, 1975. They included nine deaths which actually occurred in 1974, and not all of those that occurred in 1975.

During this report period there were 24 counties reporting 36 maternal deaths. There were 15 counties reporting 1 death each, 7 reported 2, 1 reported 3, and 1 reported 4 deaths. It is worthy of attention that there were 19 white deaths, 15 Negro, and 2 Indian women. Based on the population, these figures infer that there is increasingly better maternal care available for nonwhite women in North Carolina. The distribution of the maternal deaths by cause of death is as follows:

Non-obstetric	5
Other obstetric	3
Infection	2
Cardiac	1
Embolism	10
Toxemia	8
Hemorrhage	3
Anesthesia	2
Insufficient information	2
	36

The 3 hemorrhage deaths represent a decrease from the 6 that occurred in 1974. However, 10 embolism and 8 toxemia deaths represent significant increases in these categories.

The American Medical Association Committee on Maternal and Child Care has asked the State Society Presidents to establish liaison committees to provide leadership in early planning for high risk maternal and newborn care. Because of the experience of the North Carolina Medical Society's Committee on Maternal Health in planning and development of regionalized maternal and infant care in North Carolina, President Davis has designated this Committee to serve this role. In order to further supplement this Comm...

tee's expertise in this field, four Consulting Members (2 in pediatric perinatology and 2 in obstetric perinatology) have been appointed to serve with the regular constituted Committee on Maternal Health as Consulting Members.

The Chairman expresses appreciation to the Executive Council and the Staff of the North Carolina Medical Society for their support and cooperation in the activity of the Committee on Maternal Health. Reimbursement has been received in the amount of $300 to cover expenditures for secretarial help, mailing, supplies, and telephone expenses incurred in the course of conducting the work of the Committee for the past year.

W. Joseph May, M.D., Chairman

MEDIATION COMMITTEE

From May 1975 through January 1976 the Mediation Committee has met three times and has reviewed forty-four complaints made against physicians. Thirty have been settled to the satisfaction of the committee. Several physicians had not realized that "it is unethical for a physician, who formerly treated a patient, to refuse *for any reason* to make his records of that patient promptly available on request to another physician presently treating the patient." Twenty-three complaints alleged inappropriate or inadequate care or inappropriate charges. Most of these were not substantiated. Some charges were adjusted downward.

From its experience the committee wishes to remind the membership that the tenor of the times is for the public to assume that less than an ideal result is an indication of inadequate care, that any charges above third party payments are overcharges and that a physician is obligated, even when no emergency exists, to treat any patient on request. The best safeguard against such complaints is a conscious effort by each physician to educate his patients and the public. Let them know what to expect from treatment, the hazards involved, the basis for charges, and the mutual obligations and trusts inherent in a good doctor-patient relationship.

Louis Shaffner, M.D., Chairman

COMMITTEE ON MEDICAL ASPECTS OF SPORTS

The 1975 membership consisted of Frank C. Wilson, M.D., Chairman; Frank H. Bassett, III, M.D.; James F. Bowman, M.D.; Basil M. Boyd, Jr., M.D.; Paul L. Burroughs, Jr., M.D.; Frank Clippinger, Jr., M.D.; Joseph L. DeWalt, M.D.; James R. Dineen, M.D.; William A. Herring, Jr., M.D.; Carl J. Hiller, M.D.; A. Tyson Jennette, M.D.; C. Robert Lincoln, M.D.; Thomas L. Presson, M.D.; Don B. Reibel, M.D.; George D. Rovere, M.D.; Timothy N. Taft, M.D.; Richard N. Wrenn, M.D.; Wayne B. Venters, M.D.; with Al Proctor, Ph.D. and Raymond Rhodes as Consultants.

The major activity of the committee during the 1975 year was the sponsorship of the Symposium on the Medical Aspects of Sports that was held at the Center for Continuing Education, Appalachian State University, Boone, North Carolina on July 3, 4, and 5. In spite of the western location, the symposium attendance compared favorably with the four previous symposia, which had been held at Wrightsville Beach. The guest speaker was Coach Lou Holtz of North Carolina State University who spoke on "The Role of the Coach in the Prevention of Athletic Injuries." Other subjects covered were "Conditioning for the the Middle-aged Athlete," "Ski Injuries," and a workshop on taping was put on by three athletic trainers.

Two committee meetings were held: One on July 4 and one on October 9, 1975. Major items considered at these meetings included a report from Mr. Al Proctor on the activities of the Division of Sports Medicine in the Department of Public Instruction and its relation to the Committee on the Medical Aspects of Sports. The committee heard this report with interest and requested the President of the North Carolina Medical Society to write a letter to the Superintendent of Public Instruction emphasizing the State Medical Society's strong support of the work of the Division of Sports Medicine.

The committee continued work on an earlier recommendation requesting each county medical society to appoint a committee or a physician in the county to assume the responsibility for the Medical Aspects of Sports in that county. Over half of the counties now have such representatives.

The committee expressed support of a new regulation for organized football practice that allows practice for all high schools in North Carolina to begin on August 1 with the stipulation that the first week be a mandatory six days of physical conditioning and that two practices a day not be allowed until the second week.

The committee restated their recommendation for the use of a standardized pre-participation examination form for use in the junior high and high schools throughout the state.

Frank C. Wilson, M.D., Chairman

COMMITTEE ON MEDICAL EDUCATION

At the meeting of the Committee on September 27, 1975, several decisions were made in regard to the policies on Compulsory Continuing Education.

1) The first three-year-cycle would end on December 31, 1977. Each new member entering the society will start his cycle the year following his membership.
2) There shall be no exemptions in the requirements of continuing education for physicians who are actively employed in the field of medicine.
3) Applications for exemption, because of hardship or disability, will be forwarded to the Committee through the local medical society with that society's verifications and recommendations.

Letters were sent to the secretaries of the various county societies requesting their cooperation in this matter.

On October 13, 1975, the North Carolina Medical Society was approved by the American Medical Association to accredit programs of institutions and organizations of local scope and focus in the field of continuing education. Prior to receiving this formal notice of approval, the committee started laying ground work to implement the inspection and accreditation program. The committee through the efforts of its consultant, Ron W. Davis, Ed., started receiving applications for accreditation and plans to conduct the first inspection as early this year as possible.

The committee is also actively encouraging smaller institutions and educational programs to seek co-sponsorship of their continuing educational activities with institutions that already have AMA approval.

Albert L. Chasson, M.D., Chairman

MEDICAL-LEGAL COMMITTEE

The annual meeting of the Medico-Legal Committee was held at Mid Pines on September 24, 1975. The matter of the

malpractice crisis, which at that time was in a state of daily flux, was discussed at length. Mr. Steve Morrisette briefed the Committee on this matter, pointing out that the study commission had been set up to begin work in October, and that the formation of a mutual insurance company to write professional liability insurance was a possibility.

Mr. Henry Mitchell, legal counsel of the North Carolina Medical Society reported on the Medico-Legal Symposium which was sponsored by the AMA and the ABA.

Screening panels were discussed and a proposal was made that the N.C. Medical Society publish a brochure on "Tips to Avoid a Malpractice Suit." This would be similar to a brochure formerly published by St. Paul Fire and Marine Insurance Company.

It was noted that the frequency of attorneys requests for medical review of potential malpractice suits was increasing.

Joint meetings of Bar and Medical groups were held in approximately fifty counties.

No instance of alleged unethical action on the part of a physician had been reported to the Committee.

Julius A. Howell, M.D., Chairman

COMMITTEE ADVISORY TO MEDICAL STUDENTS

(No Report as of 3/30/76)

COMMITTEE ON MEDICINE AND RELIGION

(No Report as of 3/30/76)

COMMITTEE ON MENTAL HEALTH

(No Report as of 3/30/76)

ADVISOR TO NORTH CAROLINA ASSOCIATION OF MEDICAL ASSISTANTS

The North Carolina Association of Medical Assistants has enjoyed a most successful year, and continues to be very active in presenting educational programs designed to upgrade the knowledge and proficiency of medical assistants in this State.

During the past two years the state organization has seen a significant increase in membership, now having over 550 members in 25 chapters all across the State. The North Carolina Society surpassed all other states in membership growth this past year, winning two national membership awards at the 1975 A.A.M.A. Convention in Louisville, Kentucky.

Two educational seminars have been held this year — one in Hickory in November 1975, and one in Clemmons in February 1976. A third is planned for Jacksonville in April.

In addition to having a North Carolina member serving as the national President-Elect, several other members of the State Society hold national committee appointments.

This organization continues to present top quality educational programs, and its growth and progress are excellent, and certainly deserving of the support of all physicians in North Carolina.

John A. Brabson, M.D., Advisor

COMMITTEE ON OCCUPATIONAL AND ENVIRONMENTAL HEALTH

The Committee on Occupational & Environmental Health met on Friday, September 26, 1975, and the following are the areas of activity and discussion.

1. A resolution previously submitted by the Committee to disseminate information regarding occupational health and OSHA was approved by the Executive Committee. Accordingly, it was decided to disseminate information to be placed in the North Carolina Medical Society Bulletin and this will be done in the coming year, particularly announcements will be made of the fact that the Occupational Safety and Health Administration is developing standards which will involve physicians.
2. The Committee had a report on the silicosis study being conducted by the National Institute of Occupational Safety and Health. This should provide some interesting answers as to whether or not brickworkers in the State of North Carolina are susceptible to the hazard of silicosis.
3. The Committee was interested in the activities of the UNC School of Public Health in offering industrial hygiene services to small industry of the State.
4. The Committee received a report from Dr. Mario Battigelli concerning his current work with byssinosis.
5. The Committee passed a resolution as follows:
   THE COMMITTEE ON OCCUPATIONAL & ENVIRONMENTAL HEALTH WOULD LIKE TO REEMPHASIZE OUR INTEREST AND CONCERN IN SEEING THAT THERE IS MORE INVOLVEMENT OF THE MEDICAL SCHOOLS IN THE STATE OF NORTH CAROLINA IN THE TEACHING, RESEARCH, AND CLINICAL ASPECTS OF OCCUPATIONAL HEALTH AND IN SETTING UP A PILOT INDUSTRIAL CLINIC. THE COMMITTEE WOULD LIKE TO CONTACT THE VARIOUS MEDICAL SCHOOLS TO ASCERTAIN THEIR INTEREST IN DEVELOPING SOME SORT OF A PROGRAM AND THEN MEET WITH APPROPRIATE INDIVIDUALS IN THE MEDICAL SCHOOLS TO DISCUSS THIS.
   THE COMMITTEE WOULD ALSO LIKE IDEAS FROM THE EXECUTIVE COUNCIL AS TO APPROPRIATE METHODS OF CONTACT, SUCH AS HAVING THE PRESIDENT OF THE NORTH CAROLINA MEDICAL SOCIETY WRITE A LETTER TO EACH MEDICAL SCHOOL.
   Follow-up on this is planned during the coming year.

H. R. Imbus, M.D., Chairman

COMMITTEE ON PERSONNEL & HEADQUARTERS OPERATION

The Committee met at the headquarters building on August 21, 1975. We forwarded to the finance committee recommendations for 1976 staff salaries and Retirement Program changes required by federal regulations and the new Pension Reform Act. Leases for space in the headquarters building were discussed.

It appears at present that all space on the second floor will be leased.

The airport property deed is now in the hands of the Medical Society. At least two parties are interested in purchase at $6,000 per acre, 20% down, 10 years to pay out at 8% interest.

A. Hewitt Rose, M.D., Chairman

COMMITTEE LIAISON TO THE N.C. PHARMACEUTICAL ASSN.

There was only one meeting held by the full committee and that was during the Committee Conclave in Southern Pines. At that meeting, physicians from Richlands, Hatteras, Englehard and Jackson were approved to continue dispensing drugs under Medicaid.

The committee passed a motion that sanctioned the distribution of probenecid in a physicians office for the use of treating gonorrhea. Mr. W. J. Smith of the N.C. Pharmaceutical Assn. then distributed to the committee a copy of "Guidelines for Prescribers." The committee received this report as information.

The committee went on record as recommending to the Executive Council of the North Carolina Medical Society that it opposed the "MAC" regulations promulgated by the Dept. of HEW because the regulations interfere with the physicians ability to use his best medical judgement in prescribing drugs.

The committee went on record as recommending to the Executive Council of the North Carolina Medical Society that it oppose the attempt to repeal Anti-Substitution laws in the N.C. General Assembly.

The committee went on record as supporting the appointment of physicians to the Governing boards of HSA's.

Charles W. Byrd, M.D., Chairman

COMMITTEE ON PHYSICAL AND VOCATIONAL REHABILITATION

The Committee met on September 26, 1975, and at that time discussion was held regarding the plan for development of rehabilitation centers within the State.

Throughout the year the Committee has worked closely with State Vocational Rehabilitation Agency and with the State Advisory Committee on Rehabilitation Facilities to develope in North Carolina a comprehensive rehabilitation program.

E. H. Martinat, M.D., Chairman

MEDICAL SOCIETY CONSULTANT ON PODIATRY

A joint meeting was held in April of 1975 at the North Carolina Medical Society Building in conjunction with representatives of the North Carolina Podiatry Society and their attorney, Mr. Mel Broughton. At that time a motion was passed to recommend to the House of Delegates of the Medical Society that "this Council go on record as recognizing the validity of a hospital staff considering approval of the membership of a podiatrist on the staff of the hospital on an individual basis, with qualifications and functions in accord with published guidelines of the Joint Commission on Accreditation of Hospitals and the American Academy of Orthopaedic Surgeons."

It is my understanding that no action was taken by the House of Delegates although discussion was held on the subject and the matter was tabled pending further investigation.

There was no additional information concerning podiatry brought to this consultant's attention during the year 1975.

Donald B. Reibel, M.D., Consultant

COMMITTEE ON PROFESSIONAL INSURANCE

(No Report as of 3/30/76)

COMMITTEE ON PUBLIC RELATIONS

The Committee on Public Relations met at the Mid Pines Club in Southern Pines on September 27, 1975, and planned the year's activities as listed below:

1. The name of the *Public Relations Bulletin* was changed to *Bulletin* and a new logo was prepared. Additional changes were made to bring the periodical closer to the members (a) Elected officials were invited to contribute articles to an "Elected Official Column." Chairman of Committees were also invited to contribute items of membership interest for the *Bulletin*.
2. The North Carolina Medical Society is to continue to give a $50 award each year to the best paper presented on a medical topic at the North Carolina Academy of Science Annual Meeting.
3. The *Information Packet for Physicians* for distribution to new members was revised with the help of Headquarters Staff.
4. The project to give an award to the winner of the North Carolina Rescue Squad First Aid Competition is to be continued.
5. The North Carolina Conference for Medical Leadership was held again this year with 130 physicians in attendance. Total registration was 244. The meeting site was changed to the Royal Villa Motel so that the entire meeting could be held under one roof. Simultaneous, concurrent discussion groups through which those in attendance rotated were utilized for the Conference and favorably received.
6. In follow up of a need identified earlier by the Public Relations Committee and the North Carolina Medical Society with widespread support from other state agencies, the North Carolina General Assembly created a commission to oversee utilization of human tissue in North Carolina.
7. Dr. William Burch served as the advisor for the Committee to monitor radio programs on health topics by Health Care Information, Inc. These topics were carried over 30 radio stations across North Carolina.
8. Dr. Clement Lucas, as representative from the Committee, is serving as program director for the North Carolina Conference on Children to be co-sponsored with Governor Holshouser and Lt. Governor Jim Hunt on March 30, 1976. Representatives from all related state health agencies are to be invited.
9. A Bicentennial Brochure was prepared and distributed that listed related projects that might be undertaken by county medical societies with the help of the auxiliary.
10. In follow up of the Public Relations Policy Statement approved by the North Carolina Medical Society's House of Delegates, efforts were made to begin implementation of the recommendations included. Plans are being made to facilitate, upon request of a county medical society, presentation of telephone referral services for primary care physicians and directories listing health care services in the area. Dr. Eugene Mayer is serving as an advisor to the Committee for this project.
11. With the help of the deans from the medical schools, lists of local students attending the medical schools in the state were sent to Presidents of County Medical Societies with the suggestion that students be invited to a meeting of this County Medical Society.
12. Support for a Practice Management Workshop to be

held in Mecklenburg County was given from the North Carolina Medical Society, Charlotte Memorial Hospital and AHEC, who are the primary sponsors for the meeting.

13. *AMA News* guest subscriptions were given from the North Carolina Medical Society to members of the Human Resources Commission and the Health Committee of the House.

Appreciation is expressed to the members of the Committee, President Jim Davis, Mr. William Hilliard, Mr. Gene Sauls, Mr. Mike Cates, Mr. Dan Finch and others for the help given in the performance of the activities of the Public Relations Committee.

John L. McCain, M.D., Chairman

COMMITTEE ON RADIATION

The Committee on Radiation for the North Carolina Medical Society consists of only one person. There has been many radiation problems which must be solved, but there has been no formal meeting.

I have talked with President-Elect Caldwell and he has asked me to suggest possible members for a *Radiation Committee* for the coming year. I would like to suggest the name of Albert M. Jenkins, M.D., radiologist, Raleigh, North Carolina. Also consideration may be given to Thomas Eshelman, M.D., radiologist at Rex Hospital. There should possibly be included in this group a physicist; and it might be possible to obtain a more convenient type of meeting if this particular man could come from either the University of North Carolina or Duke Medical Center.

Many efforts are being made at the present time to cut down on the number of x-ray examinations made on patients without a clear medical indication. Furthermore, an effort should be made to be absolutely sure that a young woman is x-rayed during the first half of the menstrual cycle. Other efforts to reduce the radiation dosage consists in careful shielding the use of collimators which should be required standard equipment on all diagnostic x-ray machines, careful calibration of machines and also inspection at frequent intervals. Another consideration should be the electrical and safety hazards which exist on many diagnostic x-ray machines, and which are not always as carefully inspected as they should be. A most important consideration will be conformation to HEW standards.

I am sure that if President-Elect Caldwell will designate several members for the Committee during the coming year that he should receive a clear outline of some of the radiological problems existing today.

Thomas C. Worth, M.D., Chairman

ad hoc COMMITTEE ON RELATIVE VALUE STUDY

(No Report as of 3/30/76)

RETIREMENT SAVINGS PLAN COMMITTEE

(No Report as of 3/30/76)

COMMITTEE ON SOCIAL SERVICE PROGRAMS (INCLUDING MEDICAID)

This past year has been a most difficult year for the Medical Profession in its relationship to taking care of Medicaid recipients. This has been caused by Health Application Systems (HAS) taking over the fiscal responsibility for the entire Medicaid Program in North Carolina. The involvement of the N.C. Peer Review Foundation acting as the conscience for H A S has been a unique experience and has been beneficial.

In April 1975 the Department of Human Resources signed the first contract with a private corporation to administer the Medicaid Program for the entire state. This contract required that H A S have in place by October 1, 1975 a system of control by the Medicaid Management Information System (MMIS). At the time the department required this, the type and extent of data that would be necessary from physicians and other providers was not appreciated. In order to meet its contractual requirements H A S designed a new claim form without consulting anyone in organized medicine. A great hue and cry arose against this form from the medical profession.

As Chairman of the Committee On Social Service Programs, I met on several occasions in Raleigh with representatives of H A S and the Division of Social Services to attempt to effect some compromise so that physicians could continue to use the standard claim form (G 33P). After reviewing in depth the requirements of MMIS it became apparent to myself and an advisory committee that there was no way to modify our old form to supply the necessary data. Because of legal actions taken by two groups in North Carolina and because of contractual requirements Secretary Flaherty in late September ordered the use of the new claim form HNCP-01.

This committee has tried to impress on H A S the desirability of involving physicians before policy decisions have become set in concrete. The Executive Council in September 1975 passed a resolution to that effect. I am sorry to say at this time that H A S has not seen fit to have significant cooperation with the medical profession.

Many physicians have written me concerning dissatisfaction with the claim forms, remittance statements and payments. I have endeavored to answer this correspondence in a positive way. During the last meeting of the House of Delegates in May 1975 Dr. Frank Sohmer urged all physicians to continue treating Medicaid patients even though the physician was dissatisfied with the philosophy and payment schedules of the program. When given the opportunity I too have tried to present this same message.

J. Elliott Dixon, M.D., Chairman

COMMITTEE ON TRAFFIC SAFETY

(No Report as of 3/30/76)

ad hoc COMMITTEE TO STUDY PROFESSIONAL LIABILITY INSURANCE PROBLEMS

The ad hoc Committee to Study Professional Liability Insurance Problems was appointed by Dr. Frank Reynolds, Past President of the Society. We were charged with studying the problems of availability of professional liability insurance as well as the problems of professional liability in North Carolina. Several informal meetings were held and informal conversations were carried out by members of the Committee to discuss the problems in North Carolina.

A member of the Committee attended the AHA-AMA Invitation Conference on Professional Liability on June 2, 1975 in Chicago. This was an all day conference which presented the national problems and some of the solutions which could be used in the various states.

A major meeting of the Committee was held in [illegible]

North Carolina on August 24 thru August 26, 1975 to study in detail problems in North Carolina and to make recommendations to the Executive Council of the Medical Society. After detailed study of the various solutions the following recommendations were made to the Council:

1. The reinsurance exchange law passed by the Legislature should be supported by the Medical Society. The Medical Society should enter the law suit as an amicus curiae to present appropriate information to the court.
2. It was recommended that the Medical Society sponsor its own professional liability insurance company.
3. Changes in the tort liability system should be brought about to improve the climate in North Carolina and to discourage unwarranted malpractice claims. These included a community standard of medical care, appropriate statute of limitations, informed consent law with a statute of frauds, a counter claim law, a law on establishing limits of liability, a collateral source rule and a periodic payments law. Mandatory binding arbitration, medical review panels and medical injury compensation boards should be discouraged at this time.
4. Voluntary contractual binding arbitration should be considered since laws have been established to allow for this in North Carolina. A pilot program should be established before its widespread use is encouraged.

The Executive Council approved these recommendations and they were presented to the North Carolina Professional Liability Insurance Study Commission by Dr. James E. Davis, President.

Ira M. Hardy, II, M.D., Chairman

AD HOC COMMITTEE TO STUDY NATIONAL HEALTH PLANNING & RESOURCES DEVELOPMENT ACT OF 1974 (P.L. 93-641)

The ad hoc Committee for the study of Public Law 93-641 — National Health Planning and Resources Development Act of 1974 — was appointed by Frank Reynolds, M.D., President of the medical society. Following a preliminary meeting of the Committee the chairman presented a proposal to the Department of Human Resources in regard to area designations of Health Systems Agencies together with the medical society's interpretation of the functions of such agencies. At this meeting health planning agencies and other agencies in the health field also gave opinions in regard to the formation of the Health Systems Agencies.

On September 26, 1975, the ad hoc Committee met with the Committee on Comprehensive Health Planning. It was pointed out at this time that under the National Health Planning and Resources Development Act that Comprehensive Health Services would be phased out. It was therefore the duty of this joint meeting of the two committees to make a decision in regard to the formation of a new health planning committee.

Mr. Otto Mueller of the North Carolina Medical Peer Review Foundation, Inc. emphasized the necessity of representation by physicians on the new Health Systems Agencies to be formed. He emphasized greater physician activity in medical society cooperation in achieving involvement of physicians in designated HSA's.

Archie T. Johnson, Jr., M.D., Assistant Secretary for Health Affairs, North Carolina Department of Human Resources, gave a status report on the law and informed members at the time that the draft of regulations which the Department of Human Resources was currently studying were not final. Dr. Johnson described the convener process in the formation of HSA boards. He explained also the formation of the State Health Coordinating Council of 30 members, a state governing body in the public law to be appointed by the Governor.

Mr. Lawrence B. Burwell, Chief of the Comprehensive Health Planning Section of Plans and Program Division, Department of Human Resources, spoke on the law and the State Health Coordinating Council. He stated that the SHCC would interpret guidelines and provide consultation to the local agencies.

A decision was made at this time, under the recommendation of Frank Reynolds, M.D., President, that a list of nominees from the State Medical Society be presented to the Governor for the State Health Coordinating Council.

Finally a motion was made, seconded, and passed to the effect that the ad hoc Committee to study National Health Planning Resources Act of 1974 — Public Law 93-641 and the Committee on Health Service Planning be phased out and replaced by a committee known as the Committee on Health Planning and Development.

This motion was duly passed.

At the meeting of the Executive Council during the fall conclave the actions of the Committee and the motion of the Committee were presented to the Executive Council for action.

Charles W. Styron, M.D., Chairman

NORTH CAROLINA BOARD OF MEDICAL EXAMINERS STATISTICS

November 1, 1974 — October 31, 1975

Total number of applicants granted license:		794
By endorsement of credentials:	620	
By written examination:	174	
Examination failures (FLEX):		70
Limited licenses:		113
Hospital residents:	3	
Counties:	109	
State institutions:	1	
Resident's training licenses:		502
Applicants rejected license by endorsement— (Did not meet Board requirements):		10
Applicants declined permission to take written examination:		1
License to practice medicine revoked:		0
License to practice medicine revoked; revocation stayed:		0
License to practice medicine voluntarily surrendered:		1
License to practice medicine reinstated:		1

NORTH CAROLINA MEDICAL CARE COMMISSION

Medical Facility Planning and Construction

Since 1946, the Commission has been responsible for developing and updating a statewide plan showing the availability of and the projected need for hospital and nursing home beds. The current revision of the plan forecasts that by 1981 approximately 600 additional general hospital beds will be needed and that approximately 2,744 general hospital beds will need to be modernized.

During 1975, the Medical Care Commission approved eight projects that granted $3,965,781, which aided medical facility construction totaling $32,900,000. Over the same

eriod of time, contracts were awarded on Medical Care ommission projects totaling approximately $30,500,000, epresenting $3,883,695 in grants and $8,000,000 in loans.

Educational Loan Program

Recipients of the Division's educational loans agree upon ompletion of their training to repay their loans by one alendar year of service for each year they received funds.)ver the years, loans have been made to approximately ,000 students in 17 categories of health professions. In 975, a lack of resources made it possible to award only 140 ew loans. In the coming fiscal year, it is anticipated that no ew awards can be made, because anticipated available unds will be required to support students already enrolled in chools. Currently, there are 619 loan recipients in school.

Licensure and Certification

At the end of 1975, there were 158 licensed hospitals in Jorth Carolina, containing 29,954 beds. These figures in-lude 14 mental hospitals and 13 specialty hospitals. Of the 31 acute general hospitals in the state, 123 are accredited by the Joint Commission on Accreditation of Hospitals. The accredited facilities contain approximately 90% of the total number of beds. All but one of the acute general hospitals are certified to participate in the Medicare and Medicaid programs.

There were eight certified abortion clinics in the state at the end of 1975, and an additional clinic is expected to open early in 1976.

Emergency Medical Services

In June of 1975, the Medical Care Commission adopted revised rules and regulations governing ambulance services and the certification of attendants. During the year, the Emergency Medical Services Section inspected over 600 ambulance vehicles and was responsible for the training of approximately 7,000 EMT's. The staff is also in the process of developing an air ambulance plan for the state, a demonstration project for hospital emergency department categorization, and guidelines for emergency medical communications.

I. O. Wilkerson, Jr., Director

Executive Council

Summary of Minutes of Meetings of the Executive Council

NOTE: As recommended by the Finance Committee, the Executive Council authorized that just the salient actions of the Executive Council will be reported in brief form.
The verbatim transcript of the Executive Council minutes are on file in the Headquarters Office and may be reviewed or pertinent portions excerpted on request.

SPECIAL CALLED EXECUTIVE COUNCIL MEETING
July 20, 1975

(Morning Session)

—A Special Called Meeting of the Executive Council convened at 10:20 a.m. in the Executive Council Room at the Medical Society Building, Raleigh, N.C., Dr. James E. Davis, President, presiding. AMA Delegate, Dr. John Glasson, gave the invocation. In the absence of the Secretary, the Assistant Secretary and Executive Director, Mr. William N. Hilliard, called the roll and declared a quorum present.

President Davis explained that the Special Called Meeting was for the specific purpose of considering a Society position on the question of "claims-made" professional liability insurance policies. As a result, he explained, the meeting was therefore limited to consider this item only unless agreed to by a majority of the members of the Executive Council. Dr. Davis went on to explain that there were a couple of directly related items that he would ask for consideration of as the main item is finished. In addition, Dr. Davis stated there were at least two other very important unrelated items that he would ask the members to consider whether or not they would be permitted to be placed on the agenda at the appropriate time.

President Davis also explained, as information and explanation for the delay in starting the meeting, that officers of the Society and representatives of the committee met earlier in the morning with Mr. Waverley Smith, President, and Mr. Jim Chambers, Regional Representative of the St. Paul Company to discuss the current company position.

—Dr. Lewis J. Gaskin, Member, ad hoc Committee to Study Professional Liability Insurance Problems presented a recommendation from the Committee "That the ad hoc Committee to Study Professional Liability Insurance Problems recommends to the Executive Council that the North Carolina Medical Society oppose the approval of the "claims-made" policy and the Council instruct our representative to oppose the "claims-made" policy at the Commissioner's hearing."

—After considerable discussion the Executive Council passed a substitute motion "That this body go on record and so state at the forthcoming meeting with the State Insurance Commissioner to take the necessary steps and measures to insure that adequate professional liability insurance is provided to the members of the North Carolina Medical Society at a reasonable cost until the report of the Study Commission has been acted upon by the Legislature."

—An additional motion was made, seconded, and passed that the Executive Council also inform the Insurance Commissioner that the "claims-made" insurance is not considered adequate, but would prefer it only if "occurrence type policy is not available."

Without objections from members of the Executive Council, two additional related items were placed on the agenda and actions taken as follows:

—On recommendation of the ad hoc Committee to Stu Professional Liability Insurance Problems, the Executi Council approved a motion that the North Carolina Medic Society oppose hospital Boards of Trustees requiring phy cians to have professional liability insurance as a qualific tion for serving on the hospital staff.

—Received as information, that the ad hoc Committee Study Professional Liability Insurance Problems is colle ing data from other states who have established their ov mutual insurance company and is considering the feasibil of the North Carolina Medical Society doing likewise.

President Davis announced that there were three un lated items for possible consideratoin after lunch if t Executive Council would so permit. A motion for consider tion was approved by the members of the Council by two-thirds vote.

(Afternoon Session)

—The Council approved a motion that the present pu chasers of the Society property on Highway 70 near t Raleigh-Durham Airport be given the opportunity to pay both accrued interest and principle — to make all paymer current — and if they fail to do so, the Council instructed o Legal Counsel to proceed with foreclosure within 30 day The motion was amended by addition that release of a portions of the property for resale by the purchaser subject to such conditions in payments and portions as t Finance Committee shall determine, with the addition wording being approved by the Council.

—On the subject of the new Claim Form for Medica patients mandated by Health Applications System as a ministrator of the Medicaid program for the State, t Executive Council (a) voted to request the Committee Social Services Program to investigate problems which ha resulted from this proposed new form, and (b) authoriz the Executive Committee, Counsel, and Staff to investiga the possibility of postponement of implementation of t new form.

—The Executive Council decided against starting the ne regular Council meeting on Saturday evening and reco mended that it meet only on Sunday.

The Chairman of the Committee on Legislation, Dr. David Bruton raised the question of consideration of structions to the ad hoc Committee on Professional Liabil Problems to draw up a model bill for the liability climate a have it available for discussion at the September meeti Without objection from the Council, the topic was placed the agenda and the following action taken:

—On motion made, seconded and passed, the Coun instructed the ad hoc Committee to Study Professional L bility Insurance Problems and the Legal Counsel to draw model bill of desired Legislation on the matter of profe stional liability insurance, to be presented to the next meet of the Executive Council.

FALL EXECUTIVE COUNCIL MEETING
September 28, 1975

(Morning Session)

—The Fall Meeting of the Executive Council convened at :00 a.m. in the Meeting House, Mid Pines Club, Southern ines, N.C., President James E. Davis, presiding. The resident-Elect, Dr. Jesse Caldwell, Jr., gave the invocation nd the Secretary, Dr. E. Harvey Estes, Jr., called the roll eclaring a quorum present.

—Mrs. Charles L. Herring, President, Auxiliary to the lorth Carolina Medical Society, presented a brief report of ie Auxiliary activities of the year. She noted that Auxiliary iembership was at an all time high of 2,890 in the State and iat last year a total of $23,950.71 was donated to the AMA ducational and Research Foundation.

—Dr. Louis Shaffner, Chairman, Mediation Committee, eported that the Committee had considered thirty problems o far this year. Of that number eleven are still pending and ineteen have been settled to the satisfaction of the Media- on Committee.

—Dr. Charles B. Wilkerson, Jr., Secretary, Board of ledical Examiners for the State of North Carolina, report- g on a request of the Executive Council indicated that the oard of Medical Examiners saw no reason to change the ylaws of the Society in regard to limitation of tenure on the oard. He also pointed out that the State Statutes provided iat the Board should fill any vacancies but did not prohibit ie appointment of a former Board member to fill out an nexpired term.

—Dr. T. Tilghman Herring, Chairman, Committee on inance, presented the proposed Budget for 1976 as esti- iated, as a balanced budget, which was adopted by the xecutive Council. See separate REPORT A — REPORT)F THE EXECUTIVE COUNCIL, Page 59, HOUSE)F DELEGATES, May 6, 1976.

—On recommendation of the Committee on Finance, the xecutive Council approved a motion that the Committee n Finance be given approval to investigate further the uestion of computer equipment needs for the headquarters ffice and to authorize the purchase of such equipment, 'om the reserves of the Society, as the Committee deems to e most appropriate and economical, such funds to be re- irned to the reserve fund from the operating budget when ossible.

—The Council on Review and Development recom- iended and the Executive Council approved that the proj- ct of preservation of historical records of the Society be eferred to the North Carolina Medical Society Foundation ith the suggestion that it would be a worthwhile project for ie Foundation.

—The Executive Council approved a recommendation, 'om the Council on Review and Development, that the ad oc Committee to Study Public Law 93-641 and the Commit- e on Comprehensive Health Service Planning be com- ined into a new Committee on Health Planning and De- elopment. Also approved was the recommendation that the vo remaining committees under Commission VII be trans- rred to Commission IV, the Professoinal Service Commis- on, and that Commission VII be phased out. The two ommittees to be transferred being the Committee on Social ervice Programs and the newly created Committee on lealth Planning and Development.

—The Council on Review and Development recom- iended and the Executive Council approved the elimina- on of the Committee on Association of Professions.

—As information, the Council on Review and Develop- ment reported that it felt the Journal of the North Carolina Medical Society is worthwhile and should be continued.

—The Council on Review and Development reported that it had passed a motion to defer indefinitely the establishment of a Council on Specialty Medicine, and the Executive Council approved a motion endorsing the action of the Council on Review and Development.

—The Executive Council received as information, for transmission to the House of Delegates, a Resolution from the Section on Otolaryngology that the name of the Section be changed to Section on Otolaryngology and Maxillofacial Surgery. See RESOLUTION No. 1, introduced by the Section on Otolaryngology.

—Mr. H. Gray Hutchinson of H. Gray Hutchinson and Associates, Inc., Actuaries and Insurance Consultants, of Raleigh, N.C., explained to the Council that his firm had reviewed, with the Committee on Finance, the changes necessary to bring the Society's Employees' Pension Plan into conformity with the new pension law passed by Congress last year. Following a brief review of Mr. Hutchinson's recommendations, a motion for approval of the proposal presented was adopted by the Executive Council.

—A motion was passed by the Executive Council authorizing the officers, staff and legal counsel to proceed with the formation of a mutual insurance company when deemed advisable, such company to offer professional liability and possibly other forms of insurance to members and any other persons required by law. At a later time in the meeting, the Executive Council, in a related action, approved a motion that all the voting members of the Executive Council be the incorporators of the mutual insurance company, if it became necessary to organize such a company.

—The Executive Council was advised that the purchasers of the Highway 70 property had failed to make all past due payments on the property when offered the opportunity, in keeping with instructions of the Council at its July 20, 1975, meeting, and the property was being deeded back to the Society. Based on this information, the Executive Council instructed the Committee on Personnel and Headquarters Operations to again list the property for sale.

(Afternoon Session)

—The ad hoc Committee on Relative Value Study recommended that the North Carolina Medical Society adopt the 1974 revision of the California Relative Value Studies as the North Carolina Relative Value Studies. After considerable discussion, however, the Executive Council approved a motion "that the North Carolina Medical Society not endorse any relative value schedule, and that the headquarters staff make available copies of the California 1974 Relative Value Schedule for any members who request it," on a purchase basis. Later in the meeting in a related action, the Executive Council approved a motion "that the North Carolina Medical Society does not endorse any relative value schedule. The North Carolina Medical Society adopts Current Procedural Terminology for future coding and nomenclature purposes, with the updated editions to be used as they become available." See separate REPORT B —REPORT OF THE EXECUTIVE COUNCIL, Page 63, HOUSE OF DELEGATES, May 6, 1976.

—The Council voted to express its appreciation to the ad hoc Committee on Relative Value Study for the diligent work of great value to the Society for making this study up-to-date and available to members.

—Dr. M. Frank Sohmer, Jr., President, North Carolina Medical Peer Review Foundation, made a brief report on activities of the Foundation including the fact that Mr. Woodford Burnette, formerly a member of the AMA staff will serve as PSRO Manager for the Foundation, and that the Foundation has been involved in over 15,000 reviews. He also emphasized that the Foundation's contractural obligation with Health Application Systems (HAS) is to provide only peer review, not in any way as medical consultants to them nor to provide them with directions. Dr. Sohmer also reported on some exploratory discussions concerning reviews for Medicare and also with private industry concerning review of private insurance covered cases.

—The Executive Council approved a motion that the immediate Past President of the Society be sent at Medical Society expense to the December meeting (1975) of the AMA and that the consideration of extension of this policy to following Past Presidents be decided upon by the House of Delegates. See separate REPORT D — REPORT OF THE EXECUTIVE COUNCIL, Page 63, HOUSE OF DELEGATES, May 6, 1976.

—The Executive Council reviewed a Resolution from the Catawba County Medical Society petitioning the State Society to seek an injunction against the further enforcement by the State of North Carolina of Utilization Review procedures now in effect until the injunction against the National UR Regulations has been made permanent or vacated. After considerable discussion, the Executive Council voted against adoption of the resolution or any action prior to consideration of the resolution by the House of Delegates. See separate RESOLUTION No. 2, introduced by the Catawba County Medical Society, Page 66, HOUSE OF DELEGATES, May 6, 1976.

—Dr. Ira Hardy, II, Chairman, ad hoc Committee to Study Professional Liability Insurance Problems, recommended for the Committee that the Executive Council approve of the Society entering the lawsuits testing the constitutionality of the Reinsurance Exchange, as a friend of the Court. The Executive Council approved the recommendation.

—The ad hoc Committee to Study Professional Liability Insurance Problems also reported that it felt mandatory binding arbitration and medical injury compensation boards were not in the best interest of the Society at this time.

—The Executive Council endorsed the recommendation that a series of proposed changes in the tort liability system (legislative changes) affecting professional liability in North Carolina be presented to the Legislative Study Commission including the following topics: Community Standard of Medical Care, Statute of Limitations, Informed Consent, Counter Claim, Limits on Liability, Collateral Source Rule, and Periodic Payment.

—The Executive Council approved the recommendation that an ad hoc Committee be formed to investigate and prepare a plan for a statewide campaign to bring about the suggested changes in the tort liability system. In a related action, the Council approved a motion that the ad hoc Committee to Study Professional Liability Insurance Problems assume leadership in forming the ad hoc committee.

—Dr. Charles W. Styron, Chairman, ad hoc Committee to Study National Health Planning and Resources Act of 1974, reported briefly on the joint meeting which his committee and the Committee on Comprehensive Health Service Planning had held resulting in the recommendation that the two committees be merged as reported early in this Council meeting by the Council on Review and Development. He also briefly reviewed the development of six Health Systems Areas (HSA) in the state under the Public Law 93-641 as well as the development of a State Health Coordinating Council (SHICC). He also reported that it was further suggested that one physician board member of each HSA and SHICC be appointed to projected merged committee of the Society.

—The Executive Council approved a motion that a letter be written to Mr. David Flaherty as Secretary of the Department of Human Resources expressing the Society's position on disapproval of publicizing the list of physicians and amounts of Medicaid payments.

—The Executive Council considered, on recommendation of the Committee on Professional Insurance, approval of an insurance program for excess major medical up to $250,000 with a choice of either $15,000 or $25,000 deductibles, offered by the Golden-Brabham Insurance Agency. After discussion the Council approved a motion that the proposal be referred back to the Committee for further study and specific information as to comparable rates with other companies and report back by the February 1, 1976, meeting of the Council.

—The Executive Council considered and accepted, on recommendation of the Committee on Professional Insurance, the offer that group accidental death and dismemberment policy through the Society be made available through the J. L. and J. Slade Crumpton Insurance Agency.

—The Executive Council voted to receive and file recommendations from the Committee on Child Health and Infectious Diseases; one related to problems of child abuse and neglect and the other had to do with renegotiation of the allowable fee for the early and periodic screening, diagnosis and treatment program.

—The Committee on Child Health and Infectious Diseases recommended and the Executive Council adopted a proposal that physicians should be notified by registered mail and the hospital and health departments be notified by regular mail for insufficient samples and when all PKU levels are above 3.6 milligrams per cent and the physician be telephoned for all distinctly abnormal values.

—The Committee on Chronic Illness endorsed the recently published 1974 American Thoracic Society, "Diagnostic Standards and Classification of Tuberculosis" and made a series of five recommendations which were adopted as Medical Society policy. See separate REPORT E—REPORT OF THE EXECUTIVE COUNCIL, Page 3, HOUSE OF DELEGATES, May 6, 1976.

—The Executive Council approved a recommendation from the Committee on Drug Abuse to the effect that the Executive Council recommend to the four medical schools in the State that they introduce into their formal curriculum educational programs in prevention, diagnosis and treatment of alcohol and other drug abuse both in the general population and as a health profession occupational hazard.

—The Committee on Drug Abuse recommended and the Executive Council endorsed the recommendation of the committee that "The issue having been raised in pending legislation regarding prescribing and dispensing drugs by nurse practitioners and physician's assistants, the Committee on Drug Abuse goes on record as opposing, dispensing and prescribing but not administering any controlled substance by non-physicians. . . ."

—The Executive Council received and filed a recommendation from the Committee on Drug Abuse recommending that registered nurses be authorized to dispense or administer but not prescribe controlled substances from a hospital emergency room pursuant to a physician's order. It was the feeling of the Council that the intent of this recommendation had already been acommplished.

—Approval was voted by the Executive Council for a ommendation from the Committee on Marriage Counsel- and Family Life Education that the State Medical Soci- recognizing that physicians can now legally examine and at minors for venereal disease without parental consent, roduce legislation extending this principle to include er health services including contraception, abortion and ntal health.

—The Executive Council received and filed a recommen- ion from the Committee on Maternal Health pertaining to presence of fathers in the labor and delivery rooms when ir baby is born.

—Received and filed by the Executive Council was a ommendation from the Committee on Medicine and Re- on concerning a proposal that the office of Chaplain be ablished in the Medical Society.

—On recommendation of the Committee on Mental alth, the Executive Council approved a resolution ad- cating that treatment of the mentally ill in the local mental alth program be under medical and/or psychiatric super- ion and that all patients be adequately evaluated by cur- ntly acceptable psychiatric standards and their treatment ogram be supervised by adequately trained psychiatrists. e separate REPORT F — REPORT OF THE EXECU- VE COUNCIL, Page 64, HOUSE OF DELEGATES, ay 6, 1976.

—The Committee on Occupational and Environmental alth re-emphasized its interest and concern in seeing that ere is more involvement of the medical schools in the State North Carolina in the teaching, research and clinical pects of occupational health and in setting up a pilot in- strial clinic. The Committee expressed interest in contact- each medical school to discuss the proposal following scussion of which the Executive Council approved the esident cooperating with the Committee Chairman in car- ng out their recommendations.

—The Committee on Disaster and Emergency Medical re recommended, and the Executive Council approved e concept of a six month study by the Department of nergency Medical Services to determine (in conjunction th local medical and paramedical) emergency medical rvice capability in one selected area of the state.

—The Executive Council endorsed in principle, a recom- ndation from the Committee on Disaster and Emergency edical Care to the effect that it endorse the concept of stgraduate education for physicians working in nergency rooms.

—The Executive Council approved a request from the mmittee on Legislation for approval of a Legislative Re- ption in 1976 at the option of the Committee.

—Approval was given by the Executive Council to the quest of the Committee on Legislation for Society spon- rship of a Washington pilgrimage to visit the North arolina Congressmen and entertainment of the Con- essmen at lunch, travel expenses to be at the individual ysician's own expense.

—The Committee on Legislation recommended and the xecutive Council approved the extension of the weekly *gislative Newsletter* to all legislative contacts and any her physicians that the Chairman of the Committee on egislation feels necessary to receive the Newsletter.

—Endorsement by the Executive Council was voted for a ncept on HMO's as stated by the Committee on Legisla- n along with a position in opposition to H.R. 7847. See parate REPORT G — REPORT OF THE EXECUTIVE OUNCIL, Page 64, HOUSE OF DELEGATES, May 6, 76.

—The Council approved the recommendation of the Medical-Legal Committee that the Society publish a brochure on *Tips to Avoid a Malpractice Suit*.

—The Council went on record, based on the recommendation of the Committee Liaison to the North Carolina Pharmaceutical Association, as opposing "MAC" (Maximum Allowable Cost) regulations promulgated by the Department of HEW because the regulations are felt to interfere with the physician's ability to use his best medical judgment when prescribing drugs and medication.

—Dr. John McCain, Chairman, Committee on Public Relations presented a series of informational reports, including an announcement that the Committee would sponsor a North Carolina Conference on Children to be held sometime next spring. The Governor, and the Lieutenant Governor, along with the Department of Human Resources have been requested to co-sponsor the conference with the Medical Society.

—Dr. Jack Hughes, reporting for the Committee on Blue Shield reported that the Committee had recommended to the Board of Trustees of Blue Cross and Blue Shield that provision of benefits for services rendered in free standing ambulatory surgical facilities be contingent upon the existence and availability of licensing and accrediting agencies to assure compliance with the established criteria — or with the criteria established by the committee.

—The Executive Council approved in principle, a statement from the Committee on Physical and Vocational Rehabilitation as follows: Recognizing the needs for patient care, teaching and research and rehabilitation medicine, the Committee on Physical and Vocational Rehabilitation requests that the Executive Council approve in principle the master plan for a comprehensive rehabilitation center and regional centers to meet these needs by the ad hoc Committee of the State Department of Vocational Rehabilitation.

—The Executive Council approved the recommendation of the Committee on Physical and Vocational Rehabilitation that the later H. William Tracy, Jr., M.D., be nominated for the "Physician of the Year" Award which is presented annually by the Governor's Committee on Employment of the Handicapped.

—The Chairman of the Annual Convention Commission, Dr. Josephine Newell, reported for the Committee on Arrangements that Scientific and Technical Exhibits would be open for two days only during the 1976 Annual Meeting, these days being Friday and Saturday. It was also reported that a general information meeting for the membership will be scheduled immediately after the first meeting of the House of Delegates.

—On recommendation of the Committee on Arrangements, the Executive Council approved that only members of the North Carolina Medical Society or its Auxiliary are eligible for prizes in the golf and tennis tournaments; and further that participation in golf and tennis tournaments will be limited to members of the North Carolina Medical Society or its Auxiliary.

—The Committee on Arrangements requested an additional $600 be authorized to be used for prizes for scientific exhibitors. This amount, when added to the present $400 budget of the Committee would total a $1,000 appropriation. The Executive Council approved the request.

—The Committee on Medical Education reported that it interpreted the action of the House of Delegates to mean that the first cycle of continuing medical education for membership in the North Carolina Medical Society began on January 1, 1975, and will end on December 31, 1977; and, that a new member's reporting period will begin on January

following his admission to the North Carolina Medical Society and will end on December 31 three years later. The Committee requested, and the Executive Council approved, the Committee interpretation.

—The Committee on Medical Education recommended and the Executive Council approved that an honorarium for physician inspectors on site visits for the purpose of accreditation of programs will be $200 plus expenses per person per day; and that application fee for accreditation be set at $50.

—The Committee on Medical Education recommended that there shall be no exceptions from the requirement of continuing medical education for membership for physicians who are actively employed in the field of medicine; and, that application for exemption, because of hardship or disability, will be studied by his local medical society with this Society's verification, and recommendation to the North Carolina Medical Society. The Council approved of the committee recommendation.

—The Executive Council approved recommendations from the Committee on Cancer as follows: That the Medical Society endorse the use of the test for occult blood for intestinal cancer in the mass screening programs; That the Medical Society recommends to the Governor the reappointment of the Governor's Cancer Commission; and that the Medical Society reaffirm its previous policy for legislation for anit-quackery laws in North Carolina and that this be referred to the Society's Committee on Legislation for their consideration and actions.

—The Chairman of the Committee on Constitution and Bylaws, Dr. Louis Shaffner, reported as information that the committee is proceeding with revising of the Bylaws. He also enumerated five recommended changes in the Bylaws, which were approved by the Executive Council as follows: (1) change the name of the Section on Family Physicians to the Section on Family Practice; (2) delete the Peer Review Committee; (3) add a provision that each member designate the one section in which he wishes to vote for section delegate; (4) add a provision that the President be an ex-officio member of all committees which he appoints; and (5) change the method of filling a vacancy in the office of President Elect from election by the House of Delegates to appointment by the Executive Council within thirty days. See separate REPORT C — REPORT OF THE EXECUTIVE COUNCIL, Page 57, HOUSE OF DELEGATES, May 1976.

—Dr. A. Hewitt Rose, Jr., Chairman, Administration Commission, reported that the Retirement Savings Plan Committee recommended that the Executive Council authorize the trustee of the Retirement Savings Plan to amend the plan to include a third option that paid in funds be put in fixed returns securities, as well as the two present categories of (1) common stock and (2) annuities. The Council approved the recommendation.

—The Executive Council considered a resolution from the Chairman of the Committee on Social Service Programs which after slight modification approved that the Society requests that Health Application Systems and the Medical Services Section of the Department of Social Services of the Department of Human Resources of the State of North Carolina contact the Executive Director of the Society for referral to Medical Society committees as problems of mutual interest to the Society and these organizations are identified.

—After considerable discussion by the Executive Council concerning interpretation of eligibility for Life Membership, the entire matter was referred to an appropriate committee to be designated by the President for study and report back to the Council for future action.

—The Executive Council followed the recommendation of a local county medical society to the effect that the prerequisite for county membership should be followed before granting State Society membership in the case of a physician located out of state but planning to move to this state.

—Tentative dates of May 5-8, 1977, and May 4-7, 1978, at Pinehurst, N.C., were approved for the Annual Meeting of the Society in 1977 and 1978.

—The Executive Council adopted a motion not to approve any proposed travel plans or tours at this time.

SPECIAL CALLED EXECUTIVE COUNCIL MEETING
October 15, 1975

A Special Called Meeting of the Executive Council convened at 7:30 p.m. in the Executive Council Room at the Medical Society Building, Raleigh, N.C., Dr. James E. Davis, President, presiding. In the absence of the Secretary, the Assistant Secretary and Executive Director, Mr. William N. Hilliard, called the roll and declared a quorum present.

President Davis introduced North Carolina Commissioner of Insurance John Ingram, who in turn introduced members of his staff present. Mr. Ingram gave a brief review of the Reinsurance Exchange Law and questions from the Council members were answered by Mr. Ingram and members of his staff.

President Davis informed the Council that the Executive Committee of the Board of Directors of the Medical Liability Mutual Insurance Company of North Carolina had met and elected to follow recommendations of the consulting firm to whom they had talked as follows: (1) to leave all options open, which he felt meant to approach St. Paul again (about the possibility of not withdrawing from North Carolina as an insurance carrier offering professional liability insurance to physicians) and (2) ask the insurance consultants to continue to pursue their study and report back to the Executive Committee of the insurance company on October 20, 1975.

—After lengthy discussion concerning whether or not to continue with the Medical Liability Mutual Insurance Company of North Carolina, the Executive Council approved a motion that the Executive Council give the officers and directors of the Medical Liability Mutual Insurance Company of North Carolina a vote of confidence and ask them to proceed on the path they have started on for the formation and operation of the company.

—Following discussion pro and con on whether the House of Delegates should be called into a special session, the Executive Council approved a motion that the Executive Council ask for a called session of the House of Delegates for discussion and possible action on professional liability insurance problems. It was decided that the House of Delegates meeting should be held Sunday, October 26, 1975, at 1:30 p.m. (Later developing exigencies of the situation, however, indicated a need for an earlier meeting and the called meeting of the House of Delegates was actually held on October 22, 1975.)

The Executive Council was informed that the Insurance

Service Office (ISO) would be having a rate increase application hearing on Tuesday, October 21, and that a ruling on the rate increase application could possibly affect the rates of the Medical Liability Mutual Insurance Company of North Carolina. Following brief discussion, the Council approved a proposal that they go on record supporting the rate increase request by ISO.

—The Society's Legal Counsel advised that he had received a request from an individual member to assist in a lawsuit which had been filed against the physician, but the Legal Counsel indicated that he would not want to become involved without the authorization of the Council. A motion was approved that the legal counsel not participate actively in the lawsuit, but not eliminate the potential of his participation in the appeal if it appeared appropriate at that time.

MID-WINTER EXECUTIVE COUNCIL MEETING
February 1, 1976

(Morning Session)

—The Mid-Winter Meeting of the Executive Council convened at 9:10 a.m. in the Executive Council Room, of the Medical Society Building, Raleigh, N.C., President James E. Davis presiding. First Vice President, Dr. John L. McCain, gave the invocation, and Secretary, E. Harvey Estes, Jr., called the roll and declared a quorum present.

—Dr. T. Tilghman Herring, Chairman, Committee on Finance, presented the Audit of Society funds and expenditures for fiscal year 1975 which was approved by the Executive Council. During his presentation he explained several cost over-runs for 1975, but expressed the conviction that the Society was in satisfactory shape financially. He indicated there might need to be consideration of a dues increase within another year.

—The Executive Council approved a recommendation, from the Professional Liability Legislative Action Committee, that a letter soliciting a $25 contribution be mailed to each Society member, to be administered by the Committee in support of activities promoting the proposed legislative changes regarding professional liability and that any unused funds be turned over to MEDPAC.

—The Executive Council adopted in principle the report of the Professional Liability Legislative Research Commission. It was pointed out that the Study Commission report embodies all of the legislative proposals previously approved by the Society, with one exception, the patient's compensation fund proposal which is new.

—Dr. Jesse P. Chapman, Jr., of Asheville was named by the Executive Council to fill the unexpired term of Dr. Edward W. Schoenheit on the Nominating Committee representing the Tenth District, a term expiring in 1978.

—On recommendation of the Committee on Cancer, the Executive Council endorsed Senate Bill 588 which proposed that space for smokers and non-smokers be allocated at public meetings in government buildings.

—Approval was voted on a motion that the Executive Council endorse the general principle of the Cancer Information Service, of the Duke University Comprehensive Cancer Center, and ask the Cancer Information Service to work through the Society's Committee on Cancer to evolve a method of referrals.

—On recommendation of the Committee on Constitution and Bylaws, the Council approved proposed interpretation of qualification for Life Membership as follows:

(1) A person must be a current member of the Society at the time that he transfers to Life Membership.

(2) It is not necessary that a member have been a dues paying member continuously for the twenty or thirty years just prior to becoming a Life Member (so long as the total years requirement is met and is a current member).

(3) Definition of "retired from the active practice of medicine" in relation to retirement after age 65 and has had thirty years of dues paying membership, the State Society office accept the certification of the secretary of the member's county medical society as evidence that the member has retired from practice.

—The Executive Council approved a recommendation that the Society approve the formation of a Section on Emergency Medicine. See separate REPORT C — REPORT OF THE COMMITTEE ON CONSTITUTION AND BYLAWS, Page 70, HOUSE OF DELEGATES, May 6, 1976.

—The Executive Council received, for transmission to the House of Delegates, two resolutions from the Edgecombe-Nash County Medical Society relating to: first, creating improved communications between hospital staffs through the county and state medical societies whenever attempts are made to improve new regulations or controls over hospital staffs; and secondly, relating to the North Carolina Medical Society terminating its participation in the HARP program and seek to abolish the program through persuasion or litigation. See separate RESOLUTION NO. 3 and separate RESOLUTION NO. 4 submitted by the Edgecombe-Nash County Medical Society, Page 66, HOUSE OF DELEGATES, May 6, 1976.

—The Executive Council was informed that the State Society's AMA membership had achieved the level of four thousand members in the AMA and thereby was now entitled to an additional delegate and alternate delegate. Following discussion of the term of office of delegates and alternates and the normal responsibility of the Nominating Committee to submit nominees more than six months in advance of the term of office, the Council approved a motion that the Executive Council elect a fifth delegate and fifth alternate delegate for the year 1976 with the understanding that they are the fifth delegate and alternate delegate for the year (should the State's AMA membership not be maintained at a level to continue to qualify for the fifth delegate and alternate).

—Dr. Frank R. Reynolds was elected as the Society's fifth delegate to the AMA and Dr. Jesse Caldwell, Jr., was elected as the fifth alternate delegate to the AMA for the year 1976.

—Dr. John Glasson of Durham was unanimously endorsed by the Executive Council for a position on the AMA Council on Medical Services.

—The Committee on Eye Care and Eye Bank of the North Carolina Medical Society recognizes the duty and responsibility of all physicians to assist in the care of the medically indigent citizens and they recommend to the Executive Council that it endorse the concept of responsibility for that care and that all ophthalmologists be allowed and encouraged to participate in the Blind Commission clinics on an equal basis. The Executive Council endorsed the recommendation of the Committee.

—The Executive Council, after minor modification of the

recommendation of the Committee on Eye Care and Eye Bank, approved a motion to the effect that the Legal Counsel of the Society look into the status of soft contact lenses to see if they are considered to be, in effect, a drug.

—The Executive Council authorized the Society becoming a party to a suit against the Department of H.E.W. on implementation of P.L. 93-641 — Health Planning and Resources Development Act of 1974 contingent upon the action of the State of North Carolina with the understanding that such costs incurred by the Society would be covered by reimbursement from the AMA.

—Dr. Ira Hardy, II, Chairman, ad hoc Committee to Study Professional Liability Insurance Problems presented a brief review, for benefit of the Executive Council, of the proposals which will be made to the General Assembly by the Legislative Research Study Commission.

—Dr. Edward B. McKenzie of Salisbury discussed the Resolution presented to the October 22, 1975, Called Meeting of the House of Delegates and expressed concern that the proposed legislation by the Rowan-Davie County Medical Society had not been incorporated into the legislative recommendations of the ad hoc Committee. The following discussion emphasized that the Rowan-Davie proposals were presented to and considered by the Legislative Research Commission, and in fact one portion of the Research Commission report was drawn from the Rowan-Davie proposal. It was also pointed out that the record showed that the House of Delegates action referred the resolution to the Executive Council for consideration.

—Upon reconsideration of a recommendation made by the Committee on Professional Insurance, at the September 28, 1975, Council meeting but referred back to the Committee for additional information, the Executive Council endorsed the offering of an additional insurance program of excess major medical expenses as proposed by the Golden-Brabham Insurance Agency.

(Afternoon Session)

—The Executive Council considered the North Carolina Hospital Association request for endorsement of Constitutional Amendment No. 1 on the statewide ballot of the March 23rd primary election. The Executive Council endorsed the Amendment which would permit the North Carolina Medical Care Commission to issue, in selected cases, revenue bonds to finance health facilities — including hospital — capital expansion.

—The Executive Council received as information a report from Dr. M. Frank Sohmer, Jr., relating to the fact that under provisions of a section of the Social Security Act Amendments recently passed, all practicing physicians in the state will be polled by HEW to determine whether or not they support a change from the present local and regional Professional Standards Review Organization (PSRO) area designations to a single statewide designation.

—The Executive Council approved of Society sponsorship, in cooperation with AMA funds from an HEW grant, of a Seminar on the Role of the Medical Director in a Skilled Nursing Home.

—The Executive Council, by consensus during the discussion, agreed that the specialty listings by physicians in the Yellow Pages of telephone books should be in conformity with the AMA recognized specialty classifications.

—A request from the Medical Society of the State of New York was considered, but the Council voted against endorsing the requested action in support of the concept of opposition of the continued proliferation of Social Security numbers as an identifier for purposes other than Social Security Insurance and Internal Revenue purposes.

—Saturday, April 17, 1976, at 10:00 a.m. at the Medical Society Building was agreed upon as the time and date for the next Executive Council meeting.

—An action was approved that the North Carolina Medical Society inform the Medical Liability Insurance Company Board of Directors what expenses the Society had incurred for services by staff personnel and supplies in relation to the formation of the insurance company and to bill the insurance company accordingly.

—The Executive Council approved in principle the participation of the President, as a personal undertaking and not one for the Medical Society, on a trip to Russia in the summer sponsored by an organization known as People to People International, a non-profit organization started by President Eisenhower.

—It was announced to the Council as information that Dr. Edgar T. Beddingfield, Jr., of Wilson had been elected the afternoon before as Chairman of the AMA Council on Legislation. The Executive Council approved an expression of appreciation to Dr. Beddingfield for his services and extended the congratulations of the Council on his new office.

—It was recommended that the President and the Executive Council recommend to the Governor an appropriate number of names for membership on the State Health Coordinating Council (SHCC).

—Endorsement was voted by the Executive Council for the nominations by the President of the Medical Society of physicians to serve on the Board of Directors of the North Carolina Association of Professions as follows:

Dr. George G. Gilbert, for re-election for a two-year term;

Dr. John Glasson and Dr. Louis Shaffner, for a two-year term;

Dr. Archie T. Johnson, Jr., for an unexpired term of one year.

ANNUAL EXECUTIVE COUNCIL MEETING
April 17, 1976

(Morning Session)

—The Annual Meeting of the Executive Council convened at 10:00 a.m. in the Executive Council Room of the Medical Society Building, Raleigh, N.C., President James E. Davis, M.D., presiding. First Vice-President John L. McCain, M.D., gave the invocation. Assistant Secretary and Executive Director, Mr. William N. Hilliard called the roll and declared a quorum present.

—The Committee on Medical Education recommended and the Executive Council approved that the Committee be given the authority to give final approval to accept or not, for the Society, the recommendation of the inspection committee following a survey for accreditation of a continuing medical education program and to transmit what accreditation recommendation will be made to the American Medical Association. See separate REPORT H — REPORT OF THE EXECUTIVE COUNCIL, Page 64, HOUSE OF DELEGATES, May 6, 1976.

—The Committee on Medical Education submitted a request for funds for part-time staff support for the accreditation activities of the Committee. Following discussion, the Executive Council approved the request in principle, but at

the same time requested the Committee to work with the Executive Committee of the Society to work out the details and finalize the monetary request.

—The Executive Council approved a request from the Committee on Public Relations to recommend increasing the membership of the Committee on Public Relations to ten members, and that the recommendation be referred to the Committee on Constitution and Bylaws. See separate SUPPLEMENTARY REPORT C — REPORT OF THE COMMITTEE ON CONSTITUTION AND BYLAWS, Page 58, HOUSE OF DELEGATES, May 6, 1976.

—The Committee on Public Relations recommended and the Executive Council approved a motion that Dr. C. Clement Lucas and Dr. Archie T. Johnson, Jr., and the Society staff be commended for their fine job on the recent Conference on Children, and that the Society endorse holding a Quality of Life Conference on the Health of Senior Citizens in 1977.

—It was reported as information that the Committee on Public Relations plans to hold the annual Conference on Medical Leadership at the Royal Villa in Raleigh on January 28-29, 1977, following a format similar to the 1976 conference.

—Dr. John L. McCain reported on his attendance at a called Conference on Flu at the Center for Disease Control in Atlanta and the fact that a mass immunization program for the United States will probably be undertaken later in the year. Following discussion of his report, the Executive Council approved a motion that in keeping with the policy statement by the AMA that the North Carolina Medical Society support and participate in the implementation of the planned influenza immunization program for North Carolina and encourage county medical societies to actively participate. See separate REPORT I — REPORT OF THE EXECUTIVE COUNCIL, Page 65, HOUSE OF DELEGATES, May 6, 1976.

—The Executive Council approved a recommendation from the Committee on Legislation that the Society support the proposed legislation contained in the report of the Professional Liability Insurance Study Commission. See separate REPORT J — REPORT OF THE EXECUTIVE COUNCIL, Page 65, HOUSE OF DELEGATES, May 6, 1976.

—The Executive Council approved the refunding of 1976 dues for Dr. Alexander Webb, Jr., and Dr. A. Ledyard DeCamp due to exceptional personal circumstances.

—On recommendation of the President-Elect, Dr. Jesse Caldwell, Jr., the Executive Council, in conformity with the Bylaws, approved the reappointment of all Commissioners and empowered when he becomes the President to replace any commissioners who cannot serve.

—On recommendation of the President-Elect, the Executive Council approved a change in Committee name and several Committee reassignments to Commissions as follows: The Committee on Medical Aspects of Sports to be changed in title to Committee on Sports Medicine and that this Committee be moved from Commission VI to Commission V; and Enlargement of the Committee on Radiation from a one man membership to additional members and assignment of the Committee to Commission V.

—The Committee on Traffic Safety requested, and the Executive Council approved, that the Committee embark on an effort to inform the public of the problems of the drinking driver through a program of public relations through the media, within the profession, and through the development of a dialogue with the North Carolina Bar Association.

—Dr. Jack Hughes, as Commissioner, and on behalf of the Insurance Industry Committee presented a resolution of tribute to the late Mr. Brantley R. Shaw, former manager of the Medicare Professional Relations, Prudential Insurance Company of America, in High Point. The Executive Council unanimously approved the resolution and the request that copies of this resolution be sent to the family and the Prudential Insurance Company.

—The Council reviewed the lettered reports "A" through "G" as contained in the delegates kits which were accepted for referral to the House of Delegates, and for referral to the Reference Committees to which assigned, all having been developed on the basis of previous Council actions.

—The Council reviewed the numbered Resolutions 1 through 11 and approved that they be accepted for referral to the House of Delegates as presented and for referral to the Reference Committees to which they have been assigned.

—The Executive Council approved a motion that the Auxiliary be given the authority, along with the Committee on Personnel and Headquarters Operation to proceed with the hanging of pictures of Past Presidents in the Medical Society Building, as they see fit, including the necessary expenditure of funds.

—Nominees for the 1976-1977 North Carolina MEDPAC Board of Directors were received and the following were elected:

Edgar T. Beddingfield, Jr., M.D.
H. David Bruton, M.D.
Kenneth E. Cosgrove, M.D.
John T. Dees, M.D.
James E. Davis, M.D.
John H. Hall, M.D.
Charles A. Hoffman, M.D.
T. Reginald Harris, M.D.
Archie T. Johnson, Jr., M.D.
David S. Nelson, M.D.
Marshall S. Redding, M.D.
Robert H. Shackelford, M.D.
J. David Stratton, M.D.
John W. Watson, M.D.

—The Executive Council approved expressions of appreciation to the members of the Council who were completing their service, thanking them for their devoted service. Dr. Frank R. Reynolds, Immediate Past President and Ninth District Councilor, Dr. Verne Blackwelder were particularly referred to, along with expression of thanks to President Davis for his efficient and dynamic leadership, complimenting him also as the presiding officer over the past year.

—An additional Resolution of commendation to President Davis was presented by Dr. John L. McCain, which was approved for submission to the *North Carolina Medical Journal*.

—Dr. Edward V. Staab, Chairman, Nuclear Medicine, Department of Radiology, UNC, discussed with the Executive Council the desire of a number of physicians that a Section on Nuclear Medicine be formed within the North Carolina Medical Society. The appropriate method for formal request for such a section was outlined by members of the Council with several suggestions and by consensus it was agreed that the interested physicians should have a provisional meeting, elect officers and possibly apply for status as a Section at a future meeting of the Executive Council.

Abridged Minutes of the Meetings of the House of Delegates

SPECIAL CALLED MEETING
Raleigh, North Carolina
THURSDAY EVENING
October 22, 1975

The Special Called Meeting of the House of Delegates of the North Carolina Medical Society convened at seven-five o'clock, Wednesday evening, October 22nd, 1975, in the Auditorium of the State Highway Building in Raleigh, North Carolina.

DR. JAMES E. DAVIS [President of the Medical Society]:

Will the Special Called Session of the House of Delegates of the Medical Society of North Carolina please come to order?

I think the reason that we're here this evening would require no explanation. I would like to explain to you the two separate calls that you have received.

About ten days ago, when it became evident that it was highly advisable and necessary that the delegates get together and discuss the many facets of the problems concerning professional liability insurance, we thought we had scheduled the meeting of the House of Delegates at the very earliest possible time which was next Sunday.

As is true of all aspects of modern living, the tempo immediately picked up and especially with the decision by the Legislative Study Commission, actually on order of the Lieutenant Governor and the Speaker of the House, that the Legislative Study Commission beginning yesterday go into daily session and have a final report of their findings next Monday, it became immediately apparent — and this was only last Friday — that if we were to have maximum impact on this crisis and have maximum input to the work of the Legislative Study Commission, in particular, it would be necessary that we meet tonight.

So, Mr. Hilliard and the headquarters staff that he could muster, starting about midnight on Friday night, went to work to send out a second call which went in the mail to all of you on Saturday.

We also apologize for not being able to meet tonight in a room which would give us our usual table facilities, but this is State Fair Week in Raleigh of course and there is no such auditorium available and so I hope you will bear with us in this theatre type seating that you have tonight.

I will now turn the meeting of the House of Delegates over to your very able Speaker, Dr. Chalmers Carr.

DR. CHALMERS R. CARR [Speaker of the House of Delegates of the Medical Society]:

It is my pleasure to try to assist you in conducting the meeting and decide on some of the issues for which the meeting has been called.

To begin our meeting, as is customary, I would ask Dr. John McCain to pronounce the invocation.

DR. JOHN L. McCAIN [First Vice President, Medical Society]: Almighty God, whose loving hands have given us all that we possess, grant us wisdom to effectively deal with the problems before us tonight, that we may best serve the health interests of the people of this great state. We ask in Thy name, Amen.

SPEAKER CARR: If Dr. Payne is ready I would like a report from the Credentials Committee as to a quorum.

DR. JOHN A. PAYNE, III [Chairman, Credentials Committee] Mr. Speaker, we have 171 registered, qualified delegates present out of 272 delegates, so it would constitute a quorum.

SPEAKER CARR: Thank you, Dr. Payne.

The first agendized presentation will be by Dr. James E. Davis who will give us an informational report on Executive Council actions and actions of the Board of Directors of the Medical Mutual Liability Insurance Company of North Carolina.

PRESIDENT DAVIS: I think all of us realize that what has gone on this week and the fact that all of us are here this evening in a special called session is the culmination of what has gone on in this State and throughout the country for the last year and a half to two years.

When the situation again became acute in late September, as it had last December, the Executive Council at its fall meeting at Mid Pines on September 28th, knowing that the report of the Insurance Commissioner was imminent, did meet and discuss the situation and instructed the officers, the staff and counsel that if professional liability insurance became unavailable in North Carolina to proceed to establish a mutual insurance company in an effort to provide professional liability insurance to its members and to other physicians in the State.

The following day, on Monday, September 29th, Commissioner Ingram did file his report. St. Paul as you know refused to accept it and terminated their activity in North Carolina.

So, that evening, by conference call across the State, the Executive Council again reconsidered the situation and reaffirmed the position that the Society should do everything possible to form such a company to make such insurance available.

So, a Board of Directors of the Medical Mutual Liability Insurance Company of North Carolina was elected; officers were elected. A charter was obtained and, as you know, you were asked to subscribe funds and an agreement to purchase from this new company when it becomes operational.

I'm glad to report to you tonight that as of right now we have received from you, the members of this Medical Society, and the stock certificates are limited to you, we have now received in hand something over $800,000 and we have now received well over a thousand subscriptions to buy insurance which, of course, far exceeds the legal requirement.

The Executive Committee of the Board of Directors of the Medical Mutual Liability Insurance Company of North Carolina have been working very vigorously to seek out proper management for this company and we are delighted again to be able to tell you tonight that we think proper management is now available and that this company, if it is your wish that we proceed, can go into operation at almost any time.

Now, today, I'm sure all of you have heard varying reports of the activities.

As brought to us, the Insurance Commissioner today did announce that St. Paul's Insurance Company had modified its "claims made" form and I'll read to you the two options that we are told constitute this modification and they are:

First of all, they agree that the option of purchasing "claims made" reporting coverage on a single premium purchase basis is made available to the estate of deceased doctors and other medical providers and to doctors and other medical providers who retire, become disabled, move to another city, state or country, enter the armed services, take a sabbatical leave, or have some similar or sudden discontinuity of medical practice.

The second option that we are told that they have agreed to, relates to the single year buy-out or reporting endorsement.

Although your Society was not privy to any of the negotiations between St. Paul Fire and Casualty and the Insurance Commissioner, during the summer and fall, we are told, primarily through the newspapers, that the area of greatest disagreement was on the one year reporting endorsement, that the Insurance Commissioner insisted that every physician in the state who went into "claims made" type of coverage would have the right to buy out and this would be even at a price unannounced by St. Paul's but would have the right to get out from under "claims made" coverage in a single reporting endorsement.

St. Paul's, we are told, refused to accept this, except under the conditions of death, disability and retirement, and secondly, we are told, St. Paul's did not agree to the short-term which the Commissioner approved this "claims made" type of coverage.

So, this option which I have read you and the second one which I am about to read all relate to that one year reporting endorsement.

And, the second option is that the option of purchasing "claims made" reporting coverage on a single premium purchase basis is made available to doctors and other medical providers who have maintained "claims made" coverage with the company for a continuing period of three years or more, provided however this option shall be available only to those having new or renewed policies issued by the company on or after December 1, 1978.

So, it's our interpretation that St. Paul's has agreed that under the specific conditions of the first option, you will get a one year buy-out; under the second that if you go into "claims made" you must then have a three years experience with them under that form of coverage and that after that, you will be entitled to a single year buy-out after December 1, 1978.

It's our understanding that the cost of that buy-out will not be known, will not be announced until you get ready to buy it and that rate, we are told, is not subject to control by the Insurance Commissioner.

Also, today, the Insurance Commissioner announced that with this modification, he was approving this modified "claims made" form for use until June 30th, 1976.

In his remarks today, and you will see this — this is a press release and so I would like just to correct one aspect of it.

The Commissioner says, "I'm disappointed that the North Carolina Medical Society's mutual company has been delayed in making application for license."

We have a charter; we do not have a license. We are told that can be obtained anytime that we have a half-million dollars to deposit with the Commissioner's office.

The doctors have received the statutory required money and we understood the money would be brought to the Department of Insurance on Monday and that the mutual company could begin issuing binders this week.

The Commissioner was not assured that we would be able to bring the money to him on Monday and as a matter of record, at that time, we had cleared through our escrow agent, Wachovia Bank & Trust Company, and you will understand that although we have received larger sums of money, they do not credit it to our account until it has cleared your bank and come back — on the Monday that he mentioned, we had credited to our account as of the Friday close of business, which was the figure we had to operate on, it was $474,500.

So the reason we have not obtained a license is that we have not, or did not on Monday have adequate funds. Even now, we have not obtained the full capitalization of a million dollars.

But, also, the reason we have not begun operations is that we had not, until today or this evening, resolved the problem of management.

I'm sure the Insurance Commissioner is well aware that there's more to forming a company and assuming liability for policies than the simple requirement of depositing a half-million dollars with him and writing binders.

I can tell you, to re-emphasize the fact that we do now have adequate funds. If it is your will, we can obtain a license in the morning.

We do have management available and we can then begin to issue binders tommorrow morning if you so desire.

So, I think one of the big questions before you, obviously, tonight is in view of today's activities, is it your wish that we continue to establish and operate the Medical Mutual Liability Insurance Company of North Carolina which we have planned and for which we have solicited funds or not?

The Speaker has asked that we not go into a lengthy discussion of this and I'll be glad to answer questions pertaining to these matters later, but I would like to point out that today we studied the report of the Legislative Study Commission.

In their report and in their proceedings this morning, they point out that no actions of theirs are to be interpreted as being any impediment to our moving forward with the company and in the resolution which Dr. Hardy will read in just a moment, they strongly urge us to continue with our efforts.

The Insurance Commissioner has also stated publicly that he thinks the Medical Society should continue in their efforts to offer a choice to physicians in the State and I think lest there be any confusion at all, we plan to offer an "occurrence" type policy, such as you are currently operating under, in contrast to the "claims made," modified "claims made" form, that St. Paul's envisions.

And, thirdly, if I may read a letter which I received only this afternoon from the North Carolina Hospital Association, written this afternoon, in response to the action of today, because I think it might have bearing on your deliberations.

Skipping the part that outlines activities of the day, Mr. Marion Foster, President of the North Carolina Hospital Association, says:

> The Association plans to continue and strengthen the Insurance Trust — [which is their mode of operation, of course] — to provide an alternative source of coverage at least until the market is more stable than it now is.
>
> We are hopeful that the physicians of the state will give strong support to your approval of your mutual company to likewise provide an alternate available source of coverage for physicians and possibly for hospitals.
>
> We take this position for the following reasons:
>
> First, we have no assurance that St. Paul or any other carrier would not choose to withdraw from the market again at some future date with very short notice and put hospitals and physicians into a crisis.

Secondly, hospitals not already insured or recently covered by St. Paul, still have no indication of an available market.

And, it's our understanding that that also applies to physicians, that those physicians in the state who are not currently covered by St. Paul will not be offered an opportunity to accept their policy; that those who have been with other companies, new doctors coming into the state, would not in our understanding have a market through St. Paul.

And, further, Mr. Foster says:

Thirdly, rates for hospitals under St. Paul's approved "claims made" form will continue to increase over the next four years to a point where we anticipate the cost of coverage being considerably more than it would through the Insurance Trust.

And, fourthly, possibly some hospitals not covered by St. Paul would desire coverage through the mutual company of the Medical Society.

And, by law, we would be required to offer coverage to all applicants, including hospitals who wanted to seek coverage with us.

And, fifth — [Mr. Foster continues] — the Insurance Trust has already assumed liability for exposure since October 1, and,

Sixth, unless some reasonable alternatives are found for available coverage, the cost of insurance for both hospitals and physicians may soon be prohibitive and severely affect the quality of health care in North Carolina.

And, he concludes:

We pledge the support of the North Carolina Hospital Association in working with the Medical Society in maintaining an available source of coverage for both physicians and hospitals and mutually working out a long-term solution to this problem.

The Executive Council, on extremely short notice, attempted to meet immediately prior to this session. We had exactly fifty per cent of our voting members there and therefore not a legal quorum, but after much discussion, I was requested to bring to you the fact that every member there — nine members of the Executive Council without disagreement bring to you the recommendation that you authorize the Medical Society to continue to establish the Medical Mutual Liability Insurance Company of North Carolina. Thank you.

SPEAKER CARR: Thank you, very much, Dr. Davis.

The sentence that Dr. Davis started and didn't quite finish was the Speaker would request that you hold your discussion, your comments, your resolutions and your motions until you've heard the second part of this presentation concerning why we are meeting here tonight, which is certainly a main portion of our deliberations.

Next is the report of Dr. Ira Hardy, who is Chairman of the ad hoc Committee to Study Professional Liability Insurance Problems and information from Dr. Hardy who is also on the Legislative Study Commission, of the Legislature, on professional liability matters.

DR. IRA HARDY, II [Chairman, ad hoc Committee to Study Professional Liability Insurance Problems]:

Dr. Carr, Members of the House of Delegates:

First of all, let me say that the ad hoc Committee to Study Professional Liability Insurance Problems of the Medical Society have had numerous meetings.

They held a two-day conclave to study each of the problems which we felt were pertinent to the problem in North Carolina and made specific recommendations to the Executive Council.

These recommendations included entering the legal challenge of House Bill 74, which is the Reinsurance Exchange Bill, hoping to get the Court to pass on its constitutionality. This recommendation was approved by the Executive Council.

We also took up specific questions concerning the tort liability system in North Carolina, as it relates to the climate of the professional liability problem in our state and recommended certain specific changes.

These included a community standard of medical care, a restriction on the statute of limitations, informed consent, a counter-claim law, limits on liability, collateral source rule and periodic payments. These were also approved by the Executive Council. We then took up other minor recommendations which were approved.

The Legislative Study Commission, of which I'm a member, was then appointed and we have gone into session to deal with two problems: immediate availability for which we're here tonight, and long-range problems, to come out with specific recommendations to affect, hopefully, the climate in North Carolina — to improve the professional liability climate.

I would like to say as a member of the Professional Liability Insurance Study Commission that all ramifications of this problem are being considered and, if I might, I'd like to read a resolution presented to you by the Commission today.

At the same time, I'd like to recognize two other members of the Commission who are here this evening, Representative Tom Sawyer, whom I saw in here, if he would stand please! And, our own Dr. John Gamble!

(Each in turn stood to be recognized)

RESOLUTION OF THE NORTH CAROLINA PROFESSIONAL LIABILITY INSURANCE STUDY COMMISSION

WHEREAS, the Professional Liability Insurance Study Commission recognizes that a serious medical liability insurance crisis exists in North Carolina, and

WHEREAS, the Study Commission also recognizes that in spite of good medical care, the strong likelihood exists that such a crisis will continue for a long time unless remedial legislation is enacted, and

WHEREAS, the Study Commission feels that solutions in this crisis should include immediate and long range availability of liability insurance, and

WHEREAS, the Study Commission feels that there should be more than one source of such insurance in case any carrier withdraws from the market in the future, and

WHEREAS, the North Carolina Medical Society is presently effecting the formation of a professional liability mutual insurance company, therefore, be it,

RESOLVED, that

(1) We shall continue our careful consideration of recommendations for specific legislation concerning the following subjects:

Statute of limitations
Limitation of awards
Informed consent including a statute of fraud
Standard of care and community rule
Contingency fees
Elimination of *ad damnum* clause
Counter claims
Modification of collateral source rule
Permission to pay awards in periodic payments
And other suggested changes that have been presented to the Commission

(2) We will recommend that the recommendations of this

Commission be considered for enactment as soon as the General Assembly reconvenes.

(3) We strongly urge the North Carolina Medical Society to endorse the formation and operation of the Medical Mutual Liability Insurance Company of North Carolina tonight.

SPEAKER CARR: You have heard the two formal presentations.

There is a mechanism open to us which will save us considerable time—

DR. BERNARD WANSKER [Mecklenburg County]: Mr. Speaker! Dr. Wansker of Mecklenburg County! I move the House consider informally the professional liability problem.

SPEAKER CARR: The motion has been made that the House consider informally the question of medical liability problems.

Is there a second to that motion?

[The motion was duly seconded from the floor.]

There is a second! Are there those who may not understand the meaning of this motion?

[Affirmative response from the floor.]

I shall ask the Vice Speaker to read the paragraph or two from Sturgis's Parliamentary Procedure which we are using. If you have a book it's on page 128 which explains the procedure, how it's terminated and how it's used.

In essence, it's the old resolution, contained in Robert's Rules of Order, which the House convenes into a committee of the whole. We in effect become a Reference Committee and discussion is had without the necessity of former motions and each motion being debated is passed or failed and another one of a similar nature perhaps presumes. Dr. Carr, would you read that section for me, please!

DR. HENRY J. CARR [Vice Speaker of the House of Delegates]: This is the Section on Informal Consideration of Sturgis Standard Code of Parliamentary Procedure:

Informal Consideration:

There are times when it is desirable to have discussion of a problem precede the proposal of a motion concerning it so that some agreement may be reached on the type and wording of the motion that is needed.

There are also times when it is wise to set aside the formal rules governing discussion and debate.

Both of these objectives may be accomplished by a motion to consider a particular motion, subject or problem informally. Informal consideration permits freedom in the length and number of speeches, allows possible amendments and motions to be discussed together and gives broader latitude in debate.

If no motion is pending and a motion for informal consideration carries, it permits consideration of a subject or problem before a motion concerning it is presented. If a motion is already being considered by the assembly, the motion to consider the pending motion informally is an incidental motion. If it carries the pending motion is considered informally until the members decide to take a vote on it. This vote terminates the informal discussion.

Sometimes an assembly wishes to consider a problem that is not sufficiently understood or formulated for a member to propose a clear and adequate motion covering it.

There may not be time to refer the problem to a committee.

Informal discussion often brings understanding and agreement and makes evident how the motion should be worded. Rather than offer a poorly thought out motion, which will consume time and effort to perfect by amendment, it is better to consider the problem informally and then formulate a good motion.

For example, a member might say, "We realize that some action must be taken to raise more funds for this organization. I move that we consider informally the problem of fund raising." If this motion carries, the presiding officer opens the problem to informal discussion. When the problem is clarified and there appears to be a solution or a consensus, a member should offer a motion embodying the idea. This motion automatically terminates the informal discussion and the motion is considered and voted on under the regular rules of debate.

If no agreement on the problem is reached, informal discussion may be terminated by a motion to end the informal discussion.

Informal consideration has all of the advantages and none of the drawbacks of the old complicated procedures of the committee of the whole.

SPEAKER CARR: Are there any further questions of Dr. Henry Carr as to the intent of the motion which has been made and seconded? Is there any discussion of the motion which has been made and seconded? Hearing none, I will call for a vote on this motion.

All in favor of this motion will please say "aye"; opposed "no."

[There was one dissenting vote.]

The "ayes" seem to have it.

The matter before us, which is stated in the call, is now open for informal discussion.

The resource material people are the two speakers who have spoken to you, legal counsel, and members of the Executive Council who for the most part are here, are facing you, and any of the rest of you.

DR. ALFRED L. FERGUSON [Pitt County]: I'm Al Ferguson from Pitt County! I would like a clarification. At this time, is the floor open for a resolution? It's my understanding it is not, is that true?

SPEAKER CARR: Sir, we would prefer under this last motion that you defer your resolution until the time for action, which will come when informal consideration is terminated, but if you wish to read the substances of your resolution so it may become a subject of discussion, you certainly may.

DR. FERGUSON: I would like to do so.

What I would like to suggest is in view of the urgent need of availability of malpractice insurance, for practicing physicians in this state and because of the great effort and expertise that has already been put into this problem by our President, Dr. Davis, the North Carolina Medical Society and his Council or Committee on this, I feel it is quite urgent that the members of this House seriously consider their efforts and their expertise and that we move on in discussion, since I can't make the resolution, that we accept their efforts and vote tonight to establish the Medical Mutual Liability Insurance Company of North Carolina.

DR. ALEXANDER MAITLAND, III [Buncombe County]: My name is Dr. Maitland. I represent Buncombe County and 255 physicians and we would like to, for the purposes of discussion, get going to number one, separate the fact of medical liability insurance from those requests for tort changes. I think to put them together is a mistake.

One is a long-term overview. The other is something that should be done soon, according to the law.

We've got laws passed in other states to accept "claims made" and we should get on with it, whether it's "a la" type

St Paul's insurance or anybody else in the state getting into medical liability insurance.

And, the second thing is having done that, enabling us to get insurance that's now available, we should go on to the long-term program changing the tort rules, or the tort law.

DR. A. J. CRUTCHFIELD [Forsyth County]: I'm A. J. Crutchfield from Forsyth!

This resolution was adopted by a called meeting of the Forsyth County Medical Society on October 20th, 1975. Some of this has been done but it's the spirit we want to read.

WHEREAS, the immediate concern of all physicians is adequate patient care, and

WHEREAS, occurrence insurance is the preferred form of professional liability insurance, and

WHEREAS, we commend the State Medical Society in its attempt to provide professional liability insurance, but this coverage is not immediately available, and

WHEREAS, there is an immediate crisis in patient care due to the lack of availability of any type of liability insurance,

Therefore, be it,

RESOLVED, that the State Medical Society continue in its efforts with the Medical Mutual Liability Insurance Company of North Carolina to provide occurrence type liability insurance, and, be it further,

RESOLVED, that the State Medical Society request that the Insurance Commissioner immediately approve claims made insurance as filed so that those physicians who are without insurance may have the option to purchase it.

Now, that latter part may already have been taken care of but we want it known that at the Forsyth County Medical Society called meeting that we're in support of the Medical Mutual Liability Insurance Company of North Carolina and to then support that in every way we can.

DR. ANGUS M. McBRYDE, Jr. [Mecklenburg County]: Without moving its adoption, may I read this resolution that I have in hand and I think this will overlap a little bit but add a separate and a third category to the discussion.

WHEREAS, the present crisis in medical liability insurance has as basic cause inequities that have arisen in the basic tort system, and

WHEREAS, the Medical Society of the State of North Carolina has adopted an official position with regard to the legislative reforms that are necessary to rectify these inequities.

Be it,

RESOLVED, that the House of Delegates supports:

1. The Medical Society's efforts to secure these legislative reforms.

2. Supports the Executive Council's efforts to receive sufficient funds for implementation of these legislative reforms. Such efforts will be aimed at the entire health care community and will not be considered an assessment. Funds raised will be used for public relations campaigns, lobbying and mobilization of allied health care providers and any of the means that would enhance the probability of passage.

DR. ERNEST H. BROWN [Robeson County]: I'm Dr. Brown from Robeson County!

In the discussions that I've had in the past several days with physicians throughout the state, they would like to encourage the formation of a medical liability insurance company but that we not limit ourselves to just medical malpractice situations, that we consider and be available to insure ourselves on our home owner policies and our other insurance things that are available to us, that if possible we have that too.

DR. JOSHUA F. B. CAMBLOS [Buncombe County]: I'm Dr. Camblos from Asheville. I'm a general surgeon. I haven't done an operation in two weeks because my St. Paul ran out. I was overjoyed this morning to find out St. Paul was back in business.

Please do not misinterpret my remarks as derogatory in any way of the wonderful work that our officers and Executive Council have expended in trying to look out for us.

My point is can we possibly go along with St. Paul who have been with us since 1957 and so I can get back to work and maybe some other people in this room here and still maintain the assets which we have with our own mutual company, but perhaps without going so far as writing any premiums.

I throw this out to you because I personally know the defendant attorney who will handle my problem in Asheville and I don't know who might handle it from Raleigh and I'm a bit prejudiced on that I must admit. But again I would like to commend our officers and the Council for their very excellent efforts.

DR. THOMAS E. FITZ [Catawba County]: Fitz of Catawba! I don't know how this is going to come out. I rise and understand the gentleman from Buncombe County. My liability insurance runs out one week from Monday. I'm an internist.

I don't know what I'll do, but if I understand what Dr. Davis has said, we have available to us two options, one of which is an "occurrence" type program that will be under the auspices of this Medical Society, and a "claims made" type program under the auspices of St. Paul with whom I have had my coverage.

You have those options, but the point I think I'm trying to make and I hope it comes out clearly, is this, for the first time we as a group of physicians, have the opportunity really to work together.

We have the opportunity to tell some of these third party carriers, if you will, that we do have a degree of cohesiveness that will enable us to work together, that we no longer wish to be subject to their whim.

I think the Commissioner of Insurance has a certain amount of blame to be carried here, and this puts us all together where we can underwrite our own coverage and be covered by the claims in North Carolina and I would understand perhaps, one is correct that if we have litigation against us that we have our own attorney represent us in Hickory, Asheville or anywhere.

And, I speak for the establishment of this Medical Mutual Liability Insurance Company of North Carolina for all of us so that we can certainly judge one another's claims on a more fair basis and certainly feel that we should adopt this tonight.

PRESIDENT DAVIS: If there is a moment, may I respond to two of the questions that have been raised.

One is does this company if it starts, plan to have other types of insurance and the answer is yes, we are chartered to handle other types and we fully anticipate that if we're going to offer professional liability insurance to ask you to give us your other types of insurance which we can receive a commission on and forward them to some other company for carrying out the policy.

The State of Maryland, we understand, has done this for some time. They have found it to be a very profitable venture and only recently have they used the same mechanism to move into the professional liability area and have found that also to be profitable.

So I think the answer is, yes, if we do get going, we do plan to offer other types of insurance which we will collect commissions on, but not actually carry out and issue a policy for it.

And, secondly, to answer Dr. Camblos's question and that was I think, could we organize a company as a standby organization but not actually issue policies, our legal counsel tells us no. If we get a license to operate as an insurance company, we will have to operate.

We will be under House Bill 74 like all other insurance companies and unless we move then for injunctive relief, we would have to sell insurance!

DR. FITZ: I would like to address a question to Dr. Davis that some of the conversations that I've had with some of my colleagues. The question is do we want the Medical Society to manage an insurance program?

You used the words, "We have been able to secure a manager." Would you give us something additional on that as to what involvement does the Medical Society actually have in the management of this program?

PRESIDENT DAVIS: I think that is a very pertinent question and we, too, agree that the Medical Society should not manage or really be responsible for this corporation.

This would be a separate corporate entity, as you understand. Currently, there is great overlap between members of the Executive Council and the Board of Directors of the Medical Mutual Liability Insurance Company of North Carolina, which is already chartered and is operational as far as that is concerned.

It is recommended, advised, requested that in time these two groups separate and the Board of Directors of the insurance company be separate from the Executive Council of the Medical Society, as far as overall authority.

Now, as far as day-by-day management of the company, this will be turned over to an organization which will collect the monies, write the policies, procure a claims service investigation and take care of all the day-by-day management.

The Medical Society, neither the officers nor the staff, have any time at all to devote to the insurance business and I assure you that if you tell us to go ahead, this will be assigned, delegated to an entirely different group.

DR. ROBERT H. SHACKELFORD [Wayne County]: Dr. Shackelford from Wayne County! I rise just to bring some information mainly to the group.

I'm sure that many of you are aware that Wayne County has been specifically opposed to the Medical Mutual Liability Insurance Company of North Carolina.

Their reasons being they felt stop-gap type of thing might impede the legislature in rapidly moving toward the long-term resolution of the problem in easing the crisis.

I think the Wayne County Medical Society's position would still be that they would be highly opposed to anything that would give the legislature any surcease from a strong impulse to proceed rapidly with a resolution of the major part of the problem.

They did in session last night vote to do an about face and to support the Medical Mutual Liability Insurance Company of North Carolina and to request their members to so do, so witness their support in subscribing and signing an agreement to purchase.

Now, this was done before the compromise of today. That action was taken primarily to help solve the immediate crisis or go to federal government insurance.

I think we have enough information from our Executive Council and Dr. Davis to realize the compromise reached today with St. Paul is no real guarantee they will continue to write insurance.

I would express the opinion of our Society to you that having the two mechanisms will not be superfluous, but to have two opportunities available.

The other message I would bring to you from Wayne County is that Wayne County is extremely unhappy in that the Legislative Study Commission and the Legislature itself is going to delay until May of next year before taking action on the problem that besets us.

DR. DON C. CHAPLIN [Alamance County]: Mr. Speaker, Don Chaplin from Burlington! I have a question for our President, Dr. Davis. We are particularly interested in proper management, whom we are negotiating with, what alternatives are available and I wonder if Dr. Davis would elaborate a little bit on that?

PRESIDENT DAVIS: Yes, now to take them in reverse order.

We have negotiated with any number of people. It really has been most impressive, or appalling, if you will the number of people who have called in and said, "We can take the management problem off your hands!"

And, every solution is different! But it suits their pattern as they see it, not necessarily our managerial requirements as we see them.

We have very carefully screened these; the Executive Committee of the Board of Directors of the Medical Mutual Liability Insurance Company of North Carolina has spent many hours reviewing all of these.

We, frankly, have had the largest insurance broker in the country who sent a team of people into Raleigh, who spent two days last week going over the North Carolina situation, advising us on it.

We are now down, literally, to two local firms whom we think can handle our problem and this committee will meet again immediately after the House of Delegates if you instruct us to proceed to select one of these two and either one says they will be willing to issue policies as soon as Mr. Anderson can get to the Insurance Commissioner's office in the morning and give them a half-million dollars and secure a license.

And, this can be done simply by the use of binders, can be given by telephone and which will be binding for a million dollar coverage if that is what you want at a rate to be determined later.

We say that because as some of you know and I'm not sure it was an item tonight, the Commissioner today in not only approving St. Paul's request, he also approved the ISO rate, Insurance Services Organization request for rates which are some five to six hundred per cent above the prevailing rates which you have now.

So your Board of Directors will have to determine what is a fair and reasonable rate to charge you and by accepting this binder, you will agree to pay that rate at a later date.

SPEAKER CARR: Thank you, Dr. Davis.

I believe the gentleman at microphone one has been waiting patiently.

DR. FERGUSON: Mr. Speaker, I move that informal discussion cease.

[The motion was duly seconded from the floor.]

SPEAKER CARR: It has been moved that informal discussion cease and that has been seconded. Is there any discussion of this motion? Discussion be limited to the motion alone!

Hearing none, I will call for the question. All those in favor of the motion please say "aye"; all opposed "no."

[There were a couple of dissenting votes.]

The "ayes" have it.

The floor is now open for any business that you wish to transact, or motions that you wish to make, or actions on the general subject of the meeting which is the medical malpractice situation in the state.

DR. FERGUSON: Mr. Speaker, I'd like to make a resolution that this Medical Society support Dr. Davis and the committee on insurance motions that have been made and that we do give our support as members of the North Carolina Medical Society to the formation of the Medical Mutual Liability Insurance Company of North Carolina and that we adopt this.

[Formal written motion handed in later reads:

I move that this House give full support to the formation and operation of the Medical Mutual Liability Insurance Company of North Carolina and commend the efforts of Dr. James E. Davis and the Executive Council.]

SPEAKER CARR: You've heard the motion. Is there a second?

[The motion was severally seconded from the floor.]

Is there further discussion of the motion?

DR. J. DAVID STRATTON [Mecklenburg County]: I'd like to know what the motion means!

DR. FERGUSON: In essence, what I wanted to do was to see that this North Carolina Medical Society start its own insurance program for medical liability and that we, the delegates, support it and I make the motion that we vote to support this.

DR. FITZ: Does this motion also include what was earlier said that if we approve this motion, does this enable the Society to go to Mr. Ingram tomorrow and also to start issuing binders?

MR. ANDERSON: The answer is yes!

DR. DAVID G. WELTON [Mecklenburg County]: I am relaying a question put by one of our delegates who could not attend this evening. I think this question is for Mr. Anderson. The question is, does the company which we are discussing, proposed and set up by our State Medical Society, have to sell insurance to anyone besides the licensed physicians, licensed to practice medicine?

MR. ANDERSON: Yes, sir, it does.

DR. WELTON: Would it include such as the chiropractors?

MR. ANDERSON: Yes, sir, under House Bill 74 but they are sitting over there looking at you in your dilemma because they don't need it!

DR. HILBY [Wilkes County]: Mr. Speaker, I'm Dr. Hilby from Wilkes County! I have two questions.

One, what will be the effect of having H.R. 74 declared unconstitutional on our attempts to organize an insurance company?

MR. ANDERSON: House Bill 74 requires that any company in North Carolina accept applications for insurance of all health providers. Now, it spreads the risk among the other insurance companies through the Reinsurance Exchange.

If House Bill 74 is declared unconstitutional, this company could only issue one policy up to ten per cent of its capitalization.

At that time you would be faced with the problem of getting reinsurance for your corporation, as is being done in Maryland with their company.

PRESIDENT DAVIS: I think it is a very important question and it is one that we have addressed ourselves to many times and I think the answer is that when this happens, as Mr. Anderson says, we will need reinsurance.

The possibilities then of the private market, such as Lloyds of London, such as the Hospital Association is now pursuing — that's exactly what they have set up, as you understand, a trust with reinsurance to carry the bulk of it, so we would turn to the private market to a firm similar, or to Lloyds of London, to look for it.

Other possibilities would be the AMA Reinsurance Pool might then be operational and might be able to help us.

Another possibility and it is pure speculation, but if the legislative tort changes, as brought out by the Legislative Study Commission, do lower the limit of liability to a provider of $100,000 we may not need any reinsurance and, granted, this is speculation at this point but it is a possibility.

And, I think, all else failing then the State of North Carolina, we believe, would be willing to offer reinsurance to this company to allow adequate professional liability insurance to continue to be available.

That is over and above your basic $100,000 which you would then be limited to as Mr. Anderson explained.

So I think these are the possibilities that would be taken up if the court rules against the constitutionality.

MR. ANDERSON: I didn't tell you and this may not be obvious, but under the present statute a million dollars is the maximum guarantee capital a mutal company can have and pay interest on the capital to its certificate holders. Of course, that interest has to come from profits of the corporation.

Now, there's nothing in the statute that prohibits the company from collecting more than a million dollars in guarantee capital for its use, but it cannot obligate itself to pay interest on more than a million dollars.

Now, that statute could be changed by the legislature very easily, I'm sure. If you wanted to collect and have a larger guarantee capital, then you could contribute guarantee capital without interest obligation, that is without interest.

Or, as one of our good friends here suggested, you might if you wanted, more insurance. House Bill 74 should be declared unconstitutional, you can organize one or two other mutuals, have them side by side and have further guarantee capital that you wanted to collect and put into it. And, have ten per cent of the guarantee capital of each corporation as the limit of the fund.

DR. HILBY: Mr. Speaker, I had a second question, a concern that if we rush into self-insurance for State Society organized insurance program, we're avoiding the major issue and I would reflect concern.

I'm afraid that in three weeks, since this has been going on, if we fail to take this to the rest of the people, I'm sure there has been a great deal of work done by the Society to raise this insurance program but I'm not aware of a great deal of information going out to the local people.

We don't know what the result of the Study Commission will have. We don't know what the result of the legislature will bring forth and we don't have any idea what effect this legislation will have after it has been passed on constitutionally.

I think we're avoiding all the issues. I'm sure this is a stop-gap measure. I think we have a very urgent concern.

If we're going to approve these stop-gap measures, then we need to continue to get some message to the people if this is not solved simply by establishment of a company. We continue to pay higher and higher rates and form more and more companies that will lower our portection as the problem mushrooms.

PRESIDENT DAVIS: Yes, I think the Executive Council would agree with you a hundred per cent and they have authorized the appointment of a special committee to d

exactly what you outlined; once time will permit and the Legislative Study Commission recommendations are known, we have plans to have a statewide committee to devote itself specifically to what you have outlined, to inform the people at all levels and in every possible way to gather their support; that the very best legislative changes come to pass when the legislature does consider. This is in the works.

DR. EDGAR T. BEDDINGFIELD, JR. [Wilson County]:

I'm Beddingfield of Wilson! I rise, I hope in the interests of clarity and without changing the intent of the maker of the main motion, on the floor, I would offer a substitute resolution which I believe is simpler, clarifies and yet says the same thing.

RESOLVED, that this House of Delegates endorses the formation and implementation of the Medical Mutual Liability Insurance Company of North Carolina and urges that immediate steps be taken to secure the necessary licensing, hiring of management and operations.

SPEAKER CARR: You have heard the amendment by substitution offered by Dr. Beddingfield.

Is there a second?

[The motion was duly seconded from the floor.]

Is there any discussion of Dr. Beddingfield's amendment?

[Call for the question from the floor.]

Hearing no further discussion on Dr. Beddingfield's amendment by substitution, I'll call for the question.

All in favor please say "aye"; all opposed "no."

Hearing no "noes" I will announce that that resolution passes unanimously.

DR. HAROLD B. BATES [Alamance County]: Bates from Burlington!

We have radiologists and obstetricians who have felt it necessary to practice in spite of not having any insurance and we would like to know if the Society could possibly issue retroactive policies for these guys?

PRESIDENT DAVIS: We have asked about this and the answer is no, that it would be illegal to do it, particularly before the company really gets formed and licensed to operate.

We cannot offer insurance retroactive to our date of licensing, which seems reasonable.

DR. THOMAS B. DAMERON [Wake County]: Tom Dameron from Wake County! I would like to ask Mr. Anderson a question. He mentioned that we were obligated, I believe, to cover, say, chiropractors. I wonder what other areas of medical providers we are required to cover? Does that mean podiatrists, nurses, optometrists, or physical therapists or what?

MR. ANDERSON: Yes, the answer to that is yes. We would have to cover all *licensed* health care providers. That is covered in House Bill 74.

DR. DAMERON: If House Bill 74 were not constitutional, then what would we be obligated to do?

MR. ANDERSON: We would not be obligated to issue a policy to anybody except those the committee wished to issue policies to. In fact, it might be considered possible that you could limit it to members of the Medical Society at a later date.

DR. WANSKER: Dr. Wansker from Mecklenburg! I am concerned about one thing and this would be a question on binders and issuance of policies.

What I was wondering was this, since there has been the possibility that we may be asked to have a number of reinsurance companies, and legislation doesn't come through, come to pass, and I'm pessimistic enough to think that it won't, will it be feasible for the policies to be written so they all expire at the same time so we don't hang individually and in a staggered fashion.

As you know, the last policy written was September 29th, 1975 so when you issue binders will it be worthwhile as they come up to issue their policies until September 30th and then at that time everybody comes up for renewal and then you all hang together?

PRESIDENT DAVIS: Mr. Anderson, did you hear that question?

Do we have the legal prerogative, or choice, of issuing a policy for a partial year so that they all expire at the same date? Would the Board of Directors of the corporation have that latitude?

MR. ANDERSON: No, sir, but you could get at it another way because under the terms of the policy, at the present time policies would be cancellable on either ten or thirty days notice as your present policies are and if you all wanted them terminated as of a certain date, then that decision would be made by your Board of Directors.

DR. SHACKELFORD: Shackelford from Wayne County! I believe the Society is on record as favoring the Medical Mutual Liability Insurance Company of North Carolina and I would like to move that we now informally discuss what action we would like the legislature to take.

[The motion was severally seconded from the floor.]

SPEAKER CARR: The motion has been made that we informally discuss what action we would like the legislature to take. We have discontinued informal discussion. Do you wish to renew it?

DR. SHACKELFORD: Renew informal discussion for this specific problem.

SPEAKER CARR: You have heard the motion which is in order. Is there a second?

[The motion was again severally seconded from the floor.]

Is there any further discussion of the motion? Hearing none, I'll call for the question. All in favor of this motion to informally consider what action we would like the legislature to take please say "aye"; opposed "no."

[There were several dissenting votes.]

The motion carries.

The floor is open for informal discussion of the action we should request of the legislature, as I understand it.

DR. WELTON: Would there not be some advantage to the Medical Society in requesting a special session of the legislature at this time?

I heard someone talk about public education. This might be one way of achieving public education, but I put this in the form of a question.

DR. HARDY: My comments regarding a called special session of the legislature, truly without adequate study of all phases of this problem, I think would be inadvisable. Hasty law made under pressure often proves to be bad law.

I can assure you that the Legislative Study Commission is made up of honorable men who are deeply concerned about this problem and their recommendations will be in the best interests of this problem that I can assure you.

DR. STRATTON: Is any information that the Society has from discussions of the Study Commission of the State Legislature?

SPEAKER CARR: It's now my pleasure to introduce Dr. Gamble an M.D. from Lincolnton who is a distinguished member of the Legislature.

DR. JOHN GAMBLE [Lincoln County]: Mr. Speaker, I think apropos to this question — I think it's a timely question, but I think the resolution that was read earlier should

now be read again because it will bring in focus the answer to your question.

This resolution was read earlier and was made as a communication to this body by the Legislative Study Commission on Malpractice this afternoon.

We recognized in our committee that we should communicate to you indicating our good faith and indicate to you the precise matters or questions of legislative reforms that we would discuss.

We have included in that list every specific recommended legislative action that your State Society has recommended, plus several more.

So, Mr. Speaker, with those words, I will leave it to your judgement if you think it would add to the understanding of this body to reread that communication, that particular resolution.

I think many members were not tuned in to the message that was in that resolution.

That resolution was written specifically as a communication to this body telling you of our purpose and intent and to indicate to your our good faith to get on with discussions and proposals for legislative action of those matters which you have presented to us.

SPEAKER CARR: I am also told by the Executive Director that they are passing out copies.

DR. HARDY: Gentlemen, again let me reiterate that this resolution that was passed by the Legislative Study Commission was directed specifically to this body.

WHEREAS, the Professional Liability Insurance Study Commission recognizes that a serious medical liability insurance crisis exists in North Carolina, and

WHEREAS, the Study Commission also recognizes that in spite of good medical care, the strong likelihood exists that such a crisis will continue for a long time unless remedial legislation is enacted, and

WHEREAS, the Study Commission feels that solutions in this crisis should include immediate and long range availability of liability insurance, and

WHEREAS, the Study Commission feels that there should be more than one source of such insurance in case any carrier withdraws from the market in the future, and

WHEREAS, the North Carolina Medical Society is presently effecting the formation of a professional liability mutual insurance company, therefore, be it,

RESOLVED, that:

(1) We shall continue our careful consideration of recommendations for specific legislation concerning the following subjects:

Statute of limitations
Limitation of awards
Informed consent including a statute of fraud
Standard of care and community rule
Contingency fees
Elimination of *ad damnum* clause
Counter claims
Modification of collateral source rule
Permission to pay awards in periodic payments
And, other suggested changes that have been presented to the Commission

(2) We will recommend that the recommendations of this Commission be considered for enactment as soon as the General Assembly reconvenes.

(3) We strongly urge the North Carolina Medical Society to endorse the formation and operation of the Medical Mutual Liability Insurance Company of North Carolina tonight.

If I may, Mr. Speaker, speak off the record, as you kno the General Assembly does not go into their next sessi until 1977 but they reconvene next spring and we will re ommend that these changes be brought back at that tim

DR. HAROLD D. SCHUTTE [Buncombe County Harold Schutte from Asheville! I would like to ask D Hardy one question.

I notice on the agenda here the recommendations that I would like to recommend to the Study Commission is th there is no mention of the possibility of a "Good Samaritan law so that hospitals who operate emergency rooms cover by physicians, or on the staff and providing time on t service, can somehow get relief and be immune to suit.

I understand there is a "Good Samaritan" law that cove you if you are at the scene of an accident, but this does n extend to hospital emergency rooms, as I understand it.

SPEAKER CARR: Since this is so close to the border to whether it's in order concerning professional liability, I' going to ask that you simply pass that on verbally to t committee members here representing the Study Commi sion, as a recommendation.

SPEAKER CARR: Number one!

DR. SHACKELFORD: Dr. Shackelford from Way County!

I would like to ask if the Legislative Study Commissi takes these recommendations and they are presented to t Legislature when it reconvenes in May, what kind of timetable are we looking at for enactment of these laws

I think this is an issue of great importance to the peop that I know and I wonder what kind of a timetable we c expect to get some action to come up?

DR. GAMBLE: When a bill is enacted, it is the law the unless it has a stated time frame when it should becon effective.

Most bills, when they're enacted, become law at th moment.

DR. SHACKELFORD: But, still, what kind of time is going to take to get these bills through various committee When, in 1976, what month, could we expect any of the things to come to pass?

DR. GAMBLE: The General Assembly committee r turns to session in May for appropriation purposes.

The resolution upon which we recessed and were order to reconvene included those matters which the body wou find important would also be discussed at the same meetin

It is generally concluded that the malpractice situati would fall into that category and I sense that there will be determination of the General Assembly to open up the su ject matter to include malpractice problems.

And, once that occurs, we would be there approximate four weeks in session and that will be ample time for t recommendations of the current special committee to rep the proposed bills to the Insurance Committee of the t houses which will probably be designated to hear the rep of this committee and those should be expedited throu those committees and the bills will be enacted before vote in May.

DR. McKENZIE: I'm Ed McKenzie from Salisbu Rowan-Davie Medical Society.

The Rowan-Davie Medical Society formed a physicia crisis committee to work on a resolution, not aware that o State Society attempts at legislative proposals.

They voted unanimously to express to this body th belief that malpractice or negligence suits must be remov

om the jury system in order to salvage private medicine, gardless of all other efforts undertaken.

If this is not done, we are in for an inflationary spiral which ill eventually take the cost of medical care out of the reach the public and we would wind up with socialized edicine.

This committee offered the following proposed legislation the Study Commission and I would like to read that to this oup and a resolution will be made later for our Executive ouncil to include these matters in the proposed legislation at they are offering.

This is the proposal that was offered:

All malpractice suits shall be reviewed by a board known s the North Carolina Medical Malpractice Board which hall pass on each complaint.

The Board shall consist of:

(1) A judge who hears only malpractice claims.

It is suggested that the judge be appointed by the Chief ustice of the North Carolina Supreme Court from judges of he Superior Court level.

The judge is the only member of the Board to move from he area to another to hear all cases. He shall preside and ote in case of a tie vote and as noted below.

(2) A doctor in the same type of practice from another ounty and town of the same general size selected by the residing judge after consultation with the President of the orth Carolina Medical Society.

(3) A doctor from a medical school in the same general ype of practice selected as (2) above, such as medicine or a urgeon.

(4) A lawyer from another county selected by the judge.

(5) A layman drawn from the Grand Jury pool.

No members of the Board may have knowledge or direct ssociation with any of the parties of the complaint.

The recommendation as to the matter of the hearing:

(1) Complaints must allege that the claimant suffered in- ury while being treated for a medical disease (including urgery) as a result of malpractice or negligence on the part f the defendant.

(2) The plaintiff may be represented by a lawyer licensed o practice in the State of North Carolina.

(3) The plaintiff must prove negligence or malpractice on he part of the defendant. Complications and untoward re- ults even though unexpected are not compensable unless ey result from negligence or malpractice. Human error in dgment is not malpractice or negligence.

(4) The Chief of the medical staff of the hospital concerned ust testify under oath as to his opinion in the case.

(5) The Chief of the service (medicine, surgery Ob.Gyn. nd so forth) of the defendant must testify under oath as to is opinion in the case.

(6) Other witnesses may be called by the plaintiff and the efense. Expert witnesses in the medical profession must be censed to practice and engaged in the same type practice in he same type community in the State of North Carolina. he presiding judge shall determine this qualification if con- sted.

A fee schedule shall be established for compensation for njury resulting from malpractice or negligence. This mount shall be awarded to the plaintiff if the panel finds for he plaintiff.

If the injury is caused by malpractice or negligence and esults in prolonged disability, the fee schedule shall allow or compensation as long as the disability continues.

The fee schedule shall compensate for the plaintiff's needs nd his earning capacity lost as a result of the negligence nd/or malpractice, but not that lost as a result of the disease r necessary treatment.

For example, the loss of a limb because of disease or its normal treatment is not compensable.

In cases of extreme grievous negligence and/or malpractice causing extreme injury, the defendant's license to practice medicine shall be revoked.

This judgment shall require the unanimous verdict of the entire Board including the presiding judge.

In addition, a fine established by the judge may be invoked to be paid to the special medical malpractice compensation fund.

In lesser degrees of negligence and/or malpractice causing prolonged disability, the defendant shall be required to pay into a special fund the amount of the monthly compensation plus an additional amount for administrative expense as long as the disability continues. This may be paid by insurance.

The findings of the Board are not binding on the defendant or the plaintiff and may be appealed to court. The findings are admissable to the court as evidence.

Cases may be appealed to higher court for reversal of the Board's decision or for increased amount of compensation but no designated amount of compensation may be listed or requested and in no case may this be awarded in lump sum but in monthly awards as long as the disability shall continue.

In no case may the court award more than the plaintiff's customary income or reasonable needs prior to the onset of disease from which disability or injury caused by malpractice was incurred.

Funds for compensation shall be from a special fund known as the Medical Malpractice Compensation Fund. Payments to that fund are made by the defendant when that defendant has been found guilty of causing injury and/or disability by negligence and/or malpractice in the course of the treatment of the plaintiff for a medical or surgical disease, illness or injury.

Payments may be made by the defendant or his insurance company in monthly installments. They must be sufficient to cover the compensation award, an administrative charge and in the first payment, the plaintiff's attorney fee.

The plaintiff's attorney fee shall be prescribed by the presiding judge if the Board finds for the plaintiff.

It shall be consistent with a reasonable charge for the actual time required for the preparation and presentation of the case.

If the Board finds for the defendant, the plaintiff's attorney fee must be paid by the plaintiff. In those cases where the plaintiff cannot afford an attorney, the court shall appoint an attorney and his fee shall be paid by the Medical Malpractice Compensation Fund.

In those cases where the Board finds no justification for the charge of injury and/or disability caused by malpractice or negligence and where the Board finds evidence of malice, the Board may direct the plaintiff and his attorney to pay the defendant's attorney fee.

The problem is so great and growing so rapidly that a special session of the legislature will be required if disaster is to be averted.

New legislation based on this proposal can protect North Carolina from the debacle that has engulfed most of the United States. It's fair to all and generous to none.

This is not offered to replace the recommendations of the ad hoc committee, but to supplement them. There are a number of points in the ad hoc committee's recommendations that are excellent.

There is a question of the constitutionality of the limitation of awards and I understand this has already been taken up by the Iowa Supreme Court and found unconstitutional.

This will be presented as a resolution at the appropriate time.

DR. BROWN [Haywood County]: Brown of Haywood! I have two questions part of which overlap previous speakers. I ask Dr. Hardy why arbitration boards were not considered and why limitations on contingency fees were not considered?

DR. HARDY: Well, the ad hoc Study Commission for the Medical Society reviewed all the problems in depth that we thought were problems of North Carolina, not the nation as a whole.

We felt the contingency fee system was not a problem in North Carolina in terms of inviting malpractice problems, nor did we feel at this time that arbitration panels, binding or non-binding, were necessary in North Carolina, at the time. When we looked at the poor experience in North Carolina through the sponsorship of St. Paul, St. Paul has not lost a case in court in North Carolina.

DR. D. E. WARD [Robeson County]: Mr. Speaker, I would like to commend the officers of our Medical Society and the Executive Council for the work they have done on this. I think the House has convened tonight and expressed its wishes and at this time I would like to make a motion that we end informal discussion.

SPEAKER CARR: Is there a second?

[The motion was severally seconded from the floor.]

Any further discussion?

[No response]

All those in favor say "aye"; opposed "no."

The motion carries.

Dr. McKenzie, do you wish to make a motion regarding your resolution, or simply refer it to the Legislative Study Commission?

CHARLES R. LOCKERT: [Rowan County]: Lockert of Rowan County!

RESOLVED, that the proposed legislation of Rowan-Davie be incorporated into the proposed legislative recommendations of the North Carolina ad hoc committee.

SPEAKER CARR: Is there a second?

[The motion was duly seconded from the floor.]

Any further discussion?

[No response]

All in favor of this motion please say "aye"; opposed "no." I will have to ask for a standing count. Will the tellers please prepare to count the House.

All in favor please stand up!

[Whereupon there followed a count of members standing.]

DR. SCHUTTE: Mr. Speaker, could you clarify the motion please?

SPEAKER CARR: As I understand it, the motion is that we pass these suggested legislative proposals to the Legislative Study Committee, is that correct, Mr. Delegate?

DR. LOCKERT: To our Executive Council for consideration.

SPEAKER CARR: To our Executive Council for consideration.

All those in favor of this motion, please stand!

[There followed a count of members standing.]

Now, those sit down and those against the motion please stand!

[There followed a count of members standing.]

The tellers can't count you if you're walking all over the House.

Will the tellers give me a count of those opposed to it who are now standing? Don't count those who are walking out of the room!

Mr. Chairman of the Tellers are you ready?

DR. LEON W. ROBERTSON [Chief Teller]: There's more than a majority for. Do you want the numbers?

SPEAKER CARR: Give me the numbers to go in the record.

DR. ROBERTSON: 108 to 15!

SPEAKER CARR: All those in favor were 108; those opposed were 15 and the motion carries.

DR. EDWARD WHITESIDES [Section on Orthopaedics]: Mr. Chairman, I'm Edward Whitesides of the Orthopaedics Section. I move we adjourn.

SPEAKER CARR: There is a motion for adjournment is there a second?

[The motion was severally seconded from the floor.]

DR. DAMERON: How about endorsing this thing? Shouldn't we endorse this report?

SPEAKER CARR: I have a motion before you. If you don't want to adjourn, why, vote not to adjourn. The motion is to adjourn. All those in favor say "aye"; opposed "no."

The "noes" have it. We do not adjourn.

DR. DAMERON: I would like to move that we accept and endorse the resolution of the North Carolina Professional Liability Insurance Study Commission.

[The motion was severally seconded from the floor.]

SPEAKER CARR: Is there any further discussion?

[No response]

Hearing none, I'll call for the question. All in favor of the motion say "aye"; all opposed "no." I declare it passed unanimously.

DR. JOHN W. FOUST [Mecklenburg County]: Mr. Speaker, I'm John Foust from Mecklenburg! Now that we have just passed this motion, I think it's apparent that funds will be necessary to implement it.

Therefore, be it,

RESOLVED that the House of Delegates supports the Medical Society's efforts to secure these legislative reforms that we've just done and supports the Executive Council efforts to receive sufficient funds for implementation of these legislative reforms.

Such efforts will be aimed at the entire health care community and will not be considered an assessment. Funds raised will be used for public relations campaigns, lobbying and mobilization of allied health care providers and any other the means that would enhance the probability of passage.

SPEAKER CARR: Is that, essentially, the paper that Dr. McBryde read?

DR. FOUST: It is the same resolution, yes.

SPEAKER CARR: Is there a second to this motion?

[The motion was duly seconded from the floor.]

Is there any discussion of the motion?

[No response]

If no, I'll call for the question! All those in favor of the motion say "aye"; all opposed "no."

[There were a couple of dissenting votes.]

The "ayes" have it. The motion is carried.

DR. JOHN W. LEDBETTER [Buncombe County]: John Ledbetter of Buncombe!

We've done a lot of talking about the legislative proposals that we would like to see passed.

It's my impression that the legislature is not going to pass something because the doctors are unhappy and I think the legislature will act when the public is concerned.

I notice the *Raleigh Times* tonight has headlines that read, "Compromise Ends Malpractice Crisis"!

So there will be no chance of passage unless the public is concerned and I would move that the public information program of the State Society be given urgent priority.

SPEAKER CARR: The motion is that the public relations campaign of the State Society be given urgent priority.

[The motion was severally seconded from the floor.]

Is there any further discussion?

[No response]

If not, I'll call for the question! All in favor of this motion y "aye"; all opposed "no."

The "ayes" clearly have it and the motion passes.

DR. LLOYD W. BAILEY [Edgecombe County]: Mr. peaker. Lloyd Bailey of Rocky Mount!

I would like to request permission to introduce a resolu- on which is not pertaining to any of the subjects we have en discussing. The reason I bring this to you is I think it is ry timely in view of the change in the climate of utilization view and because of Judge Hoffman's injunction.

SPEAKER CARR: Dr. Bailey, I will have to ask the dulgence of the House. The House will have to pass upon is matter as it's not on the agenda. It takes a two-thirds te of the House to give Dr. Bailey permission to introduce s resolution.

All those in favor of the introduction of this resolution ease stand. Tellers, please count the House!

[There followed a count of those members standing.]

In this instance, since so many have left, we are talking out two-thirds of those present and legally voting.

DR. FITZ: What did he ask for? As a teller, I'm not sure I derstood what he said.

DR. BAILEY: I asked for permission to introduce a res- ution which is on a subject other than malpractice insur- ce and the reason I'm bringing this to this body is that this is the only time we will convene, I imagine, until May and this is a timely subject.

SPEAKER CARR: Dr. Bailey, I'll have to overrule you. You've given us the substance of what you're going to introduce. You'll have to get permission of the House at this point, if they understand it sufficiently.

MEMBER FROM THE FLOOR: Did he ever say what he was talking about? Have him tell us what he wants!

DR. BAILEY: The subject pertains to the North Carolina Medicaid program and the North Carolina Medical Society's association with the HARP program. It's a short resolution. I could read it if the members so desire, just the resolves.

SPEAKER CARR: I will now ask if it's the will of the House that Dr. Bailey read his resolution and introduce it. All those in favor please say "aye"; all those opposed "no."

It is the opinion of the Chair the "noes" have it. Is there any disagreement, or is there a call for a division of the House?

DR. WARD: Ward from Lumberton! Mr. Speaker, I think the business of this House has been concluded. If we get into other subjects, we might be here until a very late hour. I make a motion that we adjourn.

[The motion was severally seconded from the floor.]

SPEAKER CARR: The motion to adjourn has precedence.

All those in favor say "aye"; opposed "no." The House is adjourned.

[The meeting adjourned at nine-ten o'clock.]

Abridged Minutes of the Meetings of the House of Delegates

ANNUAL MEETING—FIRST SESSION
THURSDAY AFTERNOON SESSION
May 7, 1976

The first meeting of the House of Delegates of the 122nd Annual Meeting of the North Carolina Medical Society convened at two-ten o'clock in the Cardinal Ballroom of The Pinehurst Hotel, Pinehurst, North Carolina.

DR. JAMES E. DAVIS [President of the North Carolina Medical Society]: Will the 122nd Annual Session of the North Carolina Medical Society please come to order?

I welcome all of you here today and wish for us a very meaningful and beneficial session. It's a great personal pleasure for me now to turn the floor over to a very dear friend, a colleague and fellow worker of many years duration, and our very able Speaker, Dr. Chalmers Carr.

DR. CHALMERS R. CARR [Speaker of the House of Delegates of the North Carolina Medical Society]: Thank you, President Davis. It's again a pleasure to have the opportunity of presiding over the House of Delegates and I hope things will go to your liking. I will try to make it so with my associate, Dr. Henry Carr, your Vice Speaker.

I am now going to call on our First Vice President, Dr. John McCain, to pronounce the invocation.

DR. JOHN L. McCAIN [First Vice President of the North Carolina Medical Society]: Everyone remain seated.

Almighty God, whose loving hand hath given us all that we possess, grant us wisdom to effectively deal with the problems before us today, that we might best serve the health interests of the people of this great state. We ask in Thy name, Amen.

SPEAKER CARR: The next order of business is something that we wait for each year, but before I introduce Dr. Davis again, I would like to introduce those at the head table.

(The Speaker introduced those at the head table as follows: First Vice President John L. McCain, Second Vice President T. Reginald Harris, Secretary E. Harvey Estes, Jr., President-Elect Jesse Caldwell, Jr., Vice Speaker Henry J. Carr, Jr., Parliamentarian Louis deS. Shaffner, Executive Director William N. Hilliard, and Assistant to the Executive Director Mrs. LaRue King.)

I will now introduce our President, Dr. James E. Davis again who will make his Presidential Address before the House.

PRESIDENT DAVIS: Thank you, Mr. Speaker. Members of the House of Delegates, Mrs. Herring, Members and Guests:

(Whereupon President Davis then read his prepared Message of the President to the House of Delegates, as printed in the *North Carolina Medical Journal*, Vol. 37, No. 8, August 1976. At the conclusion of his presentation he was accorded a standing ovation.)

SPEAKER CARR: Thank you, very much, President Davis, for an excellent, informative and really erudite report. His remarks, of course, will be referred to the proper committee and they will make their recommendations on his address at the second meeting of the House on Saturday.

It is now my pleasure to introduce the head of the Auxiliary, Mrs. Charles (Shirley) Herring. We will ask her husband, Dr. Charles Her ing and our President, Dr. Davis, accompany Mrs. Herring to the lectern for her report.

(Whereupon Mrs. Herring was accorded a standing ovation, as she was duly escorted to the podium.)

MESSAGE OF THE PRESIDENT OF THE AUXILIARY

MRS. CHARLES HERRING (President, Auxiliary to th North Carolina Medical Society): Thank you, so much President Davis, Officers and Delegates; It is a privilege an honor to be bringing you a report from the Auxiliary to th North Carolina Medical Society.

First, I would like to say we are very grateful for you continued interest and support in our projects that we be lieve are very beneficial to medicine, the community that w live in and to the family.

You are most generous with the giving of $5,400.00 t ward our working budget. We do appreciate this very much.

We welcome your advice, your criticism and we want yo to be strongly aware that we are ready to help you in any wa possible.

Your problems are ours also and we must communicat not only as husband and wife, but we must help each other i each one's work.

Your President, Dr. Davis, has indeed been a great sup porter of the Auxiliary, generous with both his time an knowledge. He has extended the invitation to me to atten all the Medical Society Executive Council meetings and ha kept me informed of pertinent material that deals with th Medical Society which I and the Auxiliary are most grateful to him for.

Our thanks to Dr. Gloria Graham, Chairman of the Adv sory Committee, the Advisory Committee and to the M Med cal Headquarters staff. They have been most generous wit time and interest. It has indeed been a pleasure working wit all of these this year.

In my inaugural remarks, I asked that each of the aux iliaries join forces with other organizations and work for th betterment of health care and education in their com munities.

I also asked that there be better communication betwee the county societies and the county auxiliaries and utilizin their resources and working together for health care an education.

I also charged that we must have the cooperation betwee members of long standing and young members for with th experience, dedication, new ideas and enthusiasm that both possess, goals are not impossible.

I am happy to report that I have seen involvement of thes ideas in many of the auxiliaries and I feel we will see mor and more as each year goes by.

Our membership is at an all-time high, 2,929 state mem bership. Our membership in national is 2,871 a difference o 58 members. We also have 11 members-at-large.

We have 51 county auxiliaries in our State Auxiliary. O the 100 counties in our state, 70 counties are organized. We have had one county to reorganize this year.

There are two state projects and one of them is the studen loan fund.

We have given a total of six student loans since June 1st 1975 at $500 each. Since June 30th, we have 65 loans out an none of these are past due. Twenty-two county auxiliaries have contributed $1,202.00 to the student loan fund thi year.

Our other state project is AMA-ERF. As of this date, w have sent $20,894.24 from North Carolina to AMA-ERF

ur year will not come to a close until the end of the month. he Medical Headquarters just recently received checks om AMA-ERF to be given to the medical schools in North arolina. This might be of interest to you for this is made ossible by contributions of Auxiliary and Medical Society.

The following checks will be presented to the following edical schools in North Carolina:

UNC at Chapel Hill, $8,944.79;
Bowman Gray $9,501.05;
Duke $8,351.95;
East Carolina $986.35.

And, as you all have heard, I'm quite sure in the past, the eans welcome these checks because there are no strings ttached. The federal government is not telling them how to pend the money. They may spend it as they see fit for their chool.

Our Legislative Chairman has worked closely with Steve Morrisette on all legislative matters and has tried to keep us p-to-date on malpractice issues as well as other items facng the medical profession.

We have encouraged the members to write to their respecive senators and representatives within their districts with egard to the malpractice issue.

There has been much emphasis on health education, famy and community health this year. One of the most effecive ways of educating the student today in health education s through visual aids.

We find that health fairs and health museums are a very ffective way of both educating the communities and amilies.

Approximately 2,850 fourth and fifth graders in this state ave been exposed to some form of health education by ttending health fairs. Approximately 9,000 high school stulents have been exposed to health education by attending ectures and viewing visual aids in the two health museums hat we have in this state. There's one in Mecklenburg County and one in Buncombe County.

There are approximately 36 health career clubs with 1,236 tudents involved. 45 scholarships totalling $13,944.00 have been given this year by the Auxiliary in this state. There have been seven loans totalling $1,875.00.

We would like to see improvement in the health education urriculum in the school system and of the teachers.

And, I might add that this year we of the committee of five rom the Auxiliary and a committee of five from the Medical Society have met twice with the Department of Public Eduation. For the first time, we are getting some input into what we hope will be an improvement in the curriculum of he health education in our school system.

We have discussed what problems we see and they have liscussed what problems they see, so maybe with the combination of meeting together in the future we may see somehing come of this.

Auxiliaries across the state have become involved in their communities by presenting many various kinds of health programs. There is much interest in the child abuse program and one county has done a tremendous job in educating the public on this problem.

Many counties have helped or done the detection clinics such as PAP smears, breast self-examinations, hearing, vision and learning disabilities, blood pressures, working with blood mobiles in their communities, the mentally retarded, and a baby sitting course for junior high school students. These are just a few of the many activities that are going on in our state among auxiliaries.

It is impossible in this short a time to tell you about the many projects that the auxiliaries do in their communities.

They are not only involved in making their community a better place to live, but to create a better public relationship between the medical families and the communities.

This is also a great year in that we are celebrating our country's Two Hundredth Birthday.

We have encouraged the Auxiliary to bring their histories up-to-date and to encourage and help the Medical Society in bringing theirs up-to-date.

We have asked that they have special programs during the year on local medical history or to work on some special project in the community that is related to the Bicentennial Year.

There is no way that I can cover every project that county auxiliaries are involved with in this allotted time. I've only hit high spots, but I urge you when you go back home, ask your auxiliary what they are doing if you don't know; and, also, ask them for assistance when you need it.

We will, at all times, try to help our physician husbands and profession every way we can. We are proud of our Auxiliary and we hope you share this pride with us.

We are proud to be physicians' wives. We have strived to work together to serve as ambassadors for health and husbands which has been my theme for the year.

And, incidentally, I might add this will probably be the last year and I probably shouldn't have used the word "wives" this year, because we have three male Auxiliary members and we are so happy to have them, but from on out, it will be "spouses"! Thank you.

[Whereupon the entire assemblage then accorded Auxiliary President Herring a standing ovation.]

SPEAKER CARR: I know I speak for all of you in thanking Mrs. Herring and her Auxiliary for the work that they have done and I want to thank Charles, who's with her, for sharing her with us this year and encouraging her in her work and in his good time and a good place, he can give her a kiss for all of us. Thank you, very much.

HOUSE OF DELEGATES

It is my pleasure at this time to introduce to you our Vice Speaker, Dr. Henry Carr, from Clinton, who will now assume the Chair.

VICE SPEAKER CARR: At this time, I would like to have a report from the Credentials Committee, Dr. John Payne, Chairman of that committee for a report on the number of delegates registered and the number of delegates in the House.

DR. JOHN A. PAYNE, III [Chairman, Committee on Credentials]: Mr. Speaker, John Payne from Gates County!

There are 159 delegates registered; 149 are seated. This represents a quorum.

VICE SPEAKER CARR: I declare a quorum present and the House is ready for official business.

At this time, I would like to present to you again Dr. Chalmers Carr, our illustrious Speaker, who will present to you a report on the state of the House of Delegates at this time.

REPORT OF THE SPEAKER

SPEAKER CARR: My report to you today will be very short because we are attempting to keep this meeting on track and short as possible and still expedite the business that must be done.

You have on the table in front of each of you a report on pink sheets which really constitutes the basis of what the Speaker is supposed to report on as to the disposition that was made of material and reports and directions of the

House of Delegates in 1975. It will not be read but will be inserted in the record of these procedings. If there are specific items of interest, or if there are questions we can hear them now or at the Saturday Session.

Interim disposition of the actions of the 1975 House of Delegates:

1. REPORT A — Annual Budget Estimates for 1975.

Operated within the Annual Budget, as approved, see Auditor's Report of 1975 operations contained in the Compilation of Annual Reports in the Delegate Kits.

2. REPORT B — State Emergency Medical Service Program.

Referred to the Committee on Legislation with legislation passed on the subject in the 1975 General Assembly being supported by the State Society.

3. REPORT C — One-hundred Percent Reimbursement of Usual, Customary, and Reasonable Fees in the Medicaid Program.

Filed as Society policy. Requests made of the Department of Human Resources and discussed with individual legislators. Continuing attempts being made to obtain this level of payment.

4. REPORT D — Proposed Change in the Constitution Regarding Intern-Resident Training Members.

Implemented, by revision of the Constitution as authorized.

5. REPORT E — Prophylactic Treatment of Tuberculosis in North Carolina.

Filed as Society policy.

6. REPORT F — Reporting an M.D. for Suspected Drug Abuse to the North Carolina Board of Medical Examiners.

Filed as Society policy.

7. REPORT G — Common Hazards in the Working Environments and Information on Occupational Health and Safety Items.

Filed as Society policy, and information published in Society Bulletin.

8. REPORT H — Restructuring of the Committee on Blue Shield.

Implemented, by revision of the Constitution and Bylaws as authorized.

9. REPORT I — Acupuncture Therapy Regarded as the Practice of Medicine.

Filed as Society policy, and used as reference when questions on the subject are posed to Society Headquarters.

10. REPORT J — Transfer of Jones County from Lenoir-Greene-Jones County Medical Society to Craven-Pamlico County Medical Society.

Implemented, by incorporating Jones County as one of the counties comprising the Craven-Pamlico-Jones County Medical Society.

11. REPORT K — Suggested Public Relations Policy Statement.

Filed as Society policy.

12. REPORT L — Proposed Amendment to the Medical Practice Act.

Referred to the Committee on Legislation. A bill was passed in the 1975 General Assembly authorizing the prescribing, compounding and dispensing of drugs by a physician's assistant and registered nurse under the supervision of a medical doctor in keeping with rules and regulations developed by the Board of Medical Examiners and the Board of Pharmacy.

13. REPORT M — Recommendations from the Committee on Traffic Safety Relating to Visual Fields for Drivers, Classified Driver's Licensing System, Budget Support for Breathalyzer Program, and Patient's Driving Records.

Referred to the Committee on Legislation and the Drive Licensing Division of the Department of Motor Vehicles The committee on Eye Care developed guidelines for visua fields for drivers with the guidelines being adopted by the Driver Licensing Division.

14. REPORT N — Professional Liability Insurance Problems

RESOLUTION 9 — Medical Malpractice Insurance

RESOLUTION 10 — Professional Liability Premium Costs

RESOLUTION 16 — House Bill 74

The Reference Committee consolidated these three resolutions with Report N and made a substitute resolution, which was adopted by the House of Delegates. The Substitute Resolution was referred to the Committee on Legislation with the concept of professional liability reinsurance exchange as encompassed in House Bill 74 being supported by the Society and enacted by the 1975 General Assembly.

15. REPORT O — Report of the Committee on Medical Education, requested by the May 1974 House of Delegates (Report H — 1974).

Filed as Society policy and currently being implemented.

16. REPORT P — An expression of Appreciation to Donald Brock Koonce, M.D.

Implemented. Copy of Resolution of Tribute submitted to the *North Carolina Medical Journal*. A Resolution by the North Carolina delegation to the AMA was submitted to and adopted by the AMA House of Delegates in June.

17. REPORT Q — Proposed Changes in the Constitution and Bylaws.

Implemented, by revision of the Constitution and Bylaws as authorized.

18. REPORT R — Physician Participation in the Medicaid Program.

The Reference Committee recommended, and the House of Delegates adopted a change in the subject to read "Physician Participation in the Care of Indigent Patients," and revised the report to read "the Executive Council recommends that the House of Delegates take official action to urge and request all physicians to continue to participate in the care of indigent patients."

Filed as Society policy, and publicized in the Society Bulletin.

19. RESOLUTION 2 — Cash Reserves of North Carolina Medical Society.

The House of Delegates adopted a substitute for the original resolution to the effect that the Society maintain a cash reserve equivalent to its previous year's income. Filed as Society policy. Funds are being set aside for a reserve, as current operating expenses will permit, toward this level of reserve fund.

20. RESOLUTION 4 — Creating Improved Communications Between Hospital Staffs through County and State Medical Societies.

The House of Delegates amended this resolution before its adoption so that the resolve read "that communication be improved between hospital staffs in the State and Medical Society Headquarters." Filed as Society policy and efforts being made to effect the intent of the resolve.

21. RESOLUTION 11 — Uniform Policy of Vendor Payments under Medicare and Medicaid throughout the State.

Referred to the Committee on Legislation and filed as Society policy.

22. RESOLUTION 12 — Continuing Medical Education.

Implemented by application for an approval being received from the AMA for the Society to become the accrediting agency for this state.

23. RESOLUTION 13 — Chemical Screening Tests by Local or Area Health Departments.

Filed as Society policy.

24. RESOLUTION 14 — Suggested Position Paper on Patient Education.

Filed as Society policy.

25. RESOLUTION 15 — Use of Pound Animals in Biomedical Research and Education.

Referred to the Committee on Legislation and filed as Society policy.

26. MEMORIAL RESOLUTION — Amos Neill Johnson, M.D.

Implemented. Copy of Resolution in Memoriam submitted to the *North Carolina Medical Journal*. A resolution by the North Carolina delegation to the AMA was submitted to and adopted by the AMA House of Delegates in June.

NOMINATION AND ELECTION OF OFFICERS

We are now ready to proceed with the report of the Committee on Nominations. I believe that that committee report has been given to Dr. Davis who will announce the report of the Committee on Nominations to the House.

PRESIDENT DAVIS: Mr. Speaker, I would like to report that Dr. Sapp as Chairman of the Committee on Nominations, in accord with the bylaws, did forward to me thirty days ago an envelope said to contain the list of officers to be nominated.

The Committee on Nominations submits the following report for consideration by the House of Delegates:

President-elect, Dr. E. Harvey Estes, Jr., of Durham;

First Vice President, Dr. Joseph Benjamin Warren of New Bern;

Second Vice President, Dr. John C. Grier of Pinehurst;

Secretary, Dr. Jack Hughes of Durham;

Speaker, House of Delegates, Dr. Marvin N. Lymberis of Charlotte;

Vice Speaker, House of Delegates, Dr. Henry J. Carr of Clinton.

Mr. Chairman, on behalf of the Committee on Nominations I submit these nominations for action.

SPEAKER CARR: Dr. Sapp, do you have other nominations to make?

DR. OSCAR L. SAPP, III [Chairman, Committee on Nominations]: Mr. Speaker, Members of the House of Delegates: The following is the remainder of the report of the Committee on Nominations:

Councilors for a three year term:

Second District: Dr. Charles P. Nicholson, Jr., Morehead City;

Third District: Dr. E. Thomas Marshburn, Jr., Wilmington;

Eighth District: Dr. Ernest P. Spangler, Greensboro;

Ninth District: Dr. Jack C. Evans, Lexington;

Vice Councilors for a three year term:

Second District: Dr. J. Elliott Dixon, Ayden;

Third District: Dr. Charles M. Hicks, Wilmington;

Eighth District: Dr. Shahane R. Taylor, Jr., Greensboro;

Ninth District: Dr. Benjamin W. Goodman, Hickory.

The North Carolina Board of Medical Examiners for a six year term:

Dr. Joyce H. Reynolds, Kernersville;

Dr. Bruce B. Blackmon, Buies Creek.

AMA Delegates for the period January 1, 1977 through December 31, 1978:

Dr. John Glasson, Durham;

Dr. James E. Davis, Durham;

Dr. Frank R. Reynolds, Wilmington.

AMA Alternate Delegates for the period January 1, 1977 through December 31, 1978:

Dr. George G. Gilbert, Asheville;

Dr. Louis deS. Shaffner, Winston-Salem;

Dr. Jesse Caldwell, Jr., Gastonia.

There were no vacancies on the North Carolina Division of Health Services, nor on the North Carolina Medical Care Commission.

Nominations to serve on the Editorial Board, "*North Carolina Medical Journal*" for a four year term:

Dr. Rose Pully, Kinston;

Dr. John S. Rhodes, Raleigh;

Dr. Louis deS. Shaffner, Winston-Salem.

Nominations for the North Carolina Blue Cross and Blue Shield, Inc., Board of Directors, for a three year term:

Dr. Marvin N. Lymberis, Charlotte;

Dr. Kenneth D. Weeks, Rocky Mount.

Nominations for the Retirement Savings Plan Committee for a three year term:

Dr. Samuel E. Warshauer, Wilmington;

Dr. Robert W. Williams, Wilmington.

This completes the report of the Committee on Nominations.

SPEAKER CARR: The floor is now open for nominations from the floor. Rather than go down this list, I will simply ask are there other nominations from the floor and if such, in what office?

I hear none from the floor so I'll now declare the nominations closed. The floor is open for ballotting.

By unanimous consent, it appears that you wish to vote in toto.

I will now ask all those favor of election of this slate of officers to say "aye"; all opposed "no."

The "ayes" have it and the slate of officers as nominated and announced to you is declared elected.

I wish to congratulate each and every one of the newly elected officers. I know you have a fine slate to serve you well.

I will now ask Henry Carr to resume the chair.

VICE SPEAKER CARR:

At this time, the next item of business is a report of the Committee on Constitution and Bylaws by Dr. Louis Shaffner.

Constitution and Bylaws

REPORT C

DR. LOUIS deS. SHAFFNER [Chairman, Committee on Constitution and Bylaws]: If you will take Report "C" out of your packet please, Report of the Committee on Constitution and Bylaws. Report "C" and Supplementary Report "C".

Item 1: This is the second reading of a proposed change in the Constitution which will assure that intern/resident members, who, like active members, are licensed to practice medicine in North Carolina, will have similar privileges.

> Amend Article IV, Section 6 (page 4) by deleting the word "student" in the last sentence and inserting in lieu thereof the word "active." The sentence will then read: "They shall have the same rights and privileges as active members."

This proposal was accepted by the House of Delegates in 1975 and is now up for final action, and it will require two-thirds majority for approval.

Mr. Speaker, I move that this amendment to the Constitution be accepted.

DR. PHILLIP G. PADGETT [Cleveland County]: Second.

VICE SPEAKER CARR: The motion has been made and seconded. Is there any discussion regarding this motion?

Hearing none, all those in favor of the motion say "aye"; opposed "no." The motion is carried.

DR. SHAFFNER: The next items two through eight are proposed Bylaw changes. I will read them now but they must lie upon the table at least one day before a vote is taken on each.

I would presume, as in the past, all will be referred to the Reference Committee and then final action taken at the second meeting of the House of Delegates.

Item 2: Delete Commission VII, Developing Government Health Programs.

The Council has determined that the two committees, Comprehensive Health Service Planning and Social Service Programs can be assigned to the Professional Service Commission and that there is no need to group them in a separate commission. The proposal is to:

Amend Chapter X, Section 1 (page 34) of the Bylaws by deleting from the list of commissions the words, "Developing Government Health Programs Commission."

Item 3: At the request of the Section and on recommendation of the Council, this proposal is to:

Amend Chapter IX, Section 1 (page 54) of the Bylaws by changing the name "Family Physicians" to "Family Practice."

Item 4:On recommendation of the Council on Review and Development, the Executive Council also recommends elimination of the Committee on Peer Review.

So the amendment would be:

Amend the bylaws by deletion of Section 22 of Chapter X.

Item 5: In view of the fact that each Specialty Section elects a delegate to the House of Delegates, it is recommended that provisions be made that each Society member indicate the one Section in which he wishes to be a voting Section member. This limits each member to only one vote for a Section delegate, but does not limit his attendance and participation at the scientific program of any Section. Two bylaw changes are proposed:

(a) Amend Chapter I, Section 1 (page 12) of the Bylaws dealing with members by adding the sentence:

"Each member shall indicate at least sixty days prior to each annual meeting the one Specialty Section in which he wishes to register for eligibility to vote at the annual business meeting of that Section."

(b) Amend Chapter XI, Section 1 (page 55) by deleting the second sentence; namely:

"During the meeting of each Section; a chairman, chairman-elect, a secretary, and a delegate and an alternate delegate shall be elected for the following year, either in open session or through a committee appointed for the purpose by the chairman of the Section."

and inserting in lieu thereof the following sentence:

"Each Section shall hold an annual business meeting at which a chairman, a chairman-elect, a secretary, a delegate, and an alternate delegate shall be elected for the following year by the registered members of the Section present."

Item 6: This proposed change will clarify the relationship of the President to the Committees he appoints.

Amend Chapter X, Section 2 (page 35) by inserting after the sentence which now reads, "In addition to the foregoing standing committees, such other committees as may be necessary may be appointed by the President," the following sentence:

"The President shall be an ex officio member of all committees which he appoints."

Item 7: The bylaws at present state:

In case the office of President-elect becomes vacant, the House of Delegates at its next regular meeting shall fill the vacancy."

It is pointed out that in such a situation, by the time the House of Delegates holds its next meeting, it would be time for the President-elect to assume the office of President. In order that a new President-elect have time to serve in that office, the following proposed change is recommended:

Amend Chapter VI, Section 2 (page 26) by changing the last sentence to read:

"In case the office of President-elect becomes vacant, the Executive Council shall consult with the Nominating Committee and shall fill the vacancy within thirty days."

Item 8: The Executive Council has recommended approval of the formation of a Section on Emergency Medicine.

Amend, therefore, Chapter XI, Section 1 (page 54) by deleting the word "and" before Neurological Surgery and adding at the end of the list the words: "and Emergency Medicine."

(Adopted. See page 70.)

SUPPLEMENTARY REPORT C

Then, on the supplementary report:

Item 9: On recommendation of the Committee on Public Relations, the Executive Council also recommends increasing the membership of the Committee on Public Relations to ten members.

So, amend Chapter X, Section 11 (page 46) by changing the word "five" in the second line to the word "ten" so that the sentence will then read:

"A Committee on Public Relations consisting of not fewer than three nor more than ten members, as determined by the Executive Council . . . etcetera."

Mr. Speaker, I move that these changes in the bylaws be accepted and referred for consideration by the Reference Committee.

(Adopted. See page 71.)

VICE SPEAKER CARR: Do I hear a second to that motion?

DR. BERNARD A. WANSKER [Mecklenburg County]: Second.

VICE SPEAKER CARR: Is there any discussion?

If there is no discussion, all those in favor of this motion please say "aye"; opposed "no."

Hearing none, the items will be referred to Reference Committee I.

ANNUAL REPORTS

At this time, we have consideration of the Annual Reports. All delegates have a Compilation of the Annual Reports in their packets.

If there are any changes to be made in the Annual Reports by the Committee Chairmen, Commissioners, or any others mentioned in the Annual Reports, now is the time to do so.

Hearing no changes proposed, do I hear a motion that the Annual Reports be accepted as printed?

DR. E. THOMAS MARSHBURN, JR. [Councilor, Third District]: moved.

VICE SPEAKER CARR: Do I hear a second?

[The motion was duly seconded from the floor.]

Do I hear any discussion of this motion?

Hearing none, all those in favor of acceptance of the Annual Reports by the House of Delegates please say "aye"; opposed "no." The motion carried.

The next item of business is a report from the President regarding the actions of the Executive Council and at this time we will hear from Dr. Davis regarding that report.

EXECUTIVE COUNCIL SUMMARIES AND REPORTS OF THE EXECUTIVE COUNCIL

PRESIDENT DAVIS: Mr. Speaker, in your packet, each of you have received Summaries of the actions of the Executive Council at its sessions on July 20th, September 28th, October 15th, October 22nd and on February 1.

These summaries include actions by the Executive Council which it felt did not require special reports, but which are submitted in summary form for your consideration and, hopefully, your approval.

Also in your packet, are Reports "A" through "G," which originated from actions of the Council in meetings held which I just read.

In addition to these reports, on the table in front of you is a copy of a summary of April 17th Executive Council meeting and from that meeting Reports "H," "I" and "J" that originated from actions taken at that time.

Mr. Speaker, I therefore move that the Summaries of the Executive Council meetings and the lettered reports as printed, except for those reports just presented by the Committee on Constitution and Bylaws, be received at this time for consideration by the House of Delegates and referred to the Reference Committees as indicated without being read or further identified.

VICE SPEAKER CARR: Do I hear a second to Dr. Davis's motion?

DR. CHARLES HERRING [Lenoir County]: Second.

VICE SPEAKER CARR: Is there any discussion of this motion?

Hearing none, all those in favor of the motion please say "aye"; opposed "no." The motion carried.

REPORT A

SUBJECT: The Annual Budget Estimates for 1976
REFERRED TO: Reference Committee No. I

The Executive Council, at its September 28, 1975, meeting, considered the proposed budget for 1976 as recommended by the Committee on Finance.

The Budget Estimates for 1976 were adopted by the Council. The Budget Estimates for 1976 are as follows:

BUDGET ESTIMATES
January 1, 1976 to December 31, 1976

REVENUES: (ESTIMATED)	1975	1976
Estimated balance January 1, 1976	$ 60,000	$ 65,000
Annual Dues, paying members	445,000	463,000
Sales—Rosters & Journals	5,600	6,000
Revenue Unexpected	5,000	1,000
Technical Exhibits	10,500	10,500
Journal Advertisement—Local	9,500	10,000
Journal Advertisement—National	25,000	21,000
**AMA Remittance 1% of dues processed—plus interest	10,000	9,500
MEDPAC Remittance 1% of dues processed	250	250
Rental Income—Headquarters Facility	53,691	58,425
Rental Income—Residential Property	1,800	3,000
Interest Income—Operating Funds	9,000	9,000
Interest Income—Notes Receivable—Sale of Property	12,679	—0—
Interest Income on Reserve Fund	8,500	14,000
Reimbursement for Headquarters Office Services	Combined with Unexp. Rev.	6,000
	$656,520	$676,675

EXPENDITURES: (ESTIMATED)		
Schedule A	$264,215	$327,300
Schedule B	89,625	89,825
Schedule C	35,225	31,900
Schedule D	18,525	18,150
Schedule E	9,560	9,760
Schedule F	25,650	26,900
Schedule G	52,497	36,940
Schedule M	60,300	67,900
Schedule R	100,923	68,000
	$656,520	$676,675

** To be appropriated to Secretarial Budget A-6

		1975	1976
	EXCESS OF RECEIPTS OVER EXPENDITURES	—0—	—0—
	EXCESS OF EXPENDITURES OVER RECEIPTS	—0—	—0—
	RESERVES: (Estimated Cash Reserves—$263,716)		
	SUBMITTED TO COMMITTEE ON FINANCE	August 24, 1975	
	SUBMITTED TO EXECUTIVE COUNCIL FOR APPROVAL	September 28, 1975	
	SUBMITTED TO HOUSE OF DELEGATES FOR APPROVAL	May 6, 1976	
A.	EXECUTIVE BUDGET		
A- 1	President, expense of (travel & communications)*	$ 8,000	$ 8,000
A- 2	President's secretarial assistance	4,000	5,000
A- 3	Secretary, travel of*	1,000	1,000
A- 4	Executive Director-Treasurer, Salary of	31,000	35,000
A- 5	Executive Director-Treasurer, travel of*	6,500	6,500
A- 6	Executive Office, Secretarial & Clerical Assts.**	61,000	66,000
A- 7	Executive Office, equipment-replacements	4,000	4,000
	(a) Reserve for future equipment replacements	2,000	2,000
A- 8	Executive Office, expense of (communications, printing, and supplies, repairs & replacements of expendables)	21,600	28,000
A- 9	Bonding (in effect to 1978)	1,200	—0—
A-10	Audit (Quarterly and Annual)	2,400	2,600
A-11	Taxes (Salary tax)	9,100	10,500
A-12	Insurance: fire, liability & compensation	2,200	2,300
A-13	Membership Record, acctg., IBM Machine Rental, forms	10,700	11,000
A-14	Publications, reports & executive aids	350	350
A-17	Assistant to Executive Director & Convention Coordinator, salary of	17,250	19,320
A-18	Field Representative, salary of (MC)	10,200	11,250
A-19	Field Representative, salary of (JE) (Employee resigned June 1975)	11,000	10,000
A-20	Director, Field Services, travel of* (GS)	3,000	3,000
A-21	Director, Governmental Affairs, travel of (SM)	2,000	2,000
A-22	Controller, salary of	19,090	21,380
A-23	Director, Field Services, salary of (GS)	16,675	18,676
A-24	Director, Governmental Affairs, salary of (SM)	14,950	16,744
A-25	Field Representatives, travel of*	5,000	5,000
A-30	Retirement System for Society	Formerly G-5	34,500
A-31	NCMS Headquarters Staff Hospitalization	Formerly G-14	3,180
		$264,215	$327,300
B.	JOURNAL BUDGET		
B- 1	Journal, printing and mailing	$ 63,000	$ 65,000
B- 5	Editorial Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	850	900
B- 6	Journal Business Manager's Office, expense of (12 months communications, printing, and supplies, repairs and replacements)	925	925
B- 7	Business Manager's Office, equipment for	100	100
B- 8	Journal, travel for (Local & National)	100	100
B- 9	Taxes (Salary tax)	1,250	1,300
B-10	Sales tax on Journal Subscriptions and Roster Sales	2,400	2,500
B-11	Journal Salaries (Editor, Assistant Editor, Advertising Secretary)	21,000	19,000
		$ 89,625	$ 89,825
C.	INTRA-FUNCTIONAL ACTIVITY BUDGET		
C- 1	Executive Council expense of and travel of Councilors including district travel	$ 4,500	$ 5,000
C- 2	Publication of Executive Council Minutes, Transactions, Annual Reports	5,800	6,000
C- 3	Legislative Committee, expense of (Local and National activity)	6,500	6,500
C- 4	Maternal Health Committee, expense of (secretarial, communications, printing and supplies)	300	300

*Basis: Real for personal maintenance and travel @ 17c per mile and/or common carrier rate and for official purposes
**Any revenue derived from collection efforts related to American Medical Association dues and processing of same shall accrue to this item of the Budget

		1975	1976
C- 5	Committee on Drug Abuse	200	C-11
C- 6	Committee on Arrangements	C-11	C-11
C- 7	Committee on Exhibits, expense of (including $200 for Scientific Exhibit Awards and $200 for Student Scientific Exhibit Award)	1,250	750
C- 8	Committee on Mental Health	400	C-11
C- 9	Committee on Mediation	1,000	2,000
C-10	Committee on Chronic Illness, TB, & Heart Disease	C-11	C-11
C-11	Committees in general, expense of (including committees under $100 allocations)	4,500	5,000
C-12	Committee on Nominations	C-11	C-11
C-13	Committee on Occupational & Environmental Health	200	500
C-14	Committee on Professional Insurance	C-11	C-11
C-15	Committee on Relative Value Studies (ad hoc status)	400	C-11
C-17	Committee Advisory to Medical Students (Section) (Expense of Delegates to SAMA and AMA Annual Meeting—one each Medical School Chapter (3))	1,725	2,000
C-18	Committee on Disaster & Emergency Medical Care	600	C-11
C-19	Committee on Industrial Commission	C-11	C-11
C-20	Committee on Constitution & Bylaws	500	200
C-21	Committee on Medical Legal	C-11	C-11
C-22	Committee on Traffic Safety	C-11	C-11
C-23	Committee on Cancer	C-11	C-11
C-24	Committee on Anesthesia Study	350	350
C-25	Committee on Child Health & Infectious Disease	C-11	C-11
C-26	Committee on Blue Shield	C-11	C-11
C-27	Committee on Hospital & Professional Relations & Liaison to N.C. Hospital Association	C-11	C-11
C-28	Committee on Social Services Program	C-11	C-11
C-30	Insurance Industry Committee	200	C-11
C-31	Committee on Community Medical Care, sponsorship of 4-H Health activity for one trip to National 4-H Club for State Health Winner, and Today's Health subscription to 4-H Health Winners; Dues Rural Health Safety Council, Miscellaneous Expense	500	800
C-32	Committee on Retirement Savings Plan	C-11	C-11
C-34	Committee on Programs for General Sessions (Combined with Com. on Arrangements in May 1975)	C-11	Combined with C-6
C-36	Committee on Marriage Counseling & Family Life Education	500	C-11
C-37	Committee on Medicine and Religion	500	200
C-38	Committee Advisory to Auxiliary (Chairmanship includes Auxiliary under Item D-3)	C-11	C-11
C-39	Committee on Credentials	C-11	C-11
C-40	Committee on Scientific Awards	C-11	C-11
C-41	Committee on Physical & Vocational Rehabilitation	C-11	C-11
C-42	Committee on Eye Care and Eye Bank	C-11	C-11
C-45	Council on Review and Development	C-11	C-11
C-46	Committee on Finance	C-11	C-11
C-48	Committee on Medicare	C-11	dissolved
C-49	Committee on Medical Education	4,000	1,000
C-50	Committee on Comprehensive Health Service Planning	C-11	C-11
C-51	Committee on Medical Aspects of Sports	1,000	1,000
C-52	Committee on Association of Professions	C-11	C-11
C-53	Committee on Allied Health Professionals	C-11	C-11
C-54	Committee Liaison to N.C. Pharmaceutical Association	C-11	C-11
C-55	Committee on Personnel & Headquarters Operations	C-11	C-11
C-57	Committee Advisory to Crippled Children's Program	C-11	C-11
C-58	Committee on Peer Review	C-11	dissolved
C-61	Committee on Audio-Visual Programs	300	300
		$ 35,225	$ 31,900

D.	EXTRA-FUNCTIONAL ACTIVITY BUDGET		
D- 1	Delegates to AMA, expense of (8 including alternates to each Annual and Clinical Session)	$ 11,500	$ 9,500
D- 2	Conference Dues	250	250
D- 3	Woman's Auxiliary (contribution to State Convention, travel for 2 to National Auxiliary, printing & secretarial needs, and State President's Discretionary Fund)	5,400	5,400
D- 5	President's Communication Program	1,375	3,000
		$ 18,525	$ 18,150

		1975	1976
E.	PUBLIC RELATIONS BUDGET		
E- 3	Committee Chairman, out-of-state travel	$ 500	$ 500
E- 9	Audio-Visual depiction, photography, radio-motion pictures, production, distribution and printing, purchase of films, etc.	100	100
E-10	Eductational distribution; reprints, periodicals, press materials, pamphlets, and dodgers for educational purposes, production, distribution and printing, binding, stuffing and mailing	300	300
E-11	News and press releases, production and printing of	200	100
E-12	The Bulletin, production and printing of	4,300	5,300
E-13	N.C. Academy of Science/High School Student Program	160	160
E-14	Exhibits and Displays: Purchase, rental, production, fabrication and transportation of	500	200
E-15	Conference for Medical Leadership	1,500	1,600
E-17	American Medical News subscriptions	1,300	300
E-18	Collateral Public Relations with other committees	500	1,000
E-19	N.C. Rescue Squad First Aid Trophies	200	200
		$ 9,560	$ 9,760
F.	ANNUAL SESSIONS (122nd) CONVENTION BUDGET		
F- 1	Program, production of	$ 2,500	$ 2,800
F- 2	Hotel and Auditorium expense	6,000	6,800
F- 3	Publicity promotion, expense of (reporters and expense)	600	750
F- 4	Entertainment (general involving personnel)	1,200	1,200
F- 5	Orchestra and Floor entertainment	2,500	2,000
F- 6	Guest Speakers expense and/or honorarium	2,500	2,500
F- 8	Electric Amplification, operators, installations and screening auditorium	—0—	—0—
F- 9	Booth installations, supplies, expense signs, (Scientific and Technical) including exhibit expense & promotion	5,000	5,000
F-10	Projection, expense of (service rentals)	800	800
F-11	Badges (members, guests, exhibitors, auxiliary)	250	250
F-12	Reporting Service for Transactions—(House of Delegates, General Sessions and Reference Committees)	2,500	3,100
F-13	Rental, extra facilities, trucks for sections and/or exhibits	200	200
F-14	Exhibitors entertainment	1,000	1,000
F-15	Banquet expense	200	200
F-16	Police Security	400	300
		$ 25,650	$ 26,900
G.	MISCELLANEOUS BUDGET		
G- 1	Legal Counsel, retainer fees for	$ 20,000	$ 23,000
G- 2	Reporting, Executive Council Meetings	2,000	2,500
G- 3	Fifty Year Club Pins and Certificates and President's Jewel	400	600
G- 4	Contingency and Emergency	1,215	490
G- 5	Retirement System for Society	17,700	transferred to item A-30
G- 6	Advalorem Taxes (Personal Property)	950	1,100
G- 7	Association of Professions	200	200
G-10	Commissioners, expense of	1,500	1,500
G-11	Executive Committee, expense of	300	300
G-12	Officers, expense of	2,000	2,000
G-13	Travel and Maintenance, expense of essential headquarters staff for out-of-state meetings and in-state conferences	2,500	2,500
G-14	NCMS Headquarters Staff Hospitalization	2,980	transferred to item A-31
G-15	Other Property Taxes and Insurance (Fonville Property and Partin Property)	252	550
G-16	Residential Property Repairs (Fonville Property and Partin Property)	500	1,200
G-17	Contribution to MEDPAC Educational Fund	formerly G-4	1,000
		$ 52,497	$ 36,940

M.	HEADQUARTERS FACILITY BUDGET	1975	1976
	Operating Costs:		
M- 5	Utilities	$ 18,000	$ 23,000
M- 6	Insurance	1,750	1,800
M- 7	Taxes (Real Property)	17,000	17,000
M- 8	Water	550	800
M- 9	Janitorial Services	14,000	14,000
M-10	Grounds Maintenance	1,500	1,800
M-11	Building Repairs & Maintenance	4,000	4,500
M-12	Heating A C Repairs & Maintenance Elevator Maintenance	3,500	5,000
		$ 60,300	$ 67,900

R.	OPERATING BUDGET RESERVES		
R- 1	Interest on Notes Receivable—sale of property	$ 12,679	—0—
R- 2	Interest on Reserve Fund	8,500	14,000
R- 3	Extra Dues for Reserve Fund	52,000	54,000
R- 4	5% of Operating Budget	27,744	—0—
		$100,923	$68,000

(Adopted. See Page 70.)

REPORT B

Subject: Relative Value Studies
Referred to: Reference Committee No. 1

At the September 28, 1975, meeting of the Executive Council, the ad hoc Committee on Relative Value Study recommended that the North Carolina Medical Society adopt the 1974 revision of the California Relative Value Studies as the North Carolina Relative Value Studies.

However, after considerable discussion, the Executive Council approved a motion that the North Carolina Medical Society not endorse any relative value schedule, and that the headquarters staff make available copies of the California 1974 Relative Value Schedule for any members who requested it, on a purchase basis.

Later in the same meeting, the Executive Council in a related action, approved a motion that the North Carolina Medical Society does not endorse any relative value schedule. The North Carolina Medical Society adopts Current Procedural Terminology for future coding and nomenclature purposes, with the updated editions to be used as they become available.

(Adopted. See page 70.)

REPORT C

SUPPLEMENTARY REPORT C

Subject: Proposed Changes in the Constitution & Bylaws
Referred to: Reference Committee 1

(See Pages 57 & 58 Report of the Chairman of the Committee on Constitution and Bylaws.)

(Adopted. See Pages 70 and 71.)

REPORT D

Subject: Addition of the Immediate Past President to the North Carolina Delegation to the AMA Annual and Clinical Meetings
Referred to: Reference Committee No. 1

A recommendation was made to the Executive Council, at its September 28, 1975 meeting, that the Immediate Past President of the Society be made a member of the North Carolina Delegation to the AMA House of Delegates meetings with his expenses to these meetings to be paid by the Society.

Following a discussion of the proposal, the Executive Council approved a motion that the Immediate Past President be sent at Medical Society expense to the December (1975) meeting of the AMA and that the consideration of extension of this policy be decided upon by the House of Delegates.

The Chairman of the North Carolina AMA delegation, Dr. David G. Welton, supported the proposal for the following reasons:

"As President-Elect and President, he has attended at least four AMA House of Delegates meetings, participated in the caucuses, and deliberations of our delegation."

"The problems in North Carolina are at his fingertips and have been for two years or longer because he has had to be, in daily contact with them."

"This puts him in a unique position to assist the delegation."

"When he is dropped, we are losing a valuable resource. He has invested time and effort for several years. We have invested some expense money."

(Adopted. See Page 71.)

REPORT E

Subject: Diagnostic Standards and Classification of Tuberculosis
Referred to: Reference Committee No. 1

The September 28, 1975, meeting of the Executive Council received a series of five recommendations from the Committee on Chronic Illness relating to "Diagnostic Standards and Classification of Tuberculosis."

The Executive Council adopted as Society Policy the Committee recommendations as follows:

(1) Implementation of the 1974 American Thoracic Society, "Diagnostic Standards and Classification of Tuberculosis" in North Carolina.

(2) All persons infected with tuberculosis without evidence of disease, including those recently exposed to an infectious case, be considered for preventive treatment in

accordance with recommendations of the Center for Disease Control, USPHS, already endorsed by the Executive Council.

(3) Persons infected with tuberculosis who are found to have evidence of disease be notified to Public Health authorities as cases, if positive bacteriology is found or treatment with two or more anti-tuberculosis drugs is started.

(4) Physicians treating tuberculosis cases as defined above keep public health authorities informed as to treatment prescribed, patient cooperation in adhering to the treatment regimen and response to it, duration and final notification of completion of treatment, prognosis in terms of lasting cure and whether case contacts are being investigated and receiving follow-up surveillance.

(5) To bring this to the attention of the County Medical Society for appropriate action.

(Adopted. See Page 71.)

REPORT F

DR. MASHBURN: *Report "F".*

Subject: Adequate Psychiatric Evaluation and Treatment Supervision of the Mentally Ill.

The Reference Committee recommends approval of Report "F." Is there any further discussion of Report "F"?

All those in favor of Report "F" please say "aye"; opposed "no." Report "F" is accepted and approved.

REPORT F

Subject: Adequate Psychiatric Evaluation and Treatment Supervision of the Mentally Ill

Referred to: Reference Committee No. I

The Committee on Mental Health recommended and the Executive Council, at its September 28, 1975, meeting, approved the following resolution:

WHEREAS, the diagnosis and treatment of the mentally ill is a recognized specialty (psychiatry) in the field of medicine, and

WHEREAS, the practice of medicine is defined by G.S. 90-18 ". . . any person shall be regarded as practicing medicine or surgery within the meaning of this article, who shall diagnose or attempt to diagnose, treat, attempt to treat, any human ailment physical or mental . . ." and,

WHEREAS, the care and treatment of the mentally ill is financed in part by private, local, state and federal funds under the direction of the local mental health authorities, and

WHEREAS, some mental health programs may not provide adequate psychiatric evaluation and treatment supervision of said mentally ill,

THEREFORE, BE IT RESOLVED, by the North Carolina Medical Society acting on the recommendation of its Mental Health Committee, advocate that treatment of the mentally ill in the local mental health program be under medical and/or psychiatric supervision and that all patients be adequately evaluated by currently acceptable psychiatric standards and their treatment program be supervised by adequately trained psychiatrists.

(Adopted. See Page 64.)

REPORT G

Subject: Endorsement of Concept on HMO's and Opposition to H.R. 7847

Referred to: Reference Committee No. II

The Committee on Legislation recommended to the September 28, 1975, meeting of the Executive Council that the North Carolina Medical Society endorse a concept on HMO's based on a statement given by Dr. E. T. Beddingfield as AMA testimony in Washington. Following discussion, the Executive Council endorsed the concept on HMO's as follows:

> If the Congress adopts the presently proposed amendments, we believe that it would in effect have abandoned the "HMO concept" as originally intended and as now generally understood by the public. In addition, adoption of the amendments would be a decision now by the Congress that the HMO concept is not viable. An extensive change as contemplated would make invalid any later comparison of the new entities with the original HMO, and there could be no evaluation of the original HMO.
>
> We must question whether passage of these amendments under the guise of perfecting amendments to the Health Maintenance Organization Act is in the best interest of the public. In our opinion, the public deserves an answer as to whether the HMO, conceived after extended debate and promising accessible comprehensive care in a manner superior to other modes of health care delivery, is a viable concept. We believe the present experiment should proceed under the present Act without adoption of the major changes proposed and, accordingly, H.R. 7847 should not be adopted.

(Adopted. See Page 72.)

REPORT H

Subject: Authorization for Committee on Medical Education to make Final Accreditation Recommendation to the AMA for the Society

Referred to: Reference Committee No. I

The April 17, 1976, meeting of the Executive Council approved the Committee on Medical Education recommendation that the Committee be authorized to decide for the Society what accreditation recommendation will be made to the American Medical Association following a survey for accreditation of a continuing medical education program.

Although the Society has been authorized by the AMA to conduct surveys of continuing medical education programs in this state, and this responsibility has been delegated to the Committee by the House of Delegates, the Committee inquired who or what group makes the final decision as to what recommendation goes to the AMA. In order not to burden Society officers or the Executive Council unduly or to involve the accreditation procedure in unnecessary red tape, the Committee recommended that it be authorized to:

1. Accept the report of a continuing medical education accreditation survey team.

2. Decide, for the Society, what accreditation recommendation will be made to the American Medical Association.

3. Transmit this recommendation, over the signatures of the President of the Society and the Chairman of the Committee on Medical Education, along with the necessary documents and other information, to the American Medical Association.

4. Inform the applicant organization, over those same signatures, of the action of the American Medical Association on the Society's recommendation.

5. Provide those accredited with an appropriate certificate which will be signed by the President of the North Carolina Medical Society and the Chairman of the Committee on Medical Education and which will attest to the applicant's accreditation status.

(Adopted. See Page 71.)

REPORT I

Subject: Flu Immunization Program
Referred to: Reference Committee I

The April 17, 1976, meeting of the Executive Council approved a motion that in keeping with the policy statement by the AMA that the North Carolina Medical Society support and participate in the implementation of the planned influenza immunization program for North Carolina and encourage county medical societies to actively participate.

Although all experts are not in agreement, it is regarded as likely by the authorities at the Center for Disease Control and the World Health Organization Collaborating Center for Influenza that the new flu virus (A/Swine Influenza) will spread during the flu season next fall to epidemic proportions. Because of the enormous cost of a flu epidemic in mortality, morbidity, and health care and the short incubation period (1-3 days), a mass immunization program in the United States had been proposed at the time that the Executive Council considered the recommendation.

The program was expected to start this summer for high risk groups (approximately 20% of the population) and in September for the remainder of the population.

Supplies of the vaccine as it becomes available are to be given to state health departments for free distribution, by plans to be developed by each state, to county health departments for distribution to medical societies, clinics, private practitioners and others for administration.

To assist with planning, county medical societies desirous of participating in the immunization program are requested to notify their county health directors and work with the local health department to get the vaccine administered.

Preliminary discussions indicated it may be desirable to conduct immunization programs in each county similar to those used previously for polio and measles. (Amended and Adopted. See Page 71. Reference Committee I recommendation for Modification and House of Delegates adoption as amended.)

REPORT J

Subject: Proposed Legislation Contained in the Report of the Professional Liability Insurance Study Commission
Referred to: Reference Committee II

The Executive Council, at its April 17, 1976, meeting approved a recommendation from the Committee on Legislation that the Society support the proposed legislation contained in the report of the Professional Liability Insurance Study Commission.

The Committee on Legislation met on March 28, 1976, and reviewed in depth the report of the Professional Liability Insurance Study Commission, with thorough discussion of each of the proposals in the report.

It was the consensus of the Committee that the Medical Society should support the following:

1. The change in the Statute of Limitations from three years from the date of discovery to three years from the date of occurrence.

2. A statute that defines in general terms "Informed Consent."

3. The Patient's Compensation Fund that would provide coverage for physicians for amounts in excess of $100,000.

4. A bill that would require the jury to take into consideration the circumstances and conditions which a service of the physician was performed.

5. A bill that protects anyone from liability in an emergency situation unless they are grossly negligent.

6. A provision that would allow the courts to award periodic payments instead of a lump sum award.

7. A bill that would require an attorney filing a cause of action to list specific damages only and not general damages.

8. A bill that requires all insurance companies that write professional liability insurance to report necessary statistics to the Commissioner of Insurance.

9. A bill that would require the coordination of benefits when a plaintiff receives an award for professional negligence.

It was the opinion of the Committee on Legislation that the Study Commission's report met the above criteria. Accordingly, the Committee on Legislation recommended to the Executive Council that the North Carolina Medical Society support the proposed legislation from the Professional Liability Insurance Study Commission.

(Adopted. See Page 74.)

The next item of business pertains to the Resolutions which have been submitted to the House of Delegates by county medical societies at this time. Dr. Chalmers Carr will handle this portion the program.

RESOLUTIONS

SPEAKER CARR: These Resolutions have been presented to you in your packet on the yellow sheets and numbered, I believe, one through eleven.

Opportunity should be given to the maker or sponsor of any resolution to present said resolution in toto by reading it from the microphone if they so desire.

Also, the maker or proposer of any resolution according to our rules and bylaws, particularly the book of guidelines, has the right to withdraw, change or amend his own resolution before they're adopted and become then the property of the House, after which—before they're accepted for consideration, they then become the property of the House and go to the Reference Committees and cannot be altered except as recommended by the Reference Committee and on approval of the House by its majority vote.

Is there anyone who wishes to read a resolution that has been submitted, to change its wording or to withdraw it?

[No response]

If not, do I hear a motion that the Resolutions as presented to you be referred to the Reference Committees as indicated on said Resolutions?

[The motion was duly made and seconded from the floor.]

I hear the motion made and seconded. All in favor please say "aye"; opposed "no."

Said Resolutions are now referred to the appropriate Reference Committees and are the business of the House.

There is also the opportunity afforded for the introduction of late resolutions. Late resolutions must be identified by title and intent and receive a two-thirds favorable majority report to be accepted as business of the House this year.

Anyone proposing a late resolution? If not, we have none.

Resolution: 1

Introduced by: Section on Otolaryngology
Subject: Change Name of Section on Otolaryngology to Section on Otolaryngology and Maxillofacial Surgery
Referred to: Reference Committee No. I

WHEREAS, the discipline of maxillofacial surgery is not the exclusive domain of any one specialty, and is included in the field of otolaryngology, and

WHEREAS, historically, otolaryngologists have been intimately and extensively involved in the provision of this form of medical care, and

WHEREAS, a number of medical school departments are known as the Department of Otolaryngology and Maxillofacial Surgery; therefore be it

RESOLVED, that the North Carolina Medical Society rename the Section on Otolaryngology to the Section on Otolaryngology and Maxillofacial Surgery.

(Adopted. See Page 71.)

Resolution: 2

Introduced by: Catawba County Medical Society
Subject: Request North Carolina Medical Society to Seek an Injunction Against Further Encroachment of UR Regulations
Referred to: Reference Committee No. 11

WHEREAS, the North Carolina Medical Society has gone on record against the attempted repeal of PSRO laws, and

WHEREAS the AMA has obtained a temporary injunction against the implementation of the UR regulations as outlined by the Department of HEW, and

WHEREAS, the State has already implemented the PSRO regulations, and

WHEREAS, it would seem logical to have a uniform application of national and state Physician Review procedures, therefore be it

RESOLVED, that the Catawba County Medical Society petition the North Carolina Medical Society to seek, as soon as possible, an injunction, similar to the national injunction, against the further enforcement by the State of North Carolina of Utilization Review procedures (Title 45, Public Welfare, Part 250:20 Administrator of Public Welfare—per Federal Register, Vol. 34—March 4, 1969; 33 FR 10232, PR 40-9) now in effect until the injunction against the National UR Regulations has been made permanent or vacated.

(Not adopted. See Page 74.)

Resolution: 3

Introduced by: Edgecombe-Nash County Medical Society
Subject: Create Improved Communications Between Hospital Staffs and County Medical Societies and State Society
Referred to: Reference Committee No. 1

WHEREAS, the rapid pace of change in the practice of medicine and the continuing attempts at imposing controls on physicians make it imperative that all physicians be informed about changes or contemplated changes in order to implement them or take action against them, and

WHEREAS, an individual hospital staff might be singled out as a test case for proposed changes without other hospital staffs having knowledge of the action which might later affect them, and

WHEREAS, a broader base of experience can be drawn upon in arriving at solutions if all are informed, therefore be it

RESOLVED, that the North Carolina Medical Society inform every member of the Society through a special communication or a letter from the Executive Secretary within 45 days whenever there are attempts by a hospital administrator, the Joint Commission on Accreditation of Hospitals, or a federal agency to impose new regulations or controls over a hospital staff if the request is made through a County Medical Society.

(Amended and Adopted. See Page 72 Reference Committee I recommendation for Modification and House of Delegates adoption as amended.)

Resolution: 4

Introduced by: Edgecombe-Nash County Medical Society
Subject: North Carolina Medical Society Terminate Participation in HARP and Seek to have the Program Abolishe
Referred to: Reference Committee No. 11

WHEREAS, the North Carolina State Medical Socie
had a part in establishing the HARP program in Nor
Carolina with the North Carolina Department of Huma
Resources, and

WHEREAS, the HARP program is requiring hospitals
North Carolina to perform fiscal Utilization Review f
Medicaid patients, and

WHEREAS, the AMA suit was successful in securing a
injunction in federal court against this type of Utilizatio
Review, and

WHEREAS, the North Carolina State Medical Society
possibly in contempt of court through its sponsorship of th
program, therefore be it

RESOLVED, that the North Carolina State Medical S
ciety terminate its participation in the HARP program an
seek to have the program abolished through persuasion o
through resort to litigation.

(Not approved. See Page 74.)

Resolution: 5

Introduced by: Mecklenburg County Medical Society
Subject: North Carolina Medical Society Endorse Prese
Eight Areas PSROs
Referred to: Reference Committee No. 11

WHEREAS, North Carolina has been divided into eig
PSRO areas, and

WHEREAS, the eight areas have been organized and a
functioning, and

WHEREAS, these areas closely reflect the needs of the
local areas, therefore be it

RESOLVED, that the Mecklenburg County Medical S
ciety goes on record as endorsing the present eight areas
the means of administering the PSRO program in Nor
Carolina, and be it further

RESOLVED, that the North Carolina Medical Socie
also endorses the present eight areas as the means of a
ministering the PSRO program in North Carolina.

(Filed. See Page 75.)

Resolution: 6

Introduced by: Buncombe County Medical Society
Subject: Medical Examiner System be Revised and Funde
to Support Pathologists to Serve as Medical Examine
Referred to: Reference Committee No. 11

WHEREAS, the State of North Carolina several yea
ago approved a Medical Examiner System to replace th
Coroner System in the State, and

WHEREAS, this System has been in effect in most par
of the State for approximately eight to ten years, and

WHEREAS, the present level of funding of the Medic
Examiner System has resulted in difficulty in recruitin
part-time Medical Examiners, and

WHEREAS, many physicians presently serving as Med
cal Examiners are not trained in pathology or forens
medicine, therefore be it

RESOLVED, that the North Carolina Medical Socie
recommends and urges that the Medical Examiner Syste
be revised and adequately funded so as to provide all regio
of the State with well-trained, sufficiently supporte
pathologists to serve as Medical Examiners, and be it furth

RESOLVED, that copies of this resolution be forwarde
to the Governor, the Lieutenant Governor, the Speaker
the House of Representatives, the President Pro Tem of th

enate, and the Chief Medical Examiner of the State of orth Carolina.

(Amended and Adopted. See Page 75. Reference Committe II recommendation for Amendment and House of Delegates adoption as amended.)

Resolution: 7

ntroduced by: Buncombe County Medical Society
ubject: Reallocation of State Funds Now Set Aside for ECU for Medical Education Needs in the State
eferred to: Reference Committee No. II

WHEREAS, current economic conditions have resulted a serious reduction in revenue to the State of North arolina, and

WHEREAS, the State of North Carolina has consequently been required to curtail budgetary allocations relating to essential services for all the citizens of the State, nd

WHEREAS, the Greater University of North Carolina is herefore so encumbered that it is unable to meet even its urrent obligations for supplies and equipment, and

WHEREAS, the North Carolina General Assembly has et aside approximately fifty million dollars for the East arolina University Medical School, and

WHEREAS, the said East Carolina Medical School has ot been officially accredited as a free-standing institution, nd

WHEREAS, all existing Medical Schools are facing udgetary hardships due to rapidly escalating costs and hrinking federal support, together with limited private resources, and

WHEREAS, if the approximately fifty million dollars ere spent as allocated for building the East Carolina University Medical School, no more than fifteen to eighteen Doctors of Medicine would be added to the North Carolina edical market by 1985 and many more millions would be equired by that time, and

WHEREAS, the present needs of the citizens of North Carolina in medical education would be more productively erved by reallocation of these funds to presently accredited nd functioning institutions of the State, therefore be it

RESOLVED, that the North Carolina Medical Society rge the General Assembly of the State of North Carolina, n behalf of the citizen taxpayers, to free the approximate ifty million dollars appropriated to the East Carolina University Medical School for more immediate, realistic, and roductive use in meeting the medical education needs of he State, and be it further

RESOLVED, that copies of this resolution be forwarded o the Governor, the Lieutenant Governor, the Speaker of he House of Representatives, the President Pro Tem of the Senate, the Chairman of the Advisory and Budget Commission, the Chairman of the Board of Governors of the Greater Jniversity of North Carolina, and the President of the Greater University.

(Not adopted. See Page 75.)

Resolution: 8

Introduced by: Rowan-Davie County Medical Society
Subject: Terminology of Principles in Malpractice Legislation
Referred to: Reference Committee No. II

WHEREAS, the North Carolina Medical Society supports the principles of compensation for financial losses sustained as a result of professional malpractice, and

WHEREAS, losses already incurred and substantiated at the time of settlement, such as loss of income, could and should be awarded in lump sum, and

WHEREAS anticipation of the length of a period of disability is inaccurate and fought with danger of injustice,

BE IT RESOLVED, that disability that continues beyond the date of settlement should be compensated by periodic payments as long as the disability continues, and be it further

RESOLVED, that continuation of disability should be recertified periodically, and

WHEREAS, there is no justifiable reason to establish any minimal lump sum payment to be required before periodic payments can begin,

BE IT RESOLVED, that periodic payments should begin for any ongoing disability as soon as lump sum payment has occurred for losses already sustained.

WHEREAS, future disability is an unsatisfactory concept and expression

BE IT RESOLVED, that the term should be changed to ongoing disability, and

WHEREAS, in the case of the death of a judgement creditor while disability due to malpractice continues and where that death is due to the malpractice,

BE IT RESOLVED, that periodic payments could be paid into the judgement creditor's estate, and

WHEREAS, in the case of a death of a judgement creditor while disability due to malpractice continues and where that death is unrelated to the malpractice,

BE IT RESOLVED, that compensation should be terminated at the time of the death, and

WHEREAS, financial compensation should be required for financial losses and financial needs resulting from disability due to malpractice, and

WHEREAS, pain and suffering are not measurable quantities and differ widely from one person to another, and

WHEREAS, pain and suffering tend to be aggravated and prolonged by financial reward,

BE IT RESOLVED, that pain and suffering should be treated by medical care and financial award should not be assessable for pain and suffering, and

WHEREAS, the Rowan-Davie Medical Society feels that the above principles are just and reasonable for both sides, we urge the North Carolina Medical Society to adopt these principles and that the Medical Society should suggest to the North Carolina Legislature that they should use these principles in any legislation that may be passed concerning malpractice legislation.

(Tabled. See Page 75.)

Resolution: 9

Introduced by: Rowan-Davie County Medical Society
Subject: Legislation for Professional Malpractice
Referred to: Reference Committee No. II

WHEREAS, legislation for professional malpractice is properly concerned with two objectives:

(1) Compensation of the plaintiff for losses sustained as a result of professional malpractice, and

(2) Possible punishment, removal or retraining of the professional guilty of malpractice

BE IT RESOLVED, that the North Carolina Medical Society feels that the two objectives are different and unrelated, and the accomplishment of these two different objectives should not be sought by the same means.

(Not adopted. See Page 75.)

Resolution: 10

Introduced by: Rowan-Davie County Medical Society
Subject: Principles of Res Ipsa Loquitor
Referred to: Reference Committee No. II

WHEREAS, the principles of Res ipsa loquitor (the thing speaks for itself) violates a fundamental of American justice wherein one is innocent until proven guilty.

BE IT RESOLVED that the Rowan-Davie Medical Society urges the North Carolina Medical Society House of Delegates to urge the North Carolina Legislature to pass legislation requiring that malpractice be proven, and cannot be assumed simply because an injury or disability occurs.

(Not approved. See Page 75.)

Resolution: 11

Introduced by: Rowan-Davie County Medical Society
Subject: Contingency Fee Method of Financial Compensation
Referred to: Reference Committee No. II

WHEREAS, the contingency fee method of financial compensation encourages excessive claims and unreasonable charges that must ultimately be paid by the public,

BE IT RESOLVED, that the Rowan-Davie Medical Society urges the North Carolina Medical Society House of Delegates to condemn the contingency fee method of financing compensation as an unethical, immoral, unjust abuse of society, and be it further

RESOLVED, that the North Carolina Medical Society urges the North Carolina Legislature to pass legislation outlawing the practice.

(Tabled. See Page 76.)

NOMINATING COMMITTEE

We shall now caucus and in this instance today we're lucky as there are only three Districts—the first, fourth and eight districts have a vacancy occurring on the Nominating Committee. They will caucus.

The District Councilor of the Second District requests that the delegates from this district caucus for a purpose of its own in the corner over there by the piano.

Now, we will caucus long enough for the three districts involved to make their nominations for the Nominating Committee and I would remind the Councilor of each District that no one may seat himself on the Nominating Committee—there must have elapsed a period of three years before he was last on the Nominating Committee before he's again eligible for re-election.

[Whereupon there followed a ten minute recess for the purpose of District Caucus.]

SPEAKER CARR: I will now call on the representative from the Districts to announce the nominee for the Nominating Committee, or the designee for the Nominating Committee.

They are:

First District, Dr. L. Everett Sawyer, Elizabeth City.

Fourth District, Leon W. Robertson, Rocky Mount.

Eighth District, A . J. Crutchfield, Winston-Salem.

As I understand it, these are the nominees from the districts for the Nominating Committee.

Are there any further nominations for these positions on the Nominating Committee?

Hearing none, I'll declare the nominations to be these three gentlemen and if agreeable by unanimous consent, we'll vote on them all at one time.

All those in favor of the election of these delegates to the Nominating Committee please say "aye"; opposed "no." They are elected to the Nominating Committee.

SPEAKER CARR: As provided in the Constitution and Bylaws the Secretary of the Society, organize temporarily the Nominating Committee for next year and they elect a chairman.

Dr. Estes requests that the Nominating Committee, including the three just elected, meet him over by the press table which will be vacated by that time, as soon as this meeting is adjourned.

Under New Business, I would like to recognize our President-elect who will become our President Saturday night, Dr. Jesse Caldwell.

DR. JESSE CALDWELL [President-elect of the North Carolina Medical Society]: Mr. Speaker, as far as I can recall this is the first time that the President-elect has ever had the privilege of the floor of the House of Delegates.

This has been a busy year for me learning the affairs of your Society and I'll have more to say about that at the General Session on Saturday.

One of the jobs was to get familiar with fifty or sixty committees and try to attend as many meetings as possible and learn the composition of the committee memberships, seek suggestions from the Councilors and the Officers, Section Chairmen, etcetera, as to composition of certain committees; trying to find out what happened to a number of our members who were unable to attend committee meetings and finding replacements for them; trying to get younger people on committees and so forth.

Our committee appointments should be made in a few weeks and those who are appointed to committees will receive notice.

There will, of necessity, be some changes in the Commissioners due to the election today of Dr. Lymberis who is Chairman of Commission II and Dr. Jack Hughes who is Chairman for Commission IV. These appointments will be made in due time.

Mr. Speaker, I thank you for the privilege of making a few extemporaneous remarks today.

SPEAKER CARR: Are there any other items of New Business?

I recognize the gentleman in the rear.

DR. THORNTON R. CLEEK [Randolph County]: This is not an item of New Business, but I think there is some "rail-roading" going on here!

Last year, at the House of Delegates, efforts were made to establish a Section on Emergency Medicine. The bylaws read that the new sections will be formed upon the recommendation of the Executive Council and the approval of the House of Delegates.

This House of Delegates has never approved of a Section on Emergency Medicine but you're going to change the bylaws. It seems to me we're getting the cart before the horse.

DR. SHAFFNER: Mr. Speaker, in answer to this question, I think there are two things you should consider.

First of all, last year, the group who wanted to establish a Section on Emergency Medicine took this to the Executive Council and the Executive Council tabled the motion so it was not brought to the House of Delegates.

However, it was brought to the House of Delegates last year as a direct resolution from Forsyth County. It went to the Reference Committee, came back to the House and was tabled again.

This year, the group went back to the Council and asked for establishment of a Section on Emergency Medicine and

the Council at this time approved it and referred it to the Committee on Constitution and Bylaws.

The Committee on Constitution and Bylaws therefore wrote up the change which would go into effect — and if it did go into effect would be an approval of this House of Delegates to the establishment of a Section on Emergency Medicine.

I don't see really that it's before the horse. It just lets the Section on Emergency Medicine be a Section on Emergency Medicine as soon as the House of Delegates approves it. If we had to wait for the House of Delegates to approve it, then we would have to wait two days in order to make the bylaws change and if we don't have two more days of meeting then it would have to wait until next year.

I don't think there's any conflict.

DR. CLEEK: Well, if the Council tabled it last year and the House of Delegates tabled it last year, when does the House of Delegates get a chance to approve of the Section as the bylaws call for?

I thought the changes in bylaws came from instructions from the House of Delegates here and the House of Delegates has not approved of the section and they have not requested a change in bylaws.

I think the first step is approval of the section and then change the bylaws.

If they tabled it last year, this group may table the section again. I don't know, but I think it's the prerogative of this assembly here to give approval and then give instructions for the change in bylaws.

SPEAKER CARR: Dr. Cleek, do you wish to make a motion so the Chair may have some guidance as to the wishes of the House of Delegates?

DR. CLEEK: Yes, sir, I'll make a motion that item eight of Report "C" be stricken.

SPEAKER CARR: Is there a second?

[The motion was seconded from the floor.]

It has been moved and seconded that item eight of Report "C" be expunged or stricken.

The Chair will rule that the motion as presented by Dr. Cleek in its present form is out of order inasmuch as we have already accepted the report of the Committee on Constitution and Bylaws.

But, he does have relief in the form of a motion to reconsider the report of the Committee on Constitution and Bylaws and proceed from there.

DR. CLEEK: In that case, I will make that motion. I think something is being rail-roaded here.

[The motion was seconded from the floor.]

SPEAKER CARR: You are making a motion that the report of the Committee on Constitution and Bylaws be reconsidered.

Is there a second?

[The motion was again seconded from the floor.]

It has been moved and seconded that the report of the Committee on Constitution and Bylaws be reconsidered.

That report as you recollect was simply referred to the Reference Committee for consideration.

PRESIDENT DAVIS: May I just point out to Dr. Cleek who already realizes this perhaps that the vote taken today is contingent on a second vote on Saturday before it becomes effective, so all of report "C" including item eight will be referred to the Reference Committee where the pros and cons of the establishment of a Section on Emergency Medicine can be discussed and if the House is of such a will on Saturday not to approve it, then they can defeat item eight and it will not be effective.

I got the impression, Dr. Cleek, that you thought this was already adopted by the House of Delegates and I don't believe that's true.

DR. CLEEK: No, that is my complaint! The House of Delegates has not accepted the formation of a Section on Emergency Medicine and it's their prerogative to do so. They are being bypassed.

PRESIDENT DAVIS: If you have a vote on Saturday, you are not being bypassed.

DR. CLEEK: Well, if you want a Section on Emergency Medicine it's up to the will of this group to express it. If you want one before next year, you had best express it this afternoon so the change in the bylaws can take place, but you can't change bylaws without proper instruction.

I think if your Parliamentarian read the bylaws to you, there's one sentence there. I think it says other sections may be formed upon the recommendation of the Executive Council and approval of the House of Delegates and to my knowledge, this House has not approved a new section.

SPEAKER CARR: Is there any further discussion of the motion which is on the floor which is reconsideration of the report of the Committee on Constitution and Bylaws?

DR. JOYCE REYNOLDS [Forsyth County]: I'm Dr. Joyce Reynolds from Forsyth County!

I just want to ask is it proper for the delegates here to approve a Section on Emergency Medicine today?

SPEAKER CARR: There's nothing before the House that establishes the fact that they're even considering that at the moment.

DR. REYNOLDS: If it's not done today then if it is approved on Saturday, it will not really be established until next year, is that right?

SPEAKER CARR: If, in my interpretation, the proposed change in the bylaws which permits establishment or does establish a Section on Emergency Medicine, it becomes effective upon ratification by the House on Saturday of those bylaws.

SPEAKER CARR: The motion is before the House.

Is there any further discussion?

The motion is on the reconsideration of the report of the Committee on Constitution and Bylaws.

All in favor of reconsideration please say "aye"; all opposed "no."

It is the opinion of the Chair the "noes" have it and the report of the Committee on Constitution and Bylaws stands as it was and is referred to the Reference Committee for consideration.

Is there any New Business?

Dr. Davis wishes to make one announcement not related to the foregoing.

PRESIDENT DAVIS: Thank you, Mr. Speaker.

That's just to remind all those present that at four-thirty in this hall will be held an open membership meeting in which we are encouraging you as delegates and any other members of the Society who are not delegates to come and talk about anything you would like, ask questions about what the Society has done, should be doing and I encourage your participation.

SPEAKER CARR: We will now declare this afternoon's session adjourned.

[The meeting adjourned at three-fifty-nine o'clock.]

Abridged Minutes of the Meetings of the House of Delegates

ANNUAL MEETING—SECOND SESSION
SATURDAY AFTERNOON SESSION
May 8, 1976

The second meeting of the House of Delegates of the 122nd Annual Meeting of the North Carolina Medical Society convened at two-fifteen o'clock.

DR. JOHN L. McCAIN [First Vice President of the North Carolina Medical Society]: I'd like to call this session to order in the absence of our President and President-elect who are at the Auxiliary Luncheon. I will turn the meeting over to our Vice Speaker, Dr. Henry Carr.

VICE SPEAKER CARR: The first item of business is the report of Reference Committee I. But first we would like to get a report from the Credentials Committee.

DR. PAYNE: Mr. Chairman, we have 218 delegates registered and we have 120 in the auditorium and that gives us a quorum.

VICE SPEAKER CARR: I declare a quorum to be present. We are ready for business at this time.

Dr. Marshburn, Chairman of Reference Committee I, would you proceed with your report please.

REFERENCE COMMITTEE I

DR. E. THOMAS MARSHBURN, JR. [Chairman, Reference Committee I]: Reference Committee I submits the following report:

REPORT A

Report "A," Subject: Annual Budget Estimates for 1976.

The Reference Committee recommends approval of Report "A."

VICE SPEAKER CARR: Now, the floor of the House is open for consideration and disposition of Report "A."

Is there any further discussion on Report "A"?

If not, all those in favor of Report "A" please say "aye"; opposed "no." Report "A" is accepted, and approved.

REPORT B

DR. MARSHBURN: *Report "B."*

Subject: Relative Value Studies.

The Reference Committee recommends approval of Report "B."

VICE SPEAKER CARR: The floor of the House is now open for consideration of Report "B." Is there any discussion of Report "B"?

If not, all those in favor of Report "B" please say "aye"; opposed "no." Report "B" is approved.

REPORT C

DR. MARSHBURN: *Report "C."*

Subject: Proposed Changes in the Constitution and Bylaws.

The Reference Committee recommends approval of items two through seven of Report "C."

VICE SPEAKER CARR: The House is now ready to consider items two through seven of Report "C" which is the report of the Committee on Constitution and Bylaws.

These items can be considered individually or they can be considered collectively. We are ready for discussion and disposition of these items. Is there any discussion?

Hearing no discussion, those in favor of accepting and approving items two through seven in Report "C" please say "aye"; opposed "no."

They are accepted and approved.

DR. MARSHBURN: Mr. Speaker, *item 8 of Report "C."*

The Reference Committee recommends the approval of action taken by the Executive Council on February 1, 1976 which motion stated that "the North Carolina Medical Society approve the formation of a Section on Emergency Medicine."

The Reference Committee considered the bylaws change to be inappropriate at this time in item 8 and suggests it be referred back to the Committee on Constitution and Bylaws for its further consideration and action.

VICE SPEAKER CARR: The House is now ready for consideration and disposition of item 8 of Report "C."

DR. REYNOLDS: My name is Dr. Reynolds and I'm from Forsyth County.

I'd like to make a motion before the House of Delegates that they approve the formation of a Section on Emergency Medicine and further that they approve the changes in the bylaws as recommended by the Committee on Bylaws.

VICE SPEAKER CARR: Dr. Reynolds, the motion has been made that the report of the Reference Committee be approved. It had been seconded.

Your motion would have to be in the form of a substitute motion to that. Do you make such a substitute motion?

DR. REYNOLDS: Yes, I'd like to make that as a substitute motion.

VICE SPEAKER CARR: Is there a second to the substitute motion?

DR. OTIS B. MICHAEL [Buncombe County]: Second.

VICE SPEAKER CARR: Now, is there any discussion of this motion?

DR. GEORGE T. WOLFF [Guilford County]: Wolff from Guilford! I think it would be more appropriate, Mr. Speaker, if Dr. Reynolds would allow that this be split; if the House would approve the Executive Council's action first, then we could approve the bylaws, I think it would be in coordination with the Constitution and Bylaws better than it is now.

VICE SPEAKER CARR: This has been discussed and in making a combined motion like this we can get both things done at one time.

If Dr. Reynolds would agree to change her motion and could get her seconder to agree to this, this would be satisfactory. If not, the motion can be voted upon as submitted, unless there's a substitute motion to the substitute motion!

If there is no further discussion, we will vote on Dr. Reynolds' substitute motion.

All those in favor of Dr. Reynolds' substitute motion please say "aye"; opposed "no." I think we'll have the tellers take a count.

If the tellers are ready, all those in favor of Dr. Reynolds' motion would you please stand.

All those opposed, please stand.

The Chair rules that the motion passes.

SUPPLEMENTARY REPORT C

DR. MARSHBURN: *Supplementary Report "C."*

Subject: Proposed Changes in the Constitution and Bylaws.

The Reference Committee recommends approval of Supplementary Report "C."

VICE SPEAKER CARR: The floor of the House is now open for consideration and disposition of Supplementary Report "C." Is there any discussion?

All those in favor of approval of Supplementary Report "C" please say "aye"; opposed "no." The motion is carried.

REPORT D

DR. MARSHBURN: *Report "D."*

Subject: Add Immediate Past President to North Carolina Delegation to the American Medical Association Clinical and Annual Meetings.

The Reference Committee recommends approval of Report "D."

VICE SPEAKER CARR: We are now ready for consideration and disposition of Report "D." Is there further discussion of Report "D"?

Hearing none, all those in favor of report "D" please say "aye"; opposed "no." It is approved.

REPORT E

DR. MARSHBURN: *Report "E."*

Subject: Diagnostic Standards and Classification of Tuberculosis.

The Reference Committee recommends approval of Report "E."

REPORT H

DR. MARSHBURN: *Report "H."*

Subject: Authorization for Committee on Medical Education to make Final Accreditation Recommendations to the AMA for the Society.

The Reference Committee recommends approval of Report "H."

VICE SPEAKER CARR: Report "H" is before you for consideration and disposition. Is there any further discussion of Report "H"?

All those in favor of Report "H" please say "aye"; opposed "no." Report "H" is accepted and approved.

REPORT I

DR. MARSHBURN: *Report "I."*

Subject: Flu Immunization Program.

The Reference Committee recommends changing the report as follows:

Delete the last five lines and in keeping with the recommendation of the Coordinating Committee on Influenza, consisting of the ad hoc Committee on Influenza of the North Carolina Medical Society and the Medical Services Committee of the North Carolina Association of Local Health Directors, add the following:

(1) It is recommended that representatives of county medical societies and local health departments meet at an early date to plan for the mass swine influenza immunization program. Guidelines for these meetings are to be developed and made available through the Coordinating Committee. These guidelines will include contingency plans based upon availability of adequate vaccine supplies, potential resources for local distribution and administration and suggested informed consent and reporting procedures.

(2) Active participation by county medical societies with local health departments is vital for success in this preventive medicine endeavor.

(3) Local health departments are being requested to take the responsibility of setting up these meetings by early June with representatives from county medical societies.

The Reference Committee recommends the approval of Report "I" as modified.

VICE SPEAKER CARR: Now the floor of the House is ready to consider and dispose of Report "I."

In order to implement the recommendations or modifications of the Reference Committee, these changes will have to be made in the form of an amendment by substitution to the main report and we will consider the changes first.

The Chair is ready for a motion regarding the disposition of Report "I."

DR. BOND: I move we accept the changes.

DR. JACK HUGHES [Durham County]: Second.

VICE SPEAKER CARR: The motion has been made to accept the changes of the Reference Committee.

Is there any further discussion regarding this? If not, all those in favor of the changes please say "aye"; opposed "no."

Now the changes have been approved and accepted. We're now ready for a motion regarding the Report "I" as previously stated in the reports referred to the Reference Committee.

DR. DAVID STRATTON [Mecklenburg County]: I move we accept the report as amended.

[The motion was duly seconded from the floor.]

VICE SPEAKER CARR: Is there any discussion? If not, all those in favor please say "aye"; opposed "no." The report is accepted and approved.

RESOLUTION 1

DR. MARSHBURN: *Resolution No. 1:*

Subject: Change Name of Section on Otolaryngology to Section on Otolaryngology and Maxillofacial Surgery.

The Reference Committee recommends approval of Resolution No. 1.

VICE SPEAKER CARR: Resolution No. 1 is now before you for consideration and disposition. Is there any further discussion regarding Resolution No. 1?

All those in favor please say "aye"; opposed "no."

Resolution No. 1 is accepted and approved.

RESOLVED, that the North Carolina Medical Society rename the Section on Otolaryngology to the Section on Otolaryngology and Maxillofacial Surgery.

RESOLUTION 3

DR. MARSHBURN: *Resolution No. 3:*

Subject: Create Improved Communications Between Hospital Staffs and County Medical Societies and State Society.

The Reference Committee recommends changing the Resolution as follows:

RESOLVED, that when requested by a county medical society, the North Carolina Medical Society inform every member of the Society in an appropriate manner whenever there are attempts by the hospital administrator, the Joint Commission on Accreditation of Hospitals, or a federal agency to impose new regulations or controls over a hospital staff.

The Reference Committee recommends approval of Resolution No. 3 as modified.

VICE SPEAKER CARR: The House is now ready to consider Resolution No. 3 and make disposition of Resolution No. 3.

In order to do so, this is a substitute motion, or would have to be placed in the form of a substitute motion to replace the original Resolution No. 3, if you care to follow the recommendations of the Reference Committee.

It has been moved and seconded that the resolution No. 3

as modified be approved. Is there any further discussion of this resolution?

Hearing none, all those in favor of Resolution No. 3 as modified please say "aye"; opposed "no." Resolution No. 3 is approved.

One final item with regard to Reference Committee I, do I hear a motion that Reference Committee I's report be accepted, as modified?

It has been moved and seconded.

Is there any further discussion regarding Reference Committee I's report?

If not, all those in favor of accepting this report please say "aye"; opposed "no." The report is accepted.

Thank you, Dr. Marshburn, and your committee.

At this time we will turn the chair back over to Dr. Chalmers Carr.

SPEAKER CARR: I want to recognize as a guest of the House of Delegates — he's not a delegate himself — Dr. Archie Johnson who represents MEDPAC and also, as you know, is Assistant Secretary of the Department of Human Resources. The floor is yours!

REPORT ON N.C. MEDPAC

DR. ARCHIE T. JOHNSON: (Assistant Secretary, Department of Human Resources, State of North Carolina). Thank you, very much. I appreciate the opportunity to be here. I would like to take a brief minute to tell you a little bit about the activities of the MED-PAC for this past year.

There have been some changes. We do have a change in the Constitution and Bylaws that are published, for anyone who would like to see it and I won't go through those.

Basically, we have changed the membership of the Board from 24 members to 16 members. The membership is composed of one member from each congressional district, two auxiliary members and three at large members.

For those of you who are interested in the Board members and who to contact, the Board members are:

Dr. Ed Beddingfield, Wilson; Dr. Ken Cosgrove, Hendersonville; Dr. John Dees, Burgaw; Dr. James Davis, Durham; Dr. David Stratton, Charlotte; Dr. Shahane Taylor, a new member of the Board, Greensboro; Dr. Charles Holfman, Fayetteville; Dr. T. Reginald Harris, Shelby; Myself from Raleigh; Dr. David Nelson, Winston-Salem; Dr. Marshall Redding, Elizabeth City; Dr. Robert Shackelford, Mount Olive; Dr. John Watson, Oxford; And, Dr. David Bruton, Southern Pines.

Mrs. Edna Hoffman also is an Auxiliary member and she is from Fayetteville, and my wife, Betty Lou has just joined the Board also as the Chairman for the Auxiliary.

The new officers for this year:

I was re-elected as Chairman of MED-PAC for the coming year; Secretary-Treasurer will be Dr. John Dees; Vice-Chairman, Dr. David Nelson.

Under the change in the Constitution and Bylaws, we have three committees. We have a Candidates Evaluation Committee, Dr. Ed Beddingfield, Chairman.

The Political Action Committee, Dr. Charles Hoffman, Chairman.

And, the Membership Committee, Mrs. Edna Hoffman, Chairman.

We also at this morning's Board meeting voted to increase the dues for the coming year. As you know they had been $20 for regular membership. We voted to go to $40 and also for a family membership at $50. We did this for a number of reasons that I'd like to share with you.

First of all, there has been no increase in our dues since 1965. We have the lowest dues in the country as far as MED-PAC is concerned. We are becoming more and more involved in other races.

As you know, at one time we were mainly involved in congressional races, but we have become involved in state offices, in a number of state offices and in the legislative races and so we're becoming more and more involved in these types of things and we need the support from you.

I would urge each of you in the coming year, if you are not a sustaining member, please, if you are not a member become a member; if you're not a sustaining member please become a sustaining member at $100.

We are beginning to form what we call County-Pacs or at least to have a representative from each county who can tell you about the activities of MED-PAC and let you know how your money is being spent and get the input from each of you concerning what candidates you would like us to support and to let you know how your money is being spent.

So, we felt that the dues increase was necessary based on the reasons that I've indicated.

This is an election year. We definitely need you as members even though our membership is at an all-time high. We'd like to have a hundred per cent membership and we would certainly like to have all of you as sustaining members and our efforts in the coming year will be to communicate with you, to make sure that we're doing the things that you want us to do.

We look for your input; we welcome your input, and we look forward to working with you. Thank you, very much.

SPEAKER CARR: Thank you, very much Dr. Johnson. I'm sure the delegates are happy to hear your report.

Now, Dr. Fitz, if you as Chairman of Reference Committee II will give us your report item by item, we would appreciate it.

REFERENCE COMMITTEE II

DR. THOMAS E. FITZ [Chairman, Reference Committee II]: Mr. Speaker, Reference Committee II met as instructed and considerable light and very little heat was generated, but it comes up with the following report:

REPORT G

Report "G":

Subject: Endorsement of Concept on HMO's and Opposition to H.R. 7847.

Reference Committee II recommends approval of Report "G."

SPEAKER CARR: Report "G" bearing the recommendation of the Reference Committee is open for discussion and disposition.

Is there discussion?

If there is no discussion, all those in favor of Report "G" please say "aye"; opposed "no." It's approved!

REPORT J

DR. FITZ: *Report "J":*

Subject: Proposed Legislation Contained in the Report of the Professional Liability Insurance Study Commission.

Reference Committee II recommends approval of Report "J."

SPEAKER CARR: Report "J" is now open for discussion and disposition.

DR. STRATTON: I recommend its approval.

SPEAKER CARR: Dr. Stratton moves its approval—do you move that, or recommend it?

DR. STRATTON: Move.

SPEAKER CARR: It's moved and seconded. Is there discussion?

DR. EDWARD B. McKENZIE [Rowan-Davie County]: Mr. Speaker, I rise to support Report "J" in principle, but object to several hidden details in paragraph six of which these delegates cannot be aware.

At the meeting of Reference Committee II at two p.m. yesterday, the Chairman of that committee and the members of that committee and all delegates and visitors present were asked if they had read this proposed legislation.

None had. It is therefore reasonable to conclude that few delegates here on this floor can possibly be knowledgeable of some details that should not be endorsed.

The concept of periodic payments is excellent and I urge our incoming President to start work immediately to ensure this concept will be passed in satisfactory legislation in February 1977.

The actual proposed bill was bad for several reasons and these delegates should know.

The term "future damages" is used and defined and important throughout. It is ill-conceived and should be changed to on-going or continuing disability. This is important because the judge, no matter how honorable, cannot do better than give an uneducated guess as to how long a disability will continue.

Once the judge has determined that a disability or "future damages" lasts for perhaps up to thirty years it cannot be changed without another costly court action.

This becomes more important later in this bill which states that in case of death of the judgment creditor and the judgment creditor, gentlemen and ladies, is the person who has sued the doctor — in the case of death of the judgment creditor payment must continue to his estate.

Note that it does not state that that death may be due to malpractice or even related to malpractice.

Thus, the good judge can as honestly as possible using the very best life insurance statistics available, estimate that the judgment creditor or the person suing should live thirty years and therefore require you to pay the judgment creditor each month for thirty years and should he die, should he be struck down by lightning on the golf course, or drowned in a drunken fishing expedition or for any reason whatsoever, you are locked into paying his estate so much money, what the judge has decided, every month for thirty years.

Obviously, this is not justice and should not be this way. It's more important when you realize that people are paying this fee.

I further recommend that there should be no minimal lump sum payment prior to the initiation of periodic payments and in this bill it is proposed that periodic payments cannot stop until a lump sum payment of $100,000 has been made.

Now, this in effect kills the concept of periodic payments because a very high percentage of all settlements are under $100,000.

I further strongly object and I think your colleagues back home would want you to object to the fact that written into this bill is law establishing for the first time a contingency fee method of payment will hold in all cases of malpractice legislation.

We have been told in the past we should not oppose this, that this is justified because it's the poor man's entre into the court house.

Yet in this bill is a paragraph that writes it into law and this issue is not on the floor.

I recommend therefore the concept of Report "J" as it goes down to line 34 and again I hope that this body will not endorse the entire legislation which carries that portion.

DR. IRA M. HARDY [Section on Neurological Surgery]: The Legislative Study Commission on which I was your representative from the Medical Society spent tireless hours investigating and reviewing every aspect of medical malpractice in this state and I have to stand with the Commission's report as it came out and was officially approved by all members. I would hope that this would not be changed or amended in any way.

SPEAKER CARR: The parliamentary situation at the moment is that we are about to call for a vote on approval of Report "J."

There is no other motion pending, there's nothing tacked onto it at all now. Two delegates have spoken and that's the way it stands.

DR. McKENZIE: May I offer a substitute motion. I'm sure I do not want to reject this report entirely, but I only want to endorse the report up to line 34.

If you do not have this report before you it states that the Medical Society endorses all of the proposed legislation including the portion that I object to.

May I offer a substitute motion that this report "J" be endorsed or accepted with the exception of that portion after line 34.

SPEAKER CARR: The substitute motion is pertinent and is in order. Is there a second?

[The motion was duly seconded from the floor.]

The substitute motion has been made and seconded.

It alters the report by deletion of everything after line 34.

DR. FITZ: Line 34 if I'm reading correctly would be after item nine and beginning with the paragraph:

"It was the opinion . . ."

DR. McKENZIE: The substitute motion is to support items (1) through (9). I support all of those, gentlemen. What I object to is the statement that follows:

> Accordingly, the Committee on Legislation recommended to the Executive Council that the North Carolina Medical Society support the proposed legislation from the Professional Liability Insurance Study Commission.

Now, this includes the concept of "future damages" rather than the actual bill that's written includes the term "future damages."

It includes the paragraph wherein if the plaintiff or the legal term, "judgment creditor" dies for any reason you must continue paying that judgment creditor's estate. It includes the $100,000 lump sum payment before periodic payments can start. It includes the contingency fee, in essence, and I think all of you find that objectionable.

For that reason, I urge that you support everything in concept here but we cannot in good conscience accept the last statement.

SPEAKER CARR: The substitute motion to the Speaker indicates removal of the last four lines of the Report "J," and, it has been seconded. Is there further discussion of it?

DR. EDGAR T. BEDDINGFIELD, JR. [Wilson County]: I rise, Mr. Speaker, to argue against Dr. McKenzie's substitute motion and ask this House to go along with the recommendations of the Committee on Legislation, the Executive Council, the ad hoc malpractice committee of the State Society and the malpractice commission. All groups would have you endorse this as it is written.

I think Dr. McKenzie has a point in that there are nine cardinal points here which he favors and which I favor and yet we're told by the Committee on Legislation in its analysis, they said that the current legislation embodies the nine points that are reported to us.

However, this is a fragile, delicate situation at this weekend at this point in time. The legislature is in session, is considering this legislation. One house has passed one ver-

sion. Another house has passed another version and if this should come out of this House here, in Pinehurst, on Saturday afternoon, that the Medical Society votes against malpractice legislation, I can't think of a worse point in time for us to take that action.

We're about on the threshhold of getting a little relief by the legislation that is proposed and is about to be enacted. Let's don't pull the rug out from under our legislative friends who are supporting it for us at this time.

I would urge you to vote against the amendment by deletion and to accept the report as it is typed and presented to you and as recommended by your Reference Committee.

DR. RICHARD N. WRENN [Mecklenburg County]: It might be of some interest to the delegates that periodic payments is not actually in our bill at the moment, but I can only echo Dr. Beddingfield's sincere wish that this group defeat Dr. McKenzie's substitute motion.

Legislative matters are extremely delicate. We're on the verge and it would be very good if we could unanimously get in behind the Legislative Study Commission that Dr. Ira Hardy has participated in and put so much time and effort in.

DR. LARRY KILBY [Wilkes County]: Could we bother Dr. Hardy to respond to the points that were brought up today?

DR. HARDY: The $100,000 limit before periodic payments went in was felt to be, by the time you took out all the immediate medical expenses, the court costs involved in the suit, that you had just about taken care of what the immediate cost would be so the periodic payments were suggested only after $100,000.

We did not feel it was the prerogative of the Commission to tell the legal system, the judge, the jury or whatever, "Look, if you award this amount and that guy dies we don't want to have to pay any more!"

We didn't feel that that was the prerogative of the Commission. Our Commission felt its needs were trying to build in the periodic payment plan which would be equitable and fair primarily to people dispensing funds and patients receiving it and we felt what we came out with was the fairest answer.

Now, in terms of the contingency fee system again we've looked into the system which if there had been abuses shown to the Commission then I think action would have been taken, but there have been no abuses of the contingency fee system in the State of North Carolina and I don't think the Commission could appropriately say it's bad and we're going to do something about it when there have been no abuses in North Carolina as far as medical malpractice is concerned.

Is there further discussion of the substitute motion? If not, the question is on the substitute motion. All in favor of the substitute motion offered by Dr. McKenzie, please say "aye"; all opposed "no."

It is my opinion that the "noes" have it and the substitute motion is defeated.

The question is now still open on the original Report "J." Is there any further discussion on Report "J"?

If not, I'll call for the question. All in favor of approval of Report "J" please say "aye"; all opposed "no." The "ayes" have it and the report is approved.

RESOLUTION 2

DR. FITZ: Mr. Speaker, *Resolution No. 2:*

Subject: Request North Carolina Medical Society to Seek an Injunction Against Further Encroachment of UR Utilization Review Regulations.

Reference Committee II recommends rejection of Resolution No. 2.

SPEAKER CARR: You heard the report of the Reference Committee. The action is on Resolution No. 2. The floor is now open for discussion of Resolution No. 2 and disposition.

DR. JAMES B. GREENWOOD [Mecklenburg County]: I move we reject it.

SPEAKER CARR: It has been moved and seconded that resolution two be rejected. Is there further discussion?

Resolution No. 2 is rejected.

RESOLUTION 4

DR. FITZ: *Resolution No. 4:*

SUBJECT: North Carolina Medical Society Terminate Participation in HARP and Seek to have the Program Abolished.

Reference Committee II recommends rejection of Resolution No. 4.

SPEAKER CARR: Now Resolution No. 4 is the business of the House and it's open for discussion with your knowledge of the recommendation of the Reference Committee.

DELEGATE FROM THE FLOOR: I move we accept the report of the Reference Committee.

[The motion was duly seconded from the floor.]

SPEAKER CARR: It has been moved that we accept the report of the Reference Committee which rejects the resolution.

DR. BEDDINGFIELD: Point of order, Mr. Speaker! I would respectfully suggest to the Chair, that as I understand the parliamentary procedure, a resolution from a county medical society constitutes a main motion having been sent to this body by a county medical society.

I believe, sir, the way the question should be properly put following the report of the Reference Committee is this:

You say that Resolution No. 4 is before you, the Reference Committee recommends a vote in the negative and the way this group would accept a report of a Reference Committee would be by a negative vote. I do not believe you can ask for an affirmative vote of rejection under our parliamentary procedure. It's purely advisory! Ask your Parliamentarian!

PARLIAMENTARIAN SHAFFNER: It's exactly as I was trying to say, Mr. Speaker!

SPEAKER CARR: Thank you. Is there any further discussion of Resolution No. 4? If not, we're prepared to vote on it.

It comes to you with the recommendation of the Reference Committee that it be rejected.

All those in favor — a negative vote is opposed to the resolution. All those in favor of the resolution say "aye"; all those opposed to the resolution say "nay."

The "nays" have it, and the resolution is rejected.

RESOLUTION 5

DR. FITZ: Mr. Speaker, *Resolution No. 5:*

Subject: North Carolina Medical Society Endorse Preser Eight Area PSRO's.

A comment from the committee. It is our understandin that in the past the North Carolina Medical Society ha chosen not to take an official position. Since this matter wi be decided by statewide referendum of the individual phys cians, let it be incumbent upon those who favor one positio or the other to make an effort to educate their colleagues.

Therefore, Reference Committee II recommends that thi resolution be filed.

SPEAKER CARR: The resolution is before you with a ecommendation that it be filed. It has been moved and econded that it be filed. Any further discussion?

If not, I'll call for the vote. All in favor of filing the esolution please say "aye"; all opposed "no." The "ayes" ave it and the resolution is filed as suggested by the Refernce Committee.

RESOLUTION 6

DR. FITZ: *Resolution No. 6:*

Subject: Medical Examiner System.

Reference Committee II amends this resolution as follows:

RESOLVED, that the North Carolina Medical Society recommends and urges that the Medical Examiner System be adequately funded so as to provide all regions of the state with well-trained, sufficiently remunerated doctors of medicine to serve as Medical Examiners, and be it further,

RESOLVED, that copies of this resolution be forwarded to the Governor, the Lieutenant Governor, the Speaker of the House of Representatives the President Pro Tem of the Senate and the Chief Medical Examiner of the State of North Carolina.

Reference Committee II recommends approval of this mended Resolution No. 6.

SPEAKER CARR: You have heard the Reference Committee's report. The resolution is before you. The first matter before you is the amended resolution. Is there any discussion?

It is moved and seconded that the amendment be accepted, that the resolution in other words be amended. Is here further discussion?

If not, all those in favor of amending the resolution please say "aye"; all opposed "no." The "ayes" have it, the esolution has been adopted and approved as amended.

RESOLUTION 7

DR. FITZ: *Resolution No. 7:*

Subject: Reallocation of State Funds Now Set Aside for ECU for Medical Education Needs in the State.

Reference Committee II recommends rejection of Resolution No. 7.

SPEAKER CARR: Resolution No. 7 is before you with he recommendation of the Reference Committee. It's open or discussion. What is your pleasure?

DR. WILLIAM CLARKE [Catawba County]: Moved hat the resolution be adopted.

SPEAKER CARR: You're moving that the resolution be adopted as presented.

DR. ROBERT HODGESON [Perquimans County]: I move that it be rejected.

SPEAKER CARR: The motion that I now hear is the resolution be rejected. Is there a second?

[There followed dissension from the floor.]

The confusion arises from interpretation of which comes first, the resolution or the motion. The proper motion would be acceptance of the resolution.

DR. HODGESON: Mr. Speaker, I believe there was no second, so I'll withdraw my motion.

DR. BEDDINGFIELD: Point of order, Mr. Speaker!

SPEAKER CARR: Actually, Dr. Shaffner tells me that the resolution already is the main motion and it's ready for debate or vote.

DR. BEDDINGFIELD: Mr. Speaker, may I comment! As I understand it, as you have just clarified it, the main motion is the resolution as submitted by Buncombe County. The Reference Committee has recommended a negative vote. I rise to support the recommendation of the Reference Committee and urge a vote in the negaitve.

SPEAKER CARR: Is there any further discussion? All those in favor of the resolution please say "aye"; all opposed "no." The resolution is defeated.

RESOLUTION 8

DR. FITZ: *Resolution No. 8:*

Subject: Terminology of Principles in Malpractice Legislation.

Reference Committee II recommends resolution No. 8 be tabled.

SPEAKER CARR: Resolution No. 8 is before you, with the recommendation of the Reference Committee. The resolution is the motion.

The Reference Committee recommends tabling. They cannot move tabling but any one individual in the Reference Committee or in the House can move that it be tabled, or we can vote on the resolution.

DR. MICHAEL: Move the resolution be tabled.

SPEAKER CARR: The motion is made and seconded to Table. It permits no debate.

All those in favor of tabling the resolution, please say "aye"; all opposed "no." My opinion is that the "ayes" have it. Does anyone care to divide the House?

If not, it is tabled.

RESOLUTION 9

DR. FITZ: *Resolution No. 9:*

Subject: Legislation for Professional Malpractice.

Reference Committee II recommends rejection of Resolution No. 9.

SPEAKER CARR: The business before you is the adoption or rejection of Resolution No. 9.

Is there discussion of this? You have the report of the Reference Committee recommending rejection of Nine. Any further discussion?

All those in favor of the resolution please say "aye"; all opposed "no." The "noes" have it and the resolution is rejected.

RESOLUTION 10

DR. FITZ: *Resolution No. 10:*

Subject: Principles of *res ipsa loquitor.*

Reference Committee II recommends rejection of Resolution No. 10.

SPEAKER CARR: Resolution No. 10 is before you for consideration. It is the main motion. It is open for discussion. Does anyone wish to discuss it?

If not, all those in favor of resolution No. 10 please say "aye"; opposed "no." The "noes" have it and the resolution is rejected.

RESOLUTION 11

DR. FITZ: *Resolution No. 11:*

Subject: Contingency Fee Method of Financial Compensation.

There was considerable discussion regarding this resolution and rather than any action being taken at this time. Reference Committee II recommends that Resolution No. 11 be tabled and it is recommended to the Executive Council that continued consideration be given to the matter of contingency fees.

SPEAKER CARR: You have heard the report of the Reference Committee on this Resolution. It is open for discussion.

DELEGATE FROM THE FLOOR: I move that it be tabled.

[The motion was duly seconded from the floor.]

SPEAKER CARR: It is moved and seconded that it be tabled.

All in favor of tabling the resolution please say "aye"; all opposed "no." The resolution is tabled.

I will now entertain a motion to receive and approve the report of Reference Committee II, as amended and changed.

[The motion was duly made and seconded from the floor.]

All in favor please say "aye"; opposed "no." Thank you, Dr. Fitz and your committee for a job well done.

Please don't leave! We're not quite through for the afternoon. We have our distinguished guest with us and I'm now going to ask Dr. Jim Davis to introduce his distinguished guest!

DR. BEDDINGFIELD: Mr. Speaker, before we leave the Reference Committees, could I make one suggestion about the operation of the House in regard to Reference Committees?

I think that our method of handling resolutions in Reference Committees is a good one and is a mark of progress in this House.

However, since we now have two Reference Committees and as issues confront us we may have three or more Reference Committees, it would seem to me as a delegate who can only go to one Reference Committee that in the report of the Reference Committees perhaps there should be a one or two line explanation, a justification for the report or for the recommendation of the Reference Committee.

I believe that obviously since each delegate here can't hear the Reference Committee discuss each of the issues, he needs a crystallization of the thinking that led the Reference Committee to their recommendation and I believe that would lead to more meaningful votes by the delegates on the issues.

I do not make this as a motion, but as a consideration for the Speaker and Vice Speaker in charging the Reference Committee Chairmen with their responsibilities in the future.

SPEAKER CARR: Thank you, Dr. Beddingfield.

The point is well taken. They have heard it, but I will pass it on with my blessing too because it has been a little confusing and this might help to clarify the matter and I hope the future Speaker, Dr. Lymberis, and Vice Speaker Carr, will have this in mind when they lay their plans and perhaps even discuss it in the Executive Council.

Are there any further remarks? If not, we'll go right along with Dr. Davis, please.

PRESIDENT DAVIS: Thank you, Mr. Speaker.

I think this House of Delegates and indeed our entire Society is honored to have with us during the course of our meeting the President-Elect of the American Medical Association.

Well over a year ago I invited Dick Palmer of Alexandria to be our official guest at this meeting, realizing at that time he was an unofficial and unannounced candidate for President-elect.

I told him regardless of the outcome of the election, we wanted him to be the AMA representative at our meeting, simply because he's the type of man that many of us admire and that many of us would like to have to speak to you about the American Medical Assocaition.

Again, he accepted without hesitation realizing he had the support of the entire North Carolina Delegation and he had nothing at all to gain by agreeing to come.

Dr. Palmer, in my view, is a real doctor's doctor. He's not a professional health planner, administrator. He is an outstanding pathologist in his own right. His biography is included in your program so I will not belabor you with that again.

I would just like to ask you to join me in welcoming Dr. Richard Palmer, the President-elect of the AMA.

[Whereupon as President-elect Richard E. Palmer approached the podium, he was accorded a standing ovation.]

DR. RICHARD E. PALMER: [President-Elect, American Medical Association]. Thank you, Dr. Davis. Mr. Speaker, Delegates.

I see from the program that I will have a half-hour to address the General Sessions tomorrow so I will keep my remarks brief at this time.

I would first like to offer my heartiest thanks and my congratulations to this great State for instituting a suit against the federal government on the Health Planning and Resources Development Act that was passed last year.

(The remainder of Dr. Palmer's informal remarks will be submitted to the North Carolina Medical Journal for possible publication. At the conclusion of his presentation President-Elect Palmer was again accorded a standing ovation.)

SPEAKER CARR: I have two requests, one from the President and the other from the First Vice President, of points of personal privilege that I have agreed to and then we'll get on to New Business.

PRESIDENT DAVIS: Thank you, Mr. Speaker. I would like to present to the House of Delegates a distinguished visitor, the President of the Medical Society of South Carolina, Dr. Tucker Weston.

[Whereupon Dr. Tucker Weston, President of the South Carolina Medical Society, stood up to be recognized.] [Applause]

SPEAKER CARR: Dr. John McCain has requested the platform for a point of personal privilege.

DR. McCAIN: Mr. Speaker, there are two points I'd like to present — points of commendation:

In the Bicentennial Year of our country, we remember with gratitude that in times of great crisis, great men have come forward to lead us. The post of President of the North Carolina Medical Society is an awesome responsibility in any year.

But, in this year that began with innovations such as the regional report sessions that brought the Medical Society to the entire membership;

A year of recurrent liability insurance crises that included transient unavailability of professional liability insurance;

A year of waiting for a ruling by the United States Supreme Court;

A year that witnessed the formation of our own mutual liability insurance company;

A year that included a called meeting of the House of Delegates;

A year with a special legislative commission hearing and report;

A year busy with efforts to obtain legislative enactment;

A year truly fraught with great crises — and a great man did come forward to lead us.

We have been blessed with the leadership of a highly competent and dedicated President who has brought us through this year with our proud profession intact, in touch and ahead.

We commend you, Jim, for your signal service, for your inspiration and for your able direction.

And, we commend Margaret for sharing you with us when we needed you most.

This is approved by the Executive Council of the North Carolina Medical Society and I would like to move its adoption.

[The motion was severally seconded from the floor, as the entire assemblage accorded President Davis a standing ovation.]

SPEAKER CARR: It has been moved and seconded.

I suggest we adopt this by unanimous consent. If I hear no dissent, I will declare its adoption.

PRESIDENT DAVIS: Thank you.

DR. McCAIN: My second point of personal privilege as requested, a point of commendation also:

WHEREAS, the House of Delegates is the ultimate authority for actions of the North Carolina Medical Society, and

WHEREAS, appropriate leadership in the House of Delegates is vital, both to chart the course that medicine takes and also to preserve the democratic rights and privileges of each member of the North Carolina Medical Society, and

WHEREAS, Chalmers Carr has in an exemplary fashion served as the Speaker of the House of Delegates for six years, therefore, be it

RESOLVED, that the House of Delegates:

(1) Commend Chalmers Carr for the excellent service he has performed, and

(2) Express appreciation to him for the fine work he has performed both in this and in his long tenure of unselfish service to the medical profession in North Carolina.

And, I so move.

[Whereupon the motion was severally seconded from the floor as the entire assemblage accorded Dr. Chalmers Carr a standing ovation.]

VICE SPEAKER CARR: As Vice Speaker, I accept the motion and approval and hearing no dissenting votes, we will accept this by unanimous acclamation.

SPEAKER CARR: I thank you all.

There's one item that we never have finished because of the presence of our distinguished speaker, visitor and guest, Dr. Palmer.

Dr. Oelrich, Chairman of the Committee on President's Addresses, has a report that probably ought to be given at this time.

REFERENCE COMMITTEE ON PRESIDENT'S ADDRESSES

DR. AUGUST M. OELRICH [Chairman, Committee on President's Addresses]: Mr. Speaker, our committee has reviewed the addresses of our President, Dr. James E. Davis.

In his message he has given us a very concise and complete review of his year in the office, and he also presented us with a summary of continuing problems, as well as our future problems and an outline of what our future objectives should be.

I therefore move that the House of Delegates commend the President for his addresses and endorse them.

SPEAKER CARR: It has been moved and seconded that we commend the President. Any further discussion? Hearing none, I'll call for a vote. All those in favor say "aye"; opposed "no." The "ayes" have it.

We thank you, sir.

I've been requested — in fact, I requested the information myself. Mr. Hilliard has given it to me, that we have already exceeded last year's registration of members.

We have 662 members of the Society registered at the annual convocation and the total including wives, guests, exhibitors and so forth, 1151, as compared to the 1975 figures of 637 members and a total of 1207 persons.

Now the floor is open for New Business, but Dr. Davis has one point of Old Business before we bring up New Business.

PRESIDENT DAVIS: Mr. Speaker, on Thursday, in presenting the report of the Executive Council and presenting the reports I asked that these be accepted for consideration and inadvertently asked that the summaries which are published and in your packet also be accepted for consideration.

I should have asked approval of the summaries from which these reports as individual items were abstracted.

To clarify this matter, I move the summaries of the meetings of the Executive Council be approved, sir.

SPEAKER CARR: It has been moved and seconded. Any discussion?

Hearing none, I will call for a vote on approval of the summaries which is the motion.

All in favor say "aye"; all opposed "no." The "ayes" have it and your summaries are approved.

Is there any New Business?

If not, I declare the meeting adjourned, sine die.

[The meeting adjourned at three-fifty-five o'clock.]

General Sessions

FIRST GENERAL SESSION
May 7, 1976

Friday Morning Session

The Surgical Session of the 122nd Annual Meeting of the North Carolina Medical Society convened at nine-five o'clock in the Cardinal Ballroom of The Pinehurst Hotel, Pinehurst, North Carolina, Dr. James E. Davis, President of the North Carolina Medical Society, presiding.

PRESIDENT DAVIS: May I please ask you to take your seats in the well of the hall.

We will call to order the First General Session of the 122nd Annual Meeting of the North Carolina Medical Society.

I believe one of the by far most beneficial recent change in the format of our program has been the request to the medical schools to put on our programs on medicine and surgery on respective mornings.

As you know, these assignments are opportunities rotated among the medical schools.

It is my extreme pleasure now to turn the morning's session over to a long-time, much admired friend, Dr. Richard Myers who is the Professor and Chairman of the Department of Surgery at the Bowman Gray School of Medicine.

Dick has done a truly outstanding job after assuming the chairmanship of this Department and one hears very complimentary things about his department and the way it operates throughout our country. Dr. Myers!

DR. RICHARD T. MYERS [Professor and Chairman, Department of Surgery, Bowman Gray School of Medicine; Moderator of the Surgical Session.]: President Davis, Members and Guests:

I thank you very much for those very kind remarks. The Bowman Gray School of Medicine and the Department of Surgery are pleased to have the opportunity to present a program at the general sessions on this day of our State Society meeting.

It is fitting at the outset to have some opening remarks from the Dean of the Medical School and I now take great pleasure in presenting to you Dr. Richard Janeway, Dean of the Bowman Gray School of Medicine, who will make some opening remarks. Dr. Janeway!

DR. RICHARD JANEWAY [Dean, Bowman Gray School of Medicine, Winston-Salem, North Carolina]: Thank you, Dr. Myers.

President Davis, it's a pleasure to be here. I had the opportunity, I believe it was three years ago, when the State Society first decided to institute general scientific sessions to be given by the medical schools and our Department of Medicine had the opportunity to introduce the first time — at that time I gave the opening remarks, but they were scientific. They happened to be in an area where I had some competence.

Surgery is not one of those areas and therefore I will restrict — with the surgeons great thanks, I'm sure — restrict my remarks to operations at the Bowman Gray School of Medicine.

I thought it might be appropriate to detail a little bit of the history of our institution, not all of it, and bring us up to the current state of affairs at the Bowman Gray School of Medicine and ask a couple of questions about the future.

In 1939, when the decision was made in the Forest of Wake that the College of Basic Medical Sciences would change from a two year premed basic science program to a four year school and the decision was made to move to Winston-Salem in 1941.

Dr. Carpenter and Dr. Kitchen who was President of the College at that time, was told by Allan Gregg who was Medical Director of the Rockefeller Foundation, that they were faced with an impossible task.

They had $600,000 in funds from the estate of Bowman Gray and all conventional wisdom dictated it would take at that time at least $10 million to start a medical school.

He did not know the amount of faith and other abilities that were to be found in Wake Forest, Winston-Salem and its environment.

The entire faculty at that time was aware of the fact that for any organization to succeed, it must be a benefit and a service to the society to which it relates.

That has been one of the guiding principles of the Bowman Gray School of Medicine since its inception.

(The presentation which followed by Richard Janeway, M.D. and the papers on Surgical Session program were submitted to the *North Carolina Medical Journal* for possible publication.

The speakers and the title of their respective papers were as follows.)

SURGICAL SESSION

Department of Surgery, Bowman Gray School of Medicine — North Carolina Baptist Hospital Medical Center, Winston-Salem, North Carolina

MODERATOR: Richard T. Myers, M.D.,
Professor and Chairman, Department of Surgery

OPENING REMARKS
Richard Janeway, M.D., Dean Bowman Gray School of Medicine

SURGERY FOR OBSTRUCTIVE JAUNDICE IN INFANTS
Louis deS. Shaffner, M.D.

EXPERIENCES WITH TOTAL KNEE REPLACEMENT
George D. Rovere, M.D.

MODERN MANAGEMENT OF ABDOMINAL AORTIC ANEURYSMS
Frank R. Johnson, M.D.

REVIEW OF STAGING LAPAROTOMIES PERFORMED FOR LYMPHOMAS AT THE NORTH CAROLINA BAPTIST HOSPITAL
John Michael Sterchi, M.D.

MANAGEMENT OF PRE-MALIGNANT LESIONS OF THE CERVIX
Howard D. Homesley, M.D.

LESS RADICAL APPROACHES TO SOLITARY THYROID NODULES
Timothy C. Pennell, M.D.

DISCUSSION

BREAK — Coffee — compliments of NCSS-AAMA (Medical Assistants)

GASTRIC BYPASS FOR OBESITY
Jesse H. Meredith, M.D.

MANAGEMENT OF MINOR FACIAL TRAUMA
Julius A. Howell, M.D.
ULTRASONOGRAPHY OF THE PROSTATE AND BLADDER
Martin I. Resnick, M.D.
THE STATUS OF PACEMAKERS — 1976
Robert Cordell, M.D.
COMBINED USE OF "SUPER-PEEP"
(Positive end expiratory pressure) and "IMV" (Intermittent mandatory ventilation) IN THE TREATMENT OF POST-SURGICAL RESPIRATORY FAILURE
Robert L. Gibson, M.D.
RECENT ADVANCES IN CATARACT SURGERY
John Allen Stanley, M.D.
DISCUSSION

MODERATOR: And, now I think that time dictates that I should thank Dr. Richard Janeway for his fine participation in this program and my colleagues for their efforts to put on this very fine program and on behalf of each of the participants to thank the Section on Surgery of the Society and President "Jimmie" Davis, for the privilege of allowing the Bowman Gray School of Medicine to put on this program.

Now, I will turn the program over to Dr. Davis for some closing remarks. Thank you, very much.

PRESIDENT DAVIS: Dr. Myers, Dean Janeway, on behalf of a very attentive and a very grateful audience, I express our sincerest appreciation to you and to each of the participants for a very valuable, instructional course that you've given us this morning.

I would express our appreciation to the American Association of Medical Assistants for the coffee, the smiles and the hospitality they gave us during the break.

[The meeting adjourned at twelve-thirty o'clock.]

SECOND GENERAL SESSION
May 8, 1976

Saturday Morning Session

The Medical Session of the 122nd Annual Meeting of the North Carolina Medical Society convened at nine-ten o'clock, Dr. John L. McCain, First Vice President of the Medical Society, presiding.

CHAIRMAN McCAIN: The General Session of the North Carolina Medical Society will please come to order.

I'd like to welcome each of you to this second general session, the Medical Session to be conducted by the Department of Medicine of Duke University Medical Center.

The program this morning is extremely versatile with something of interest to everyone.

Chairing the Medical Session for Duke is Dr. James B. Wyngaarden, Frederick Haynes Professor and Chairman of the Department of Medicine at Duke.

Tobacco is one of Durham's and North Carolina's greatest exports. Jim Wyngaarden is one of Durham's and North Carolina's finest imports. We look forward to hearing from you and your Department, Jim Wyngaarden.

DR. JAMES B. WYNGAARDEN [Professor and Chairman Department of Medicine, Duke University Medical Center, Durham, N.C.]: John, thank you, very much.

To open the session, I'd like to call on Dr. Estes, currently Secretary of the State Society and beginning this evening, President-elect, who will make a few comments on behalf of the Duke administration.

DR. E. HARVEY ESTES, JR. [Secretary, North Carolina Medical Society]: Dr. Busse and Dr. Anlyan are tied up at Duke today and tonight. You may or may not know this, but this is graduation weekend at both UNC and Duke; Bowman Gray is next weekend.

So things are a bit busy at Durham and Chapel Hill. In addition to that, we are dedicating a new building and that's one of the items that Dr. Busse wanted me to talk about.

Duke has completed its new communications center and library which is named the Seeley-Mudd Building. The new communications center and library is being dedicated this weekend and so this is another one of the activities.

If you haven't seen this new building, we would urge you to come by and take a look. It's a showpiece.

The next item they wanted me to announce is that the new addition to Duke Hospital has now been started. This faces Erwin Road across the street from the Veterans' Administration Hospital.

It will be completed two and a half years hence and at the moment looks like a big hole in the ground, but it has been started.

The next item that they wanted me to announce is the Comprehensive Cancer Center is now in full swing and you will be hearing more about that today as announcements will be made regarding the initiation of the new information center which is available to you not only as professionals but also to lay people who have questions about cancer.

The Comprehensive Cancer Center is not for the purpose of bringing cancer patients to Duke Hospital, but for the purpose of helping cancer patients get what they need wherever they might be over the State.

The information center is being operated in close conjunction with and in cooperation with the State Medical Society and with the North Carolina Chapter of the American Cancer Society.

The next item on "Bud" Busse's list was the fact that we should comment on the fact that Duke has formed a formal affiliation with Fayetteville under the North Carolina AHEC program and Fayetteville and Duke have established a relationship which will mean that these two areas will be working together under the AHEC system so those hospitals in areas under Fayetteville's general surveillance in the AHEC Program will be relating to Duke.

The next item is the fact that the Family Medicine Program is in place at Duke and is this year up to 37 residents. This is a joint program between Duke and Watts Hospital with its model family practice along Broad Street near Watts Hospital.

Things are going quite well with that program. We have I think seven full-time faculty members now in the family medicine program and as I've mentioned, 37 residents next year.

Many people during this meeting have mentioned the fact that family medicine programs have been established for about three or four years and yet we still can't see family practitioners back in the rural areas in the State.

It takes about three or four years to fill the pipeline up, but I think with this year, the pipeline will be reasonably full and we should be turning out not only in the Duke program but in other programs in the State a few more family practitioners per year than in the past.

With these few general remarks, I will step aside and let Jim proceed with the program.

Welcome, and I think you will find that the program is a very good one. Thank you.

(The presentations which followed as papers on the Medical Session program were submitted to the *North Carolina Medical Journal* for possible publication.

The speakers and the title of their respective papers were as follows.)

MEDICAL SESSION

Department of Medicine, Duke University Medical Center, Durham

OPENING REMARKS

James B. Wyngaarden, M.D., Professor & Chairman, Department of Medicine, Duke University Medical Center, Durham

ULTRASOUND IN CARDIAC DIAGNOSIS

Joseph R. Kisslo, M.D., Assistant Professor of Medicine

DIAGNOSING HYPERCALCEMIC STATES

Marc K. Drezner, M.D., Associate in Medicine

THYROID EVALUATION TESTS

Frank A. Neelon, M.D., Assistant Professor of Medicine

THE HEARTBREAK OF PSORIASIS

John P. Tindall, M.D., Professor of Medicine

DISCUSSION

BREAK — coffee compliments of NCSS-AAMA (Medical Assistants)

IS THERE A PLACE FOR MECHANICAL VENTILATION IN CHRONIC LUNG DISEASE?

Byron D. McLees, M.D., Assistant Professor of Medicine

WHEN and WHY to STUDY the HIS BUNDLE

Galen S. Wagner, M.D., Assistant Professor of Medicine

INFLAMMATORY BOWEL DISEASE

John T. Garbutt, M.D., Assistant Professor of Medicine

DISSOLUTION OF CHOLESTEROL GALLSTONES

Malcolm P. Tyor, M.D., Professor of Medicine and Chief, Gastroenterology Division

DISCUSSION

MODERATOR: Since we are about the end of our time, I'll turn it back to Dr. McCain at this point and if there are questions of the speakers, perhaps you can find them after the meeting.

I want to thank the speakers on behalf of the Department of Medicine.

CHAIRMAN McCAIN: Thank you, Jim.

We are deeply indebted to you and the members of the Department of Medicine for the fine program of relevant, practical value that we have received.

For each patient that I leave in the hospital when I come to a hospital like this, I tell them that I am going to hear authorities tell about new discoveries, to learn more information that I can bring home and put to work for their benefit.

Certainly, this meeting today allows me to do this. We are deeply indebted to you.

We have been told that the AMA does care! We have evidence of this by the presence of Dr. Richard Palmer, President-elect of the AMA, for the entire three-day duration of this meeting.

His participation here is divided into two parts: your time and his time. Your time, to go up and introduce yourself to him and ask any questions that you might have of the AMA. Let them know what you think, eyeball to eyeball. And, then his time. His address tomorrow during the General Session, you will want to hear what he has to say, it begins at eleven o'clock, immediately preceding the remarks of President Jesse Caldwell.

It is with great pleasure now that I present to you one who does and always will mean much to the practice of medicine in the State of North Carolina.

A native of Goldsboro, a long-time resident of Durham, the patient's beloved physician, the physician's esteemed colleague, our able and dedicated leader.

The man who has led us with foresight and courage. The man who is leading us through the malpractice morass. The man who has kept our vision keen and in perspective and has bolstered our courage when we needed it most and resolve in a time of great trauma for our profession.

I present to you with pride and gratitude, for the purpose of presenting his Annual Address, Dr. James E. Davis, President of the North Carolina Medical Society.

[Whereupon the entire assemblage then accorded President Davis a standing ovation.]

PRESIDENT DAVIS: Dr. McCain, Dr. and Mrs. Palmer, Dr. Weston, Members and Guests:

I think it was Bishop Fulton Sheen who once said that if they applaud before you start, that's a sign of faith. If they applaud while you're talking, that's a sign of hope. If they applaud when you get through, that's a sign of charity!

I certainly appreciate your faith and I promise to be fairly brief and charitable.

[President Davis' "President's Farewell was published in the *North Carolina Medical Journal*, August, 1976, Vol. 37, No. 8. Following presentation of his address, President Davis was again accorded a standing ovation.]

CHAIRMAN McCAIN: Thank you, Jim, for everything. I want to recognize Margaret in the back of the room and express our appreciation to her for letting us have Jim this year. Margaret, would you please stand!

[Whereupon Mrs. James Davis stood up to be recognized.]

I would now like to call upon Dr. George Gilbert for a special presentation.

DR. GEORGE G. GILBERT: For the purposes of this presentation, I'm wearing another hat.

I'm speaking as a long-time member of the North Carolina Association of Professions, of which many of you are familiar. I'm sure there are still too few, however.

This organization is made up of MDs from our Society, dentists, pharmacists, the engineers, architects and veterinarians of the state.

So far, we have failed in wooing the lawyers! In any event, they are welcome to join as individuals.

This organization has done a great deal for the state, but for the purposes of this presentation, it may be anticlimactic and it may be taking "coals to Newcastle," but I have an award here for Jim Davis from the Association of Professions.

Dr. Davis I hope you will take this and be proud of it because you've earned it along with everything else.

[Whereupon Dr. Gilbert then presented the Certificate of Appreciation to President Davis.]

CHAIRMAN McCAIN: Thank you, George.

The North Carolina Medical Society is a grass root based organization. Come watch democracy at work!

Attend the House of Delegates this afternoon at two p.m. The reports of the Reference Committees are at the back of the room, available at the end of this session.

[The meeting adjourned, following the drawing of prizes, at twelve-forty-five o'clock.]

THIRD GENERAL SESSION
May 9, 1976

Sunday Morning Session

The Socio-Economic Session of the 122nd Annual Meeting of the North Carolina Medical Society convened at nine-fifteen o'clock, Dr. T. Reginald Harris, Second Vice President of the Medical Society, presiding.

CHAIRMAN HARRIS: Good morning, ladies and gentlemen.

I'd like to now convene our Third General Session of this our 122nd Annual Meeting.

Our first item this morning is the Conjoint Session with the North Carolina Division of Health Services.

Jake Koomen is well known to all of you. Before this session, I asked him how long he had been our State Health Director because he had been the State Health Director as long as I had been aware we had a Health Director in my North Carolina practice.

He has been with us for 22 years and this is his 11th year as State Health Director. Dr. Koomen!

[Whereupon Dr. Jacob Koomen, Director, North Carolina Division of Health Services, then gave his prepared presentation which has been submitted to the *North Carolina Medical Journal* for possible publication.]

Thank you, Dr. Koomen. This has been one of the best Conjoint Sessions I've attended and we appreciate your being here with us. Although you gave us a long history of your work in the dental health area, I think it has escalated to the point that many of us across the state are much more acutely aware of this in the past two years.

Certainly, I have been and those people with children or exposed to children cannot help but be aware of the work all over North Carolina.

(The presentations which followed as papers on the Socio-Economic Session program of the Third General Session were submitted to the *North Carolina Medical Journal* for possible publication.

The speakers and the title of their respective papers were as follows.)

SOCIO-ECONOMIC SESSION

PROPOSALS OF THE LEGISLATIVE STUDY COMMISSION ON MEDICAL MALPRACTICE PROBLEMS
Ira M. Hardy, II, M.D., Greenville

Q & A SESSION

ACTIVITIES OF THE OFFICE OF STATE RURAL HEALTH SERVICES
James D. Bernstein, Chief, Rural Health Section, Division of Health Facilities, Department of Human Resources, Raleigh

CHAIRMAN HARRIS: I would now like to recognize our, since last night, our immediate Past President, Dr. James E. Davis. Jim!

DR. DAVIS: Mr. Chairman, the North Carolina Medical Society is particularly honored to have had with us this weekend the President-elect of the American Medical Association, a true friend of our Society, of the AMA Delegation from North Carolina.

Dr. Palmer, like all of us, I think, is a practicing physician. He is a pathologist of national reputation. He lives and works, or did before the AMA has prevented it, in Alexandria, Virginia. He has been a member of the Board of Trustees of the AMA since 1969, has served as Chairman of the Board of Trustees and is currently the President-elect and will assume the Presidency of the American Medical Association in Dallas next month.

It is an unusual and special privilege for me to present to you Dr. Richard Palmer.

[Whereupon the entire assemblage then accorded Dr. Palmer a standing ovation.]

DR. RICHARD E. PALMER: [President-elect, American Medical Association]: Dr. Davis, Members of the North Carolina Medical Society and Guests:

(Dr. Palmer's remarks submitted to the *North Carolina Medical Journal* for possible publication.)

I do appreciate this opportunity to be with you. You've had a splendid meeting. I've enjoyed it and my wife has enjoyed it too. God bless you and God speed!

(Whereupon the entire assemblage then again accorded AMA President-elect Palmer a standing ovation.)

CHAIRMAN HARRIS: Thank you, Dr. Palmer.

We appreciate your being here today and the extensive time you have been with us at this meeting as well as your participation in our entire sessions. Thank you so much.

Now, indeed, it's a personal privilege for me to now present your President, Jesse Caldwell.

We know Jesse as an honest, sincere and thoughtful person, who is a competent, compassionate and complete physician. Jesse!

[Whereupon the entire assemblage then accorded President Caldwell a standing ovation.]

PRESIDENT CALDWELL: Mr. Chairman, Dr. and Mrs. Palmer, Members of the Society and Guests:

[Whereupon President Caldwell then presented his Presidential Address which was printed in the *North Carolina Medical Journal* in 1976. Following his address he was again accorded a standing ovation.]

CHAIRMAN HARRIS: Thank you, very much. I certainly enjoyed that.

You can see that the North Carolina Medical Society is going to be just as busy this year as it has been this past year. Thank you, so much, Dr. Caldwell.

That concludes the official program of the 122nd Annual Meeting of the North Carolina Medical Society.

[The meeting adjourned sine die at eleven-fifty-five o'clock.]

President's Dinner

SATURDAY EVENING SESSION
May 8, 1976

The President's Dinner of the 122nd Annual Meeting of the North Carolina Medical Society convened at eight-five o'clock, in the Main Dining Room of The Pinehurst Hotel, Pinehurst, North Carolina.

DR. DAVID G. WELTON, MASTER OF CEREMONIES: [Past President; AMA Delegate of the North Carolina Medical Society]: May we come to order, please. Please remain seated while Past President Frank Reynolds gives the invocation.

DR. FRANK R. REYNOLDS [Immediate Past President of the North Carolina Medical Society]: Our Father, we thank Thee for the privilege of gathering here once again. We ask Thy guidance and blessings on our deliberations and actions. Bless our leaders and guide them in the year to come.

Bless this food to the nourishment of our bodies and make us ever mindful of the needs of others. We ask in Christ's name,

Amen.

[Whereupon the banquet followed, the meeting reconvening at nine-fifteen o'clock.]

DR. WELTON [Master of Ceremonies]: Is everybody satisfactorily served? Then can I have your attention, please?

A hearty welcome to the Annual Family Dinner of the North Carolina Medical Society. What a remarkable great family you are and a splendid gathering? I can't remember when we've had the whole place full and a sign out in front saying, "Private Party!"

Well, for three days, we've had greetings and meetings, reports, resolutions, and reunions, debates, discussions and dinners, and I think some played golf and tennis.

Now, it's time for relaxation, entertainment and recognition, so sit back and enjoy it.

It is my pleasure first to present to you the distinguished guests seated at the platform.

We're going to start on my far right, and give each one a big hand, don't hold your applause. Let 'em have it now! Further, however, it's good exercise, elapping!

First on my far right, Charles and Shirley Herring! As you know, she served as President of the Auxiliary this year.

Next, we have Marguerite and Frank Reynolds. Frank completed his term as President of this Society just one year ago.

Next, Margaret and Jim Davis who is completing his term as President tonight.

Next, my beloved wife, Elizabeth! Who makes me a very lucky fellow!

Now, I'll direct your attention to the other end of the table. I hate to tell anybody to go to the left, so I'm going to the other end of the table!

Now, we have a special friend from South Carolina, the immediate Past President of the South Carolina Medical Association, Dr. and Mrs. Tucker Weston. Jane and Louis Shaffner!

Louis completed his term as President five years ago. He's now completing his term as Chairman of the Mediation Committee, but he has agreed to continue to serve as Chairman of the Committee on Constitution and Bylaws and we thank you.

Mary Lou and Richard Palmer of Alexandria, Virginia, the President-elect of the American Medical Association.

Martha and Jesse Caldwell, soon to be baptized — with all of you as godparents!

Now, there are lots of other distinguished people in the room and I would like to introduce all of them, but our time is limited. There are some good things coming very soon.

I would like to present two. Our next President-elect, Dr. Harvey Estes, and his lovely wife.

And, we are honored to have with us tonight, the new Secretary of the Department of Human Resources of the State of North Carolina, Secretary and Mrs. Phil Kirk!

(As the Master of Ceremonies introduced each person, they stood to be recognized and were applauded by the audience at the time of their introduction.)

Now, tonight, at the invitation of President Jim Davis, we have a great musical group for you. They are the celebrated Barbara Berry Singers who have performed from New York to Miami. They come to us this evening fresh from a stunningly successful performance before the Auxiliary this noon. So, please help me welcome the Barbara Berry Singers!

[Whereupon the Barbara Berry Singers then sang a medley of songs.] [Applause]

Thank you, very much, all of the Barbara Berry Singers for that delightful, delicious and harmonious presentation. Don't forget, they will be with us a little bit later in the ballroom.

Well, folks, the main reason we're gathered here is to honor our fearless, tireless, intrepid leader. He who has led us skilfully through the labyrinth of liability, to the land of legislative lullabies!

Through many committee and council agendas and numerous other meetings scattered far and wide, where he has represented us effectively.

Throughout this stressful, eventful year, he has maintained a remarkable equanimity so as we brush up our Shakespeare, we can say, "Now is the winter of our discontent made glorious summer by this son of Durham!"

[Laughter] [Applause] [Cheers]

Our President, Jim Davis!

[Whereupon as President Davis approached the lectern the entire assemblage accorded him a standing ovation.]

PRESIDENT DAVIS: Oh, my! Thank you so very, very much.

I asked for just a few seconds to thank all of you once again for the magnificent support and cooperation you have given us this year. We've had tremendous help from everyone here and I want everyone to fully realize how very much we appreciate it.

Margaret and I are delighted to have with us this evening our three sons. I want all of you to meet them at this time.

And, I'll ask first, Jim to stand up, our oldest son!

And, Ken!

And, George, our third son!

We have here also, which delights us very much, our mother, Mrs. Kenneth Royal of Raleigh.

And, our long-term and special friends, Ann and Ross McElwee of Charlotte!

[Each family member and each special guest stood as he

or she was introduced, with applause following their respective recognition.]

Okay. Now, last year, my good friend, Frank Reynolds, very thoughtfully after he swore me in gave me some of his Rolaids — [laughter] — and I thought that was very nice of Frank and I sure wish I had had time sometime during the year to take 'em!

I understand the next nice thing he's going to do for us is give them to the Mediation Committee to worry with!

But, Frank has been a different man this year. He has been terribly relaxed and happy, [laughter] — smiling all the time! I understand, at times, in Wilmington he has been mistaken for Jimmy Carter!

[Laughter] [Applause]

But after giving it a lot of thought, I've decided I like the old Frank best, so I've got a little gift for Frank to see if we can't pep him up and I'd like to return the favor of last year and ask Frank to please take these No-Doz and stay awake for awhile!

[Whereupon President Davis then handed the bottle of pills to Dr. Reynolds.] [Applause] [Laughter]

Another special friend I've gotten to know this year I'd like to pay special recognition to and that's Bill Hilliard, our Executive Director.

[Applause]

Everybody knows what a great person Bill Hilliard is and what a good job he does for the Medical Society, but I think it takes a term of office as President to really understand that.

Bill is always helpful and he has the knack of being able to let you think that you're running something! [Laughter]

It's amazing. You go to Raleigh and you sit down and talk over some of the problems with Bill and decide what we're going to do and on the way home, you get to thinking about them and you say, "Yes, I believe that's the right thing to do. Bill sure had a great idea, didn't he?" [Laughter]

And, the worse part of this job as I see it is that he has to start all over every year! [Laughter]

He's got a different character, a different personality to live with and to adapt to and to lead through the trials and tribulations of the presidency.

So, I'd just like to recognize shepherd ability, his ability to get almost anybody through this job and give Bill something he'll never be able to use — [Whereupon President Davis then reached behind the podium and displayed a shepherd's crook to the audience.] [Laughter] — but I hope we will remember how much we appreciate his sheperding us through this year! Bill, come on up!

[Whereupon Mr. William N. Hilliard, Executive Director of the Medical Society, then came forward to accept the shepherd's crook.] [Applause]

Bill, thank you, very much. We appreciate it.

PRESIDENT DAVIS: And, remembering Frank Reynolds' kindnesses to me last year, I thought I would try to find something that might be helpful to Jesse Caldwell in the coming year.

I checked some figures before I left home because I remembered when Louis Shaffner was President he got up and told us how many miles he'd traveled and how many telephone calls and things of that sort.

I can't document that, but we did find out that I was away from Durham 146 days out of the year and I certainly realize that I've learned to love North Carolina more than I used to.

So, Jesse, come up here just a minute and let me give you a couple of gifts.

[Whereupon Dr. Caldwell then approached the lectern as requested.]

The first one of them is called "The North Carolina Gazeteer." It tells you about every nook and cranny in North Carolina because when you drive around looking at them, you can read about it and find out what they are! [Laughter]

[Whereupon President Davis then presented the Gazeteer to Dr. Caldwell.] [Applause]

DR. JESSE CALDWELL: Thank you, very much.

PRESIDENT DAVIS: And, then when you do get home and find out that there are just an awful lot of letters to dictate, I'd like to give you this long cord that you can plug into your dictaphone so you can dictate from any place in your office while you're seeing patients! [Laughter]

[Whereupon President Davis then presented the extension cord to Dr. Caldwell.] [Applause]

Then, when you get to stay at home and you fianlly get the correspondence dictated and you get to see a few patients, it's late in the evening and you think everything is done and your secretary brings you a long list of about twelve doctors' names and she says, "These want you to call back right away!"

So you soon learn that your best friend is what the Medical Society will give you, called a credit card! And, you'll find that they're your favorite numbers and with them that you can call anywhere in the world. I want you to keep this card up high so you can always remember those numbers!

[Whereupon President Davis then presented to Dr. Caldwell a gigantic reproduction of the telephone credit card.] [Laughter]

And, just in case you get tempted, the bottom line says, "For calls back to the United States see reverse," so we've got that blank because we don't want you to get too far away from us! [Laughter] [Applause]

DR. CALDWELL: Thank you, Jim, and I'll use it!

PRESIDENT DAVIS: And, now I'd like to recognize Liz Kanof for a presentation. Liz, of course, is an outstanding dermatologist in Raleigh and is Chairman of the Section on Dermatology. Liz!

DR. ELIZABETH P. KANOF [Chairman of the Section on Dermatology, North Carolina Medical Society]: Ladies and Gentlemen; Officers and District Councilors:

On behalf of all of our members, we wish to thank the Medical Society staff for the superlative job that they have done this past year.

Two hundred and fifty of us faced with the sudden loss of our malpractice insurance last October, experienced one of the most traumatic episodes of our professional lives.

We descended upon Bill Hilliard like a swarm of agitated bees.

In the trying weeks and months that followed, our needs were met with unprecedented energy, resourcefulness dedication and ability.

This effort rescued the beleaguered two hundred and helped infinitely to spare the majority a similar crisis. The citizens of North Carolina will probably never appreciate the critical role they played, but we will always be grateful to each and every one of them.

I like to think of the staff seated in the middle of all this finery of this banquet of a hand tooled chain of the finest quality. As each indispensable link is introduced and receives a gift as a gesture of our appreciation, please join me in saying thank you for everything. I'll begin with the clerical staff if they'll please come forward.

Mrs. Linda Blanton!

Mrs. Jackie Cutrell!

Mrs. Deanna Godwin!

Mrs. Martha Goodson!

Mrs. Lucy Gross!

Mrs. Katherine Moore!

Miss Lou Narron!

Mrs. Ginny Nichols!

Now, we come to some other very special people.

Next, our graphics technician, Bill Ennis!

Field Representative, Mr. Dan Finch!

Dan is a relative newcomer to the staff, but somehow managed to survive his initiation!

Field Representative, Mr. Michael Cates!

A very special person, Director of Governmental Affairs, Mr. Stephen C. Morrisette!

Director of Field Service, Mr. Gene Lane Sauls!

Controller, Mr. Garland R. Pace!

[Each staff member came forward as introduced, to accept a gift and was applauded by the audience.]

Please note that all of these people are wearing a flower on their shoulder. We hope during the evening you'll have a chance to talk with them all individually.

Now, the woman of the day gets her chance. One of the most outstanding administrators, incredibly well organized, a wonderful human being, our Assistant to the Executive Director, the person who has made sure that all of these conventions will go off without any problems and has provided a most educational and happy experience for all of us — Mrs. LaRue A. King!

[Whereupon Mrs. LaRue A. King came forward to accept the gift, and was accorded a standing ovation.]

Dr. Davis expressed his feelings about Mr. Hilliard better than I can, but for all the M.D.'s who look up to him with the utmost respect and affection, we also have our gift for Mr. William Hilliard.

[Whereupon Mr. Hilliard came forward to accept the gift, and was accorded a standing ovation.]

At this point, I'm expected to sit down!

However, in designing the necklace, I decided it needed a blue sapphire. This was very hard on a state fan. It took me a long time to give up the ruby!

But, I finally yielded just this one time to the sapphire blue in honor of his eyes, eyes which saw the problem as it really was and saw to it that a solution would be given to it. Dr. James Davis!

[Whereupon as President Davis came forward to accept the gift, he was accorded a standing ovation.]

MASTER OF CEREMONIES: Thank you so much, Liz, for that very thoughtful gesture.

The next man on our program is our Past President from Winston-Salem, and is the eminent keeper of the C&B's, Lous Shaffner! He is also a member of our delegation to the AMA.

DR. SHAFFNER: Thank you, Dr. Welton. Ladies and Gentlemen:

Each year, the North Carolina Medical Society presents to the retiring President the diamond jeweled pin as a token of its appreciation for his year of service and leadership.

I don't really know when or how this practice started, but I do know that every Past President guards his pin carefully and he wears it proudly.

It is not only a reminder of a year of work, but also is symbolic of the profession of which we are privileged to be a part and it's symbolic of an association in which we are proud to be a member.

Jim, I could present this, you know, by giving your biography, saying you were born in Goldsboro, you went to UNC, you went to the University of Pennsylvania, you went home and married the girl next door and I could list your previous positions of leadership which indicates the confidence your friends have in you — such as a trustee on the Blue Cross and Blue Shield, Past President of the Board of Medical Examiners, Past President of Durham-Orange Medical Society, etcetera and I could list the surgical associations you're in indicating your professional competence, and I could list the previous service you have given to the Medical Society, as Speaker of the House and already now a delegate to the AMA, and I could list your accomplishments this year, but you've already done that! [Laughter]

And, it has already been alluded to tonight, but really what I want to say is I don't see it as anything but providence that a Nominating Committee two and half years ago could put your name up for President-elect and have you be the President that we needed, in the time we needed you, this year. [Applause]

Now, when you wear this pin, you may have many thoughts but let one of them be that this Society is grateful to you for your unselfish service and devotion to duty, and owes its present strength and prestige in the eyes of the public, as well of course to our own members, to your great inspiration and innovative leadership.

In short, as one of our members said to me tonight, you've been a cool cat in a turbulent year! [Laughter] Jim it is an honor for me in behalf of the Society to present to you the President's Jewel.

Jim, would you come up here please, and Margaret, would you come forward with Jim and pin this jewel upon him for us.

[Whereupon Dr. and Mrs. Davis came to the lectern and while Mrs. Davis was pinning the President's Jewel onto her husband, the entire assemblage accorded them a standing ovation.]

MASTER OF CEREMONIES: I now recognize President Davis who will now install our new Officers.

PRESIDENT DAVIS: Fine, would the newly elected Officers come forward.

Dr. Estes, President-elect; Dr. Warren, First Vice President; Dr. Grier, Second Vice President; Dr. Hughes, Secretary; Dr. Lymberis, Speaker; and Dr. Henry Carr, Vice-Speaker.

[Whereupon the newly elected officers came to the front of the lectern as requested.]

The Oath of Office as follows:

I SOLEMNLY SWEAR THAT I WILL CARRY OUT THE DUTIES OF MY OFFICE TO THE BEST OF MY ABILITY. I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES OF AMERICA AND THE CONSTITUTION AND BYLAWS OF THE NORTH CAROLINA MEDICAL SOCIETY AT ALL TIMES. I SHALL CHAMPION THE CAUSE OF FREEDOM IN MEDICAL PRACTICE AND FREEDOM FOR ALL OF MY FELLOW AMERICANS.

What say ye?

[Whereupon the newly elected Officers cried, "I do" in unison.]

You are now installed! [Applause]

And, now, a very pleasant moment.

Dr. Caldwell, will you please join me at the podium?

[Whereupon Dr. Caldwell came and stood beside President Davis as requested.]

So I can read this to you, Jesse!

I, JESSE CALDWELL, SOLEMNLY SWEAR THAT I SHALL CARRY OUT THE DUTIES OF THE OFFICE OF PRESIDENT OF THE NORTH CAROLINA MEDICAL SOCIETY TO THE BEST OF MY ABILITY. I SHALL STRIVE CONSTANTLY TO MAINTAIN THE ETHICS OF THE MEDICAL PROFESSION AND PRO-

MOTE THE PUBLIC HEALTH AND WELFARE. I SHALL DEDICATE MYSELF AND MY OFFICE TO IMPROVING THE HEALTH STANDARDS OF THE AMERICAN PEOPLE AND TO THE TASK OF BRINGING INCREASINGLY IMPROVED MEDICAL CARE WITHIN THE REACH OF EVERY CITIZEN.

I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES AND THE CONSTITUTION AND BYLAWS OF THE NORTH CAROLINA MEDICAL SOCIETY AT ALL TIMES. I SHALL CHAMPION THE CAUSE OF FREEDOM IN MEDICAL PRACTICE AND FREEDOM FOR ALL MY FELLOW AMERICANS.

I DO SOLEMNLY SWEAR THAT I WILL DISCHARGE THE DUTIES OF THE OFFICE TO THE BEST OF MY ABILITY, SO HELP ME GOD.

PRESIDENT CALDWELL: I do!

DR. DAVIS: Your new President!

[Whereupon the entire assemblage then accorded President Caldwell a standing ovation.]

PRESIDENT CALDWELL: Thank you, ladies and gentlemen.

Taking the Oath of Office and accepting the honor and responsibility as your presiding officer for the next year is a humbling experience.

I hope that I will be fortunate enough to have good health and mobility to do a decent job for you. I'll have more on this tomorrow!

Several years ago, a resolution came from Pitt County to the House of Delegates which if approved would pay the President of the Medical Society $25,000 a year salary.

This resolution was referred to a Reference Committee of which I was the Chairman. There was much consideration and discussion that afternoon and our committee, by what I thought was a deft parliamentary maneuver, essentially killed the resolution!

[Laughter]

Now, Mr. Speaker, if it's in order — [laughter] — I wish to move that we immediately reconsider the motion of those brilliant members from Pitt County!

[Laughter] [Cheers] [Applause]

One of the nice things about this occasion is the chance to have one's family together with you.

You've already met my wife, Martha, the official head of our family!

I would like you to meet my mother Mrs. Arthur Watrous from Cramerton, who in many ways has made it possible for me to enjoy a gratifying career in medicine.

And, now, our children. I'll take them in order as they came!

Jesse, and our lovely daughter-in-law, Nancy!

Charles and our lovely daughter-in-law, Merrily!

Lawson and his date, Debbie Courrier!

And, our jewel of the family, little Martha and her escort, Wade Allen!

[Each family member and guest stood as introduced and each was recognized by applause.]

And, now, just a brief something about them.

Jesse is a practicing attorney in Gastonia with the firm of Roberts, Caldwell and Planter.

Charles is with Touchberry Realty in Charlotte.

Lawson is a recent graduate of the university and Martha is a senior at the university in Greensboro.

And, now, Mr. Master of Ceremonies, that's all I have to say!

MASTER OF CEREMONIES: I must say, Jesse, that's quite an obstetrical feat to bring in four additional members to our family all in one stroke this evening! [Laughter]

We're very, very happy to have them.

Well, we've done it again! We've graduated a topnotch President and launched a new one. Jesse, you've got a topnotch crew and we wish you blue skies and smooth sailing throughout your term.

Before you get up, let me remind you that we will recess now, resume in the Cardinal Ballroom as soon as it is convenient for you, where there will be some dancing, and there will be a floor show of the Barbara Berry Singers promptly at ten-thirty.

This will be followed by more dancing.

We stand adjourned.

Thank you, very much.

[The meeting adjourned at ten-fifteen o'clock.]

MEDICAL AWARDS

Moore County Medical Society Medal

In 1927 the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society meeting each year. No one is eligible to receive this medal except Fellows of the Medical Society of the State of North Carolina in good standing; no invited guest is allowed to compete.

Each Section Chairman selected a committee of three to decide on the best paper in their section. The winning papers are then turned over to the State Committee, who select the one to receive the medal. The following award was made:

1971—Herbert J. Proctor, M.D., Chapel Hill
"POST TRAUMATIC PULMONARY INSUFFICIENCY"
(Section on Surgery, May 17, 1971)

1972—Donald C. Mullen, M.D., Charlotte
"CURRENT CONCEPTS IN THE MANAGEMENT OF ABDOMINAL AORTIC ANEURYSMS."
(Section on Surgery, May 23, 1972)

1973—Susan C. Dees, M.D., Durham
"THE ROLE OF GASTRO-ESOPHAGEAL REFLUX IN NOCTURNAL ASTHMA IN CHILDREN"
(Section on Pediatrics, May 22, 1973, Pinehurst)

1974—Herman Grossman, M.D., Durham
"PEDIATRIC UROLOGICAL ROENTGENOLOGY"
(Section on Pediatrics, May 20, 1974)

1975—No Awards given—(no papers received)

The George Marion Cooper Award

The Fellows of the Wake County Medical Society present the George Marion Cooper Award established in honor of George Marion Cooper, physician and health benefactor.

The medal is awarded by the Fellows of the Wake County Medical Society as a token of appreciation and esteem in recognition of the eminence of an essay contributing to the knowledge and advancement of the science of medicine in the field of Preventive Medicine, Public Health, or Maternal and Infant Health Care, presented before the Medical Society of the State of North Carolina. The following award was made:

1971—Takey Crist, M.D.., Chapel Hill
"ABORTION—WHERE HAVE WE BEEN? WHERE ARE WE GOING?"
(Section on General Practice of Medicine, May 18, 1971)

1972—John L. McCain, M.D., Wilson
"TRAIN YOUR OWN ASSISTANT"
(Section on Internal Medicine, May 23, 1972)

1973—Elizabeth Kanof, M.D., Raleigh
"SKIN CANCER — EDUCATION AND DETECTION AT A STATE FAIR"
(Section on Dermatology—May 20, 1973, Pinehurst)

1974—William G. Conley, III, M.D., Chapel Hill
"URINARY TRACT INFECTION IN CHILDREN"
(Section on Peditarics, May 20, 1974)

1975—No Awards given—(no papers received)

HISTORICAL DATA

In the interest of economy the lengthy Historical Data printed in the Transactions will only be printed periodically. Only the information relating to recent years is included here. Should any member desire additional Historical Data, he may request the information for earlier years from the Medical Society Headquarters Office at 222 North Person Street, (Mail address: P. O. Box 27167) Raleigh, North Carolina 27611.

HISTORY OF THE NORTH CAROLINA MEDICAL SOCIETY ANNUAL MEETINGS

Date	Place of Meeting	Number in Attendance	President	President-Elect	Vice Presidents	Sec.-Treas	Members on Roll	Honorary Members	Life Members
1945	No meeting because of O.D.T. restrictions		Paul F. Whitaker	Oren Moore	Wm. H. Smith Zack D. Owens	Roscoe D. McMillan	1,811	7	383
92 1946	Pinehurst	889	†Oren Moore	‡Wm. H. Smith	Zack D. Owens	Roscoe D. McMillan	1,939	6	397
93 1947	Virginia Beach, Va.	444	†Wm. M. Coppridge	Frank A. Sharpe	G. E. Bell J. B. Bullitt	Roscoe D. McMillan	2,191	7	404
94 1948	Pinehurst	920	†Frank A. Sharpe(‡)	James F. Robertson	V. K. Hart J. G. Raby	Roscoe D. McMillan	2,298	8	407
95 1949	Pinehurst	998	†James F. Robertson	G. Westbrook Murphy	Joseph J. Combs Joseph A. Elliott	Roscoe D. McMillan	2,318	5	405
96 1950	Pinehurst	947	†G. Westbrook Murphy	Roscoe D. McMillan	Ben F. Royal Joseph A. Elliott	Millard D. Hill	2,283	5	455
97 1951	Pinehurst	938	Roscoe D. McMillan	Frederic C. Hubbard	Joseph A. Elliot Henderson Irwin	Millard D. Hill	2,341	5	469
98 1952	Pinehurst	969	Frederic C. Hubbard	J. Street Brewer	Forest M. Houser Arthur Daughtridge	Millard D. Hill	2,326	5	476
99 1953	Pinehurst	1,016	†J. Street Brewer	Joseph A. Elliott	George W. Paschal John R. Bender	Millard D. Hill	2,673	5	486
100 1954	Pinehurst	1,077	†Joseph A. Elliott	Zack D. Owens	John F. Foster Julian A. Moore	Millard D. Hill	2,801	6	486
101 1955	Pinehurst	991	Zack D. Owens	J. P. Rousseau	George W. Paschal, Jr. Elias S. Faison	Millard D. Hill	2,896	6	507
102 1956	Pinehurst	1,022	†James P. Rousseau	Donald B. Koonce	E. W. Schoenheit Milton S. Clark	Millard D. Hill	3,058	7	561
103 1957	Asheville	867	†Donald B. Koonce	Edward W. Schoenheit	John S. Rhodes O. Norris Smith	Millard D. Hill	3,127	8	522
104 1958	Asheville	781	Edw. W. Schoenheit	Lenox D. Baker	George W. Holmes Amos N. Johnson	Millard D. Hill	3,171	9	542
105 1959	Asheville	651	Lenox D. Baker	John C. Reece	Amos N. Johnson Kenneth B. Geddie	John S. Rhodes	3,211	10	251
106 1960	Raleigh	848	John C. Reece	Amos N. Johnson	Chas. M. Northcot, Jr. W. Walton Kitchin	John S. Rhodes	3,247	12	472
107 1961	Asheville	636	†Amos N. Johnson	Claude B. Squires	Theodore S. Raiford Charles T. Wilkinson	John S. Rhodes	3,248	12	438
108 1962	Raleigh	745	†Claude B. Squires	John R. Kernodle	John A. Payne, III J. Sam Holbrook	John S. Rhodes	3,339	9	425
109 1963	Asheville	714	John R. Kernodle	John S. Rhodes	H. Fleming Fuller Jacob H. Shuford	Charles W. Styron	3,491	9	431
110 1964	Greensboro	677	John S. Rhodes	T. S. Raiford	Wm. F. Hollister F. G. Patterson	Charles W. Styron	3,473	8	398
111 1965	Charlotte	738	†T. S. Raiford	George W. Paschal, Jr.	Hubert McN. Poteat Wayne J. Benton	Charles W. Styron	3,516	8	390
112 1966	Asheville	545	George W. Paschal, Jr.	Frank W. Jones	W. Otis Duck John L. McCain	Charles W. Styron	3,597	12	339
113 1967	Pinehurst	644	†Frank W. Jones	Robert A. Ross	David G. Welton Daniel A. McLaurin	Charles W. Styron	3,606	14	302
114 1968	Pinehurst	623	†Robert A. Ross	David G. Welton	E. T. Beddingfield, Jr. James S. Raper	Charles W. Styron	3,642	13	298
115 1969	Pinehurst	577	David G. Welton	Edgar T. Beddingfield, Jr.	John Glasson Mark McD. Lindsey	Charles W. Styron	3,674	13	298
116 1970	Pinehurst	580	Edgar T. Beddingfield, Jr.	Louis deS. Shattner	Robert P. Crouch Rose Pully	Charles W. Styron	3,711	14	289
117 1971	Pinehurst	575	Louis deS. Shattner	Charles W. Styron	George G. Gilbert James G. Jones	E. Harvey Estes, Jr.	3,765	14	287
118 1972	Pinehurst	543	Charles W. Styron	John Glasson	Kenneth E. Cosgrove William H. Romm	E. Harvey Estes, Jr.	4,059	15	267
119 1973	Pinehurst	562	John Glasson	George G. Gilbert	Frank R. Reynolds Harry H. Summerlin	E. Harvey Estes, Jr.	4,123	15	278
120 1974	Pinehurst	623	George G. Gilbert	Frank R. Reynolds	^Michael F. Keleher *D. E. Ward, Jr.	E. Harvey Estes, Jr.	4,294	15	283
121 1975	Pinehurst	637	Frank R. Reynolds	James E. Davis	Jack Hughes M. Frank Sohmer	E. Harvey Estes, Jr.	4,598	14	303
122 1976	Pinehurst	674	James E. Davis	Jesse Caldwell	John L. McCain T. Reginald Harris	E. Harvey Estes, Jr.	4,633	14	330

†) Deceased
‡) Died during term of office; succeeded by James E. Robertson, president-elect
^) Resigned as First Vice-President.
*) Became First Vice-President at resignation of Dr. Keleher

ROSTER OF MEMBERS OF COMMISSION FOR HEALTH SERVICES
(Formerly State Board of Health)

Name	Address	Appointed by	Term
James S. Raper, M.D.	Asheville	Medical Society	1967 to 1971
Paul F. Maness, M.D.	Burlington	Medical Society	1967 to 1971
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Dan Moore	1967 to 1971
Ernest A. Randleman, Jr., PhG	Mount Airy	Gov. Dan Moore	1967 to 1971
Joseph S. Hiatt, Jr., M.D.	Southern Pines	Medical Society	1969 to 1973
Jesse H. Meredith, M.D.	Winston-Salem	Medical Society	1969 to 1973
Lenox D. Baker, M.D. (1)	Durham	Gov. Robert W. Scott	1969 to 1973
J. M. Lackey	Hiddenite	Gov. Robert W. Scott	1969 to 1973
Charles Barker, D.D.S.	New Bern	Gov. Robert W. Scott	1969 to 1973
Ralph W. Coonrad, M.D. (2)	Durham	Gov. Robert W. Scott	1971 to 1973
James S. Raper, M.D.	Asheville	Medical Society	1971 to 1975
Paul F. Maness, M.D.	Burlington	Medical Society	1971 to 1975
Ernest R. Randlemann, Jr., PhG	Mount Airy	Governor Robert W. Scott	1971 to 1975
Donald W. Lackey, D.V.M.	Lenoir	Governor Robert W. Scott	1971 to 1975
Jesse H. Meredith, M.D.	Winston-Salem	Medical Society	1973 to 1977
Maurice A. Kamp, M.D.	Charlotte	Medical Society	1973 to 1977
Richard T. Belton, D.D.S.	Gastonia	Gov. James E. Holshouser, Jr.	1973 to 1977
Faye B. Eagles, D.C.	Rocky Mount	Gov. James E. Holshouser, Jr.	1973 to 1977
Grady Hunter	Boonville	Gov. James E. Holshouser, Jr.	1973 to 1977
Buford W. Kidd, O.D.	Greensboro	Gov. James E. Holshouser, Jr.	1973 to 1977
Clyde W. Kiker	Greensboro	Gov. James E. Holshouser, Jr.	1973 to 1977
Paul F. Maness, M.D.	Burlington	Medical Society	1975 to 1979
William D. Rippy, M.D.	Burlington	Medical Society	1975 to 1979

(1) Resigned when appointed Secretary, Department of Human Resources.
(2) Fill unexpired term Dr. Baker.

ROSTER OF MEMBERS OF BOARDS OF MEDICAL EXAMINERS

Name	Address	Term
Charles B. Wilkerson, Jr., M.D., Secretary	Raleigh	1972-1978
E. Wilson Staub, M.D.	Pinehurst	1972-1978
David S. Citron, M.D.	Charlotte	1974-1980
James Jerome Pence, M.D.	Wilmington	1974-1980
Bryant L. Galusha, M.D.	Charlotte	1974-1980
Joyce H. Reynolds, M.D.	Kernersville	1976-1982
Bruce B. Blackmon, M.D.	Buies Creek	1976-1982
Bryant D. Paris, Jr., Executive Secretary	Raleigh	1973-