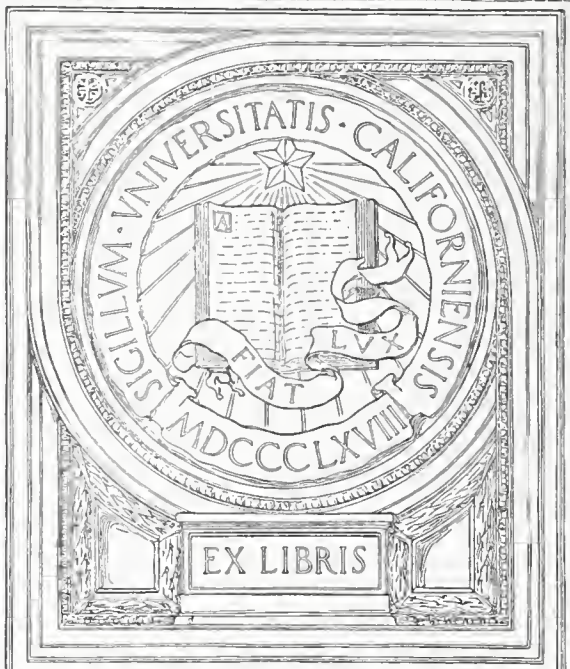
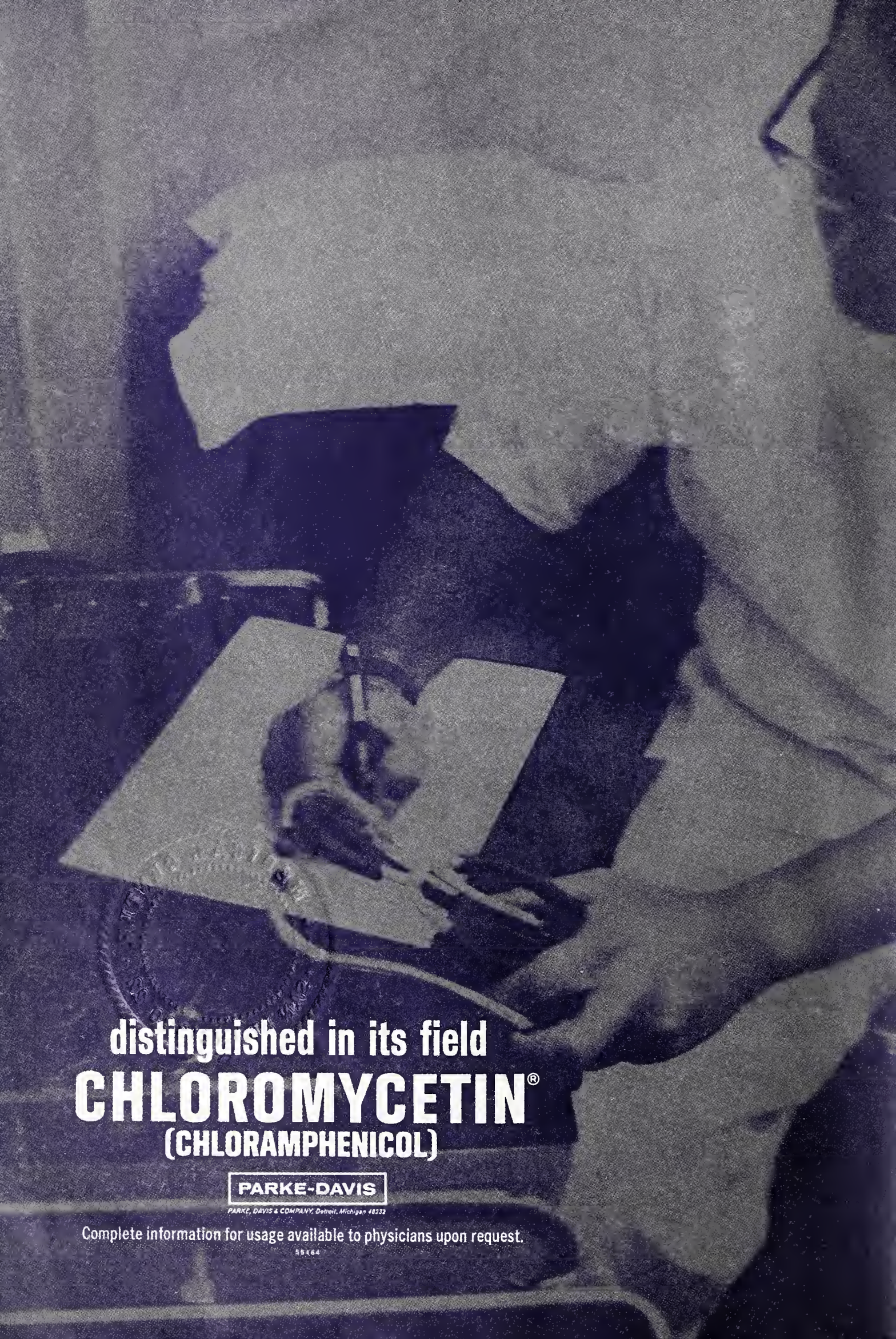


September-October, 1964

HAWAII MEDICAL JOURNAL

In this issue

VOLUME 24 • NUMBER 1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HAWAII MEDICAL JOURNAL

Contents

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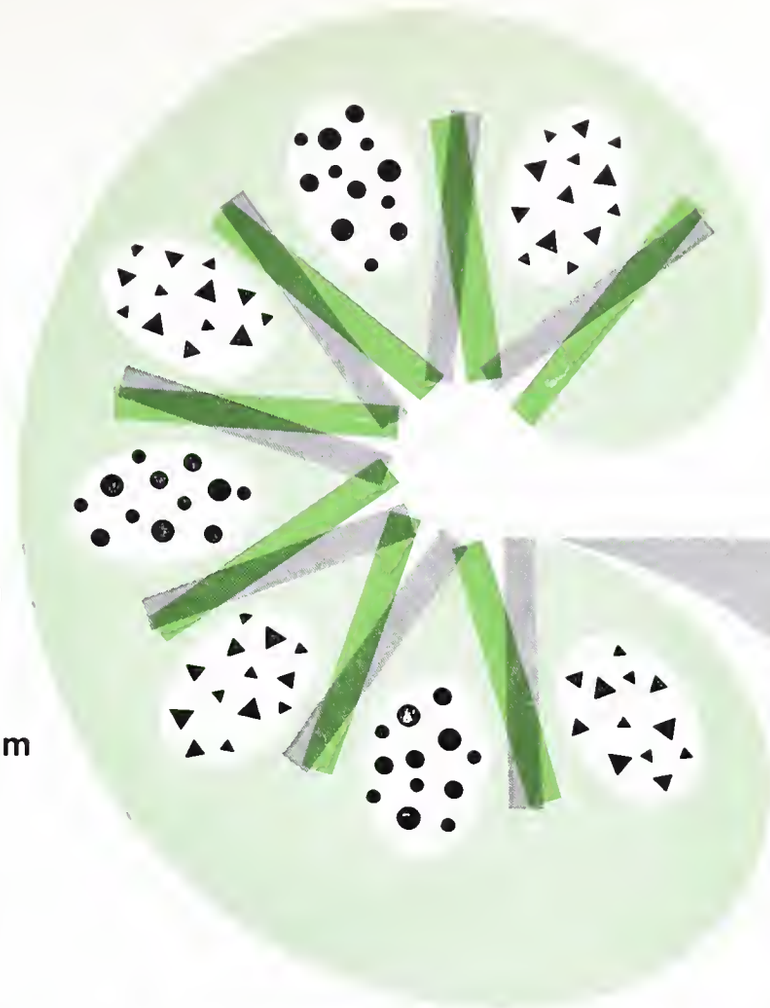
Hawaii Technologists' Bulletin

A totally new synthetic antibacterial for urinary tract infections



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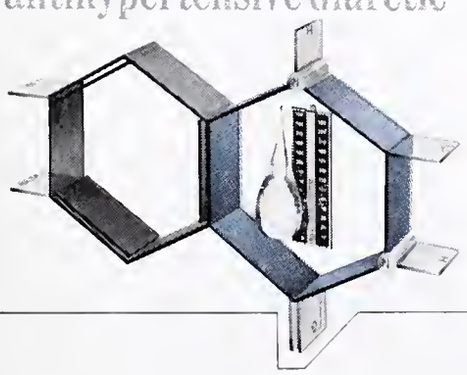

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1. Steigmann, F., and Griffin, R.: Evaluation of Quinethazone, a New Diuretic. J. Amer. Geriat. Soc. 11:945 (Oct.) 1963.

2. Schwartz, M.: Office Evaluation of a New Diuretic in Patients with Hypertensive Diseases. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, Nov. 25-28, 1962.

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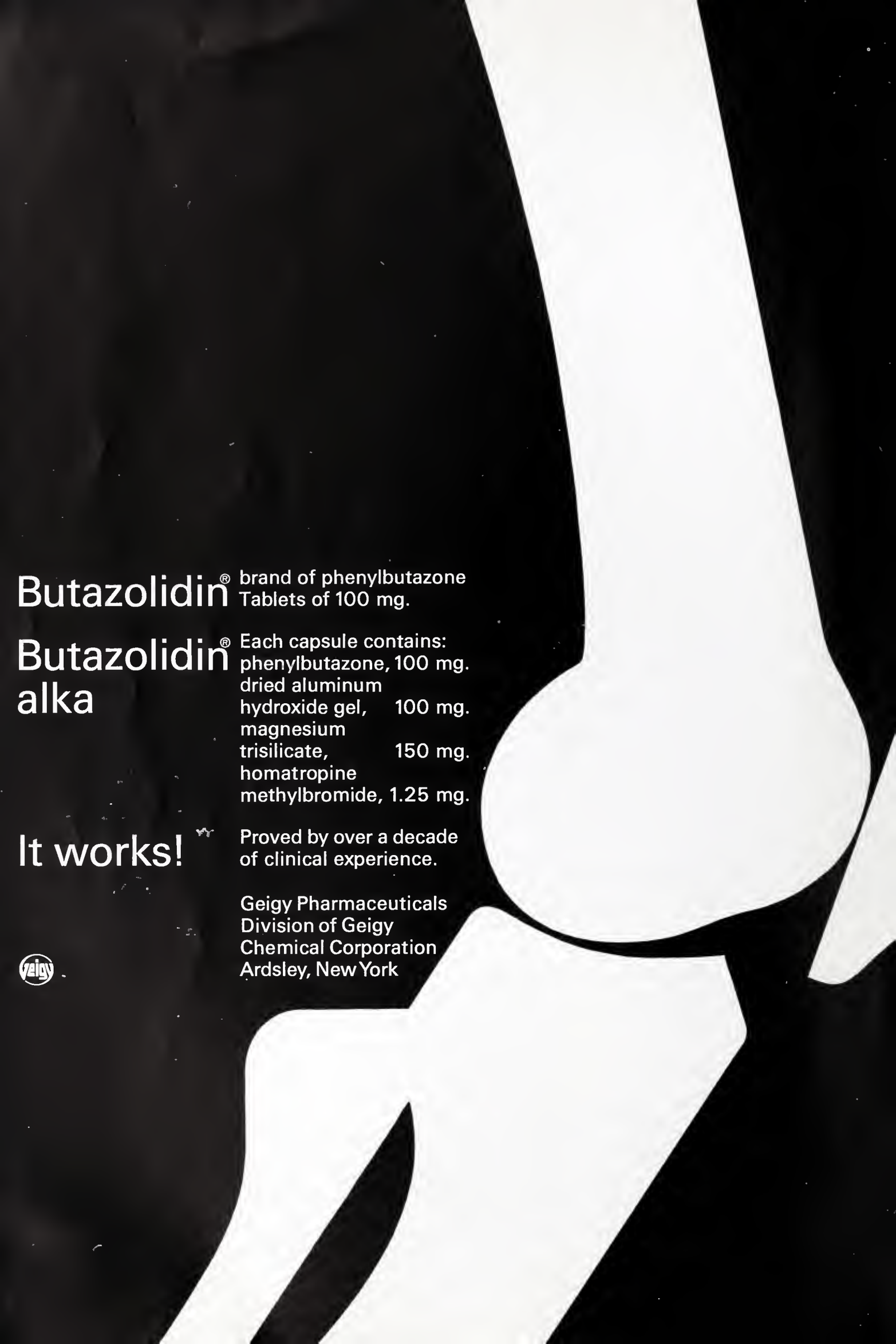
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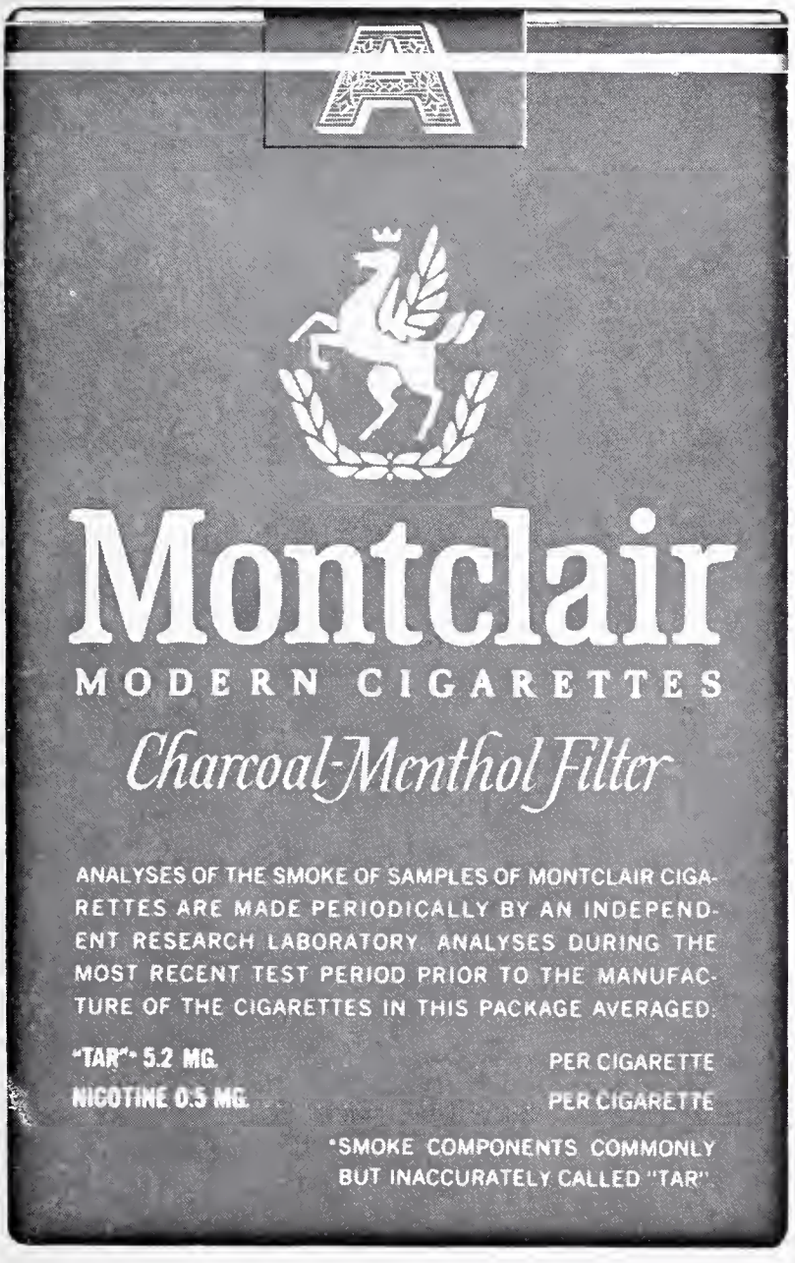

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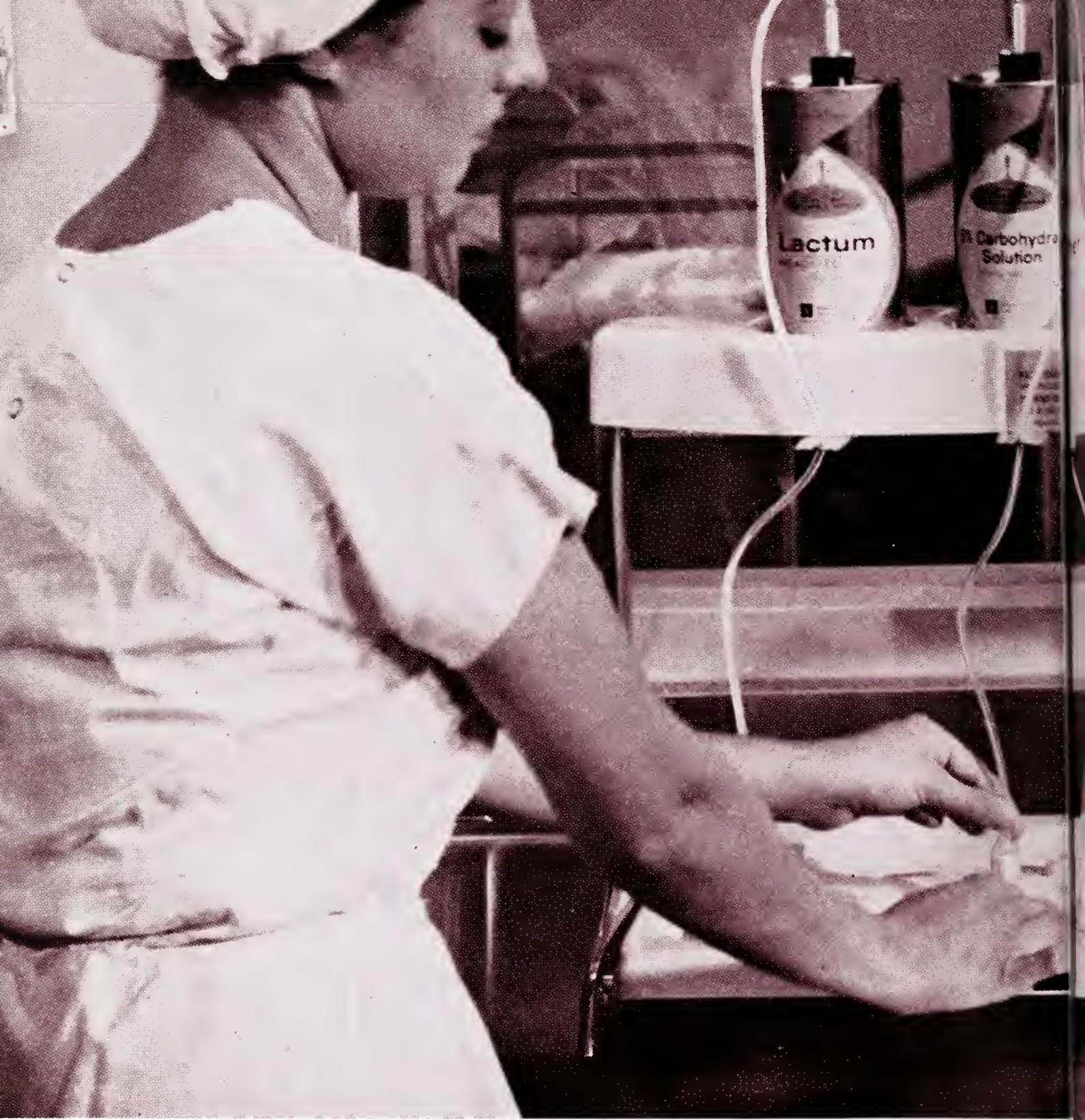

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References:

1. Phelps, J. A.; Hiller, A. J., and McHargue, A. M.: Disposable Nurser System for Infant Feeding: Comparison with Usual Glass Nurser Method. Part I—A Clinical Study, Hosp. Management 93:30-33 (Jan.) 1964

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8:30 a.m.–4:15 p.m.

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PROGRAM

8:30–9:15 A.M. *Registration*	**Sheraton Meeting House**
9:15–9:30 A.M. *Welcome*	**Robert P. C. Ho, M.D.**
9:30–10:15 A.M. *Psychotropic Drugs:* *Their Use in Emergency Psychiatric Treatment*	**Thomas Detre, M.D.** *Director, Inpatient Psychiatric Services* Yale Medical Center, New Haven, Connecticut
10:15–11:00 A.M. *The Masks of Depression*	**Paul E. Feldman, M.D.** *Director of Research and Education* Topeka State Hospital, Topeka, Kansas
11:00–11:45 A.M. *Recognition and Treatment of Anxiety*	**Burton Cahn, M.D.** *Consulting Psychiatrist* University of Pennsylvania Medical School Philadelphia, Pennsylvania
12:00–2:00 P.M. *Luncheon for Doctors and Their Wives* *Diamond Head Wing Suite*	
Presiding:	**John M. Felix, M.D.** *Chairman, Program Committee*
Subject: *"Physician on Everest"*	**Gilbert Roberts, M.D.** *Director of Student Help* University of California
2:00–2:45 P.M. *Functional Gastrointestinal Disorders*	**Howard E. Ticktin, M.D.** *Chief Medical Officer* The George Washington University Medical Division D. C. General Hosiptal, Washington, D. C.
2:45–3:30 P.M. *Recognition and Treatment of Alcoholism*	**Martin D. Kissen, M.D.** *Clinical Director* Institute for Alcoholism & Narcotics Addiction St. Luke's Hospital, Philadelphia, Pennsylvania
3:30–4:15 P.M. *Questions and Answers*	By the entire panel

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Fear and Our Future

RODNEY T. WEST, M.D., *Honolulu*

NOT UNLIKE many other times in history, ours is indeed an age of change and an age of crisis—and for some strange reason or other, there is in our time a very deep sense of insecurity and anxiety. Certainly this insecurity is not economic, nor could it be one of weakness or of approaching danger—for never before in the history of man has there been at one time a nation so young, so strong, so rich, so resourceful—but also so fearful.

Fearful of what? What engenders this fear, which apparently starts right from the top of our government, filters down through our Congress, down through the states, the counties and cities, and eventually into our businesses and organizations and even into our own medical society? It seems as if our people are being trained to fear by a public policy based on pessimism and rooted in the assumption that things are bad and getting worse. Nothing seems to be done anymore because it is right or proper, or in our best interests, or in the best interests of the people of our country; instead, things are done, policies are made, decisions are moulded, and actions taken, with, it seems, the sole purpose of avoiding some imagined fearful situation.

Delivered at the 108th Annual Meeting of the Hawaii Medical Association, May 1, 1964.

As a nation we cringe, we go out of our way in order not to hurt anyone's feelings, we work at cross purposes, we accept with relish the flimsy excuses of others who tread on our toes and fling insults at our democratic institutions. Because of this, our national prestige has never been so low—and so we become even more fearful.

Fearful of what? If the stock market goes up, we are fearful that it will soon go down again. In the political field, if the opposing party gets the upper hand we become fearful that our cause is lost. We hesitate to get our chin up in fear that we might be sticking our neck out.

WHY THIS FEAR?

Why all this fear? History and experience have shown that when we know we are right, and stick up for our rights, our nation has always come out ahead. One can pinpoint the instances when we really felt proud to be Americans and when there was that spirit of solidness and well-being engendered by forthright firmness: when we backed up Matsu and Quemoy and said to Red China, "This is as far as you go!"—when we poured troops into West Berlin and said to East Germany and Russia, "This is as far as you go!"—when we block-

aded Cuba and said to Castro and Russia, "You have gone too far!" We were proud because we knew that our leaders had done the right thing—and for a few months, weeks, and in the last instance for a few days, the air seemed purer, our spirits were lifted, and we were not afraid. Yes, we had lost our fear!

Right now, Hawaii is also going through its own period of radical change and crisis, with accompanying fears. There is a huge undercurrent of unrest among our various ethnic and economic groups—jockeying for social, economic, and political position, and maneuvering for prestige, wealth, and power. But we are fearful that outsiders are eyeing this nice juicy pie that we have and unless we erect some sort of barrier, they will enter the ring and complicate the picture. The real truth, however, is that like other Americans, we are almost all "outsiders." Ninety-three per cent of us have ancestors who came from somewhere else. These people who came here, the Americans, the French, the Japanese, the Chinese, the Russians, the English, the Koreans, the Portuguese, the Filipinos, etc., all played their part in the development of these islands—and we now have a state whose economic, social, political, and professional pattern and atmosphere are radically different from those of any other state in the Union.

TWO MAIN TYPES

These people were of two types—those early arrivals who saw the future possibilities of these islands and had the foresight and courage to build, and those who sought these islands as a place in which to enjoy a larger degree of freedom and a chance to better their economic situation, and who, in turn, did their part in furthering the development of these islands.

For those of us who were born here, I believe I can say that most of our ancestors, including mine, came from this latter group. Yes, most of us are, relatively speaking, newcomers to these shores. But now that we have been accepted into the club and now that we are enjoying all of the benefits of being in Hawaii and being part of the great U.S.A., do we have the right to close the doors or even remove the welcome mat from our front porch? Can't we have the prescience to know that, just as in the past, it is only through new blood, new attitudes, new philosophies, new skills, new money that we make progress, and make the necessary changes without which there would be no progress?

We seem to fear that what we have in Hawaii is limited and there is only enough to go around for those of us who are already here. Personally I feel that the possibilities here in Hawaii are limitless. Even if there may be a limit, the surface of Hawaii's possibilities has only been scratched.

Show me any person who has come to these islands with big, new, and progressive ideas, and I will show you someone who has been blocked from as many angles as possible, but who, if he has persevered, has brought new life, new vitality, and new horizons to this community. As Maeterlinck said, "At every crossing on the road that leads to the future, each progressive spirit is opposed by a thousand appointed to guard the past."

LEGAL BLOCKADES

This holding on to the old and fearing the new is present not only here in Hawaii, not only in our profession, but everywhere. The one big difference in Hawaii is that as a community and as a State we have actively tried, through legal means, to stifle the entrance of new blood.

Why do we continue to require a three-year residence of mainland teachers before we allow them to teach in our public schools, when 150 teachers who graduated from our Universiy last year went immediately to the mainland, where they were welcomed and given jobs. Had our graduates been discriminated against by the citizens of other states as we discriminate, you would have heard the indignant screams from Portland, Maine, to South Point. The irony of the situation is that the politicians and many of us who give lip service and keep this law on the books, in turn, send their children to private schools where there is more latitude in the choosing of teachers, and where the three-year law is not in effect.

What are we afraid of? That our own local teachers cannot stand their ground against those from other states? How absurd! Here we profess to have one of the least discriminatory communities in the world, when in truth we are in many ways the most discriminatory. We champion civil rights, with freedom of opportunity for all citizens. Then, do we have the right to discriminate against another citizen because of his length of residence in our State? We all want to see Hawaii develop, but we should have the foresight to see that we are constantly hindering this development by placing barriers and tariffs in the way of new ideas, skills, and knowledge.

You all know my somewhat controversial views with regard to the one-year residence clause as it concerns the members of our own and other professions, and so I will not bore you with repetition. Here again is this devil fear in another form. Many fear the development and expansion of closed-panel groups and other forms of medical practice; the encroachment of the Federal Government, and the establishment of a medical school. Fearing the

loss of patients for any reason does no good; as Napoleon once said, "He who fears being conquered is sure of defeat." If we are going to compete—and in our free society, competition is the keystone of our economic freedom—we must do it by being available when we are needed, by giving our patients better care, by improving our doctor-patient relationship, by improving the doctor-patient economics of our voluntary health plans, by keeping up to date with the many rapid changes in the practice of medicine, by bringing in new skills where they are needed, and finally by standing up for what is right because it is right!

THINK BIG!

Let's not take provincial, selfish, apathetic, piecemeal approaches to any of our problems. It has been noted throughout history that man progresses from bondage to spiritual faith, from spiritual faith to courage, from courage to freedom, from freedom to abundance; and then comes the waning, from abundance to selfishness, from selfishness to apathy, from apathy to dependency, and from dependency right back into bondage again. Let's not act after it is too late and the damage has been done. Let's not remain static and fearful of giving proper and necessary benefits to the many, just because our actions might give extra help to a few. We must think big. We must always think along the lines of an expanding economy. We must think of the medical needs of a population which might even double itself within the next 12 years. We must think when we choose our leaders, and be sure that they are not small and selfish in their ideas and plans for the future, that they are willing to continue the fight for our freedom in medicine; we must think courageous things and not fearful things. No amount of statistics can conceal from the fearless eye the clear truth that our economy in Hawaii and the U.S. has achieved a degree of well-being unheard of in the history of man. But, on the other hand, no amount of statistics can prove this to the fearful mind. Have we reached the top of our social progress, and if so, can we prevent the waning which history says is bound to follow?

FEAR OF EACH OTHER

In closing I want to speak about one more fear, and that is the fear of each other. Each of us in his own way has much to contribute to our society, our community, our nation, and—if given the chance—our profession. Our educational background, intelligence, and training should enable us to make contributions of great merit, and to influence the course of events in a beneficial manner.

During one year one cannot expect to solve all problems or to surmount all the obstacles. If during each year we can solve something, improve some conditions, and break ground for further developments, we should be satisfied. For we must realize that we do not have all the solutions, nor do we know all the answers. We must have faith that our younger colleagues will have as much foresight as we, or perhaps even more, and that they in turn must and will push ahead from where we leave off. Let's accept the fact that there are wide differences in some of our philosophies and our methods of practicing medicine, but remember that in general our goals are the same—to earn a decent livelihood so that our families may enjoy the advantages and be able to make full use of the opportunities here in Hawaii, but at the same time be able to follow our chosen profession and have the satisfaction of knowing that we are living up to our part in the bargain by giving our patients honest, excellent, and sympathetic medical care. Yes, let's make use of all the talents in our medical association and continue to forge ahead fearlessly into the future. Perhaps such courage will become a growing ripple which will radiate out and begin to counteract the waves of fear which have kept us from sailing out into the limitless seas of opportunity and progress. ■

888 So. King St.

Are we liable to have another polio epidemic here?

Type III could strike any time!

Operation Swallow—Two Years After

A Critique, a Warning, and a Recommendation

ROBERT M. WORTH, M.D., Ph.D.,* *Honolulu*

• *Both Sabin and Salk polio vaccines have contributed to the virtual disappearance of polio from our community. However, the present complacency is premature. The present status and trends in polio immunization in Hawaii, with either type of vaccine, may shortly result in a tragic reappearance of the disease among our children.*

DURING the autumn of 1962, in a community-wide immunization campaign called Operation Swallow, Sabin live-virus poliomyelitis vaccine Types I and II was given to 89 per cent (about 228,000 persons) of Hawaii's population from age three months through 18 years, and to about 68 per cent (roughly 255,000 persons) of those 19 or older. Type III vaccine was not given because of a report of vaccine-related paralytic disease in adults in Canada.

The purpose of this paper is to report the surveillance for vaccine-related disease after Operation Swallow, to review the patterns of polio immunization in the community during the ensuing year, and to point out a potentially dangerous situation that is appearing.

VIRUS ISOLATION

Prior to Operation Swallow, the Health Department planned a system of specimen collection for virus isolation from any patient suspected of polio or polio-like disease by any doctor in the State during the weeks immediately following the campaign. Swallow I took place during the week of October 14, and Swallow II during the week of December 2, 1962. Five mildly ill children had poliovirus isolations, three after participating in Swallow I and two after taking part in Swallow II. In only three of these children were the time-relationships such that the illness could have been related to the vaccine; in only one was there any neuromuscular sign at any time during the course of observation, and he recovered completely and permanently after 48 hours of afebrile leg spasticity. In all three cases the isolation of poliovirus might have been only a coincidental event during an unrelated disease, but even if these cases were to be accepted as being a direct result of the vaccine, this is a spectacularly small degree of morbidity out of 483,000 persons in this campaign. This morbidity is far smaller in number and severity than would have been observed with such well-accepted vaccines as typhoid, cholera, influenza, or smallpox. This local experience is certainly in accord with worldwide observations of the safety of Sabin live-virus vaccines.

IMMUNIZATION PATTERNS

Before poliomyelitis vaccine was introduced into the United States, peak incidence of the disease was concentrated in the 5-14 age group.[1] The advent of Salk inactivated vaccine and school-based immunization campaigns in the past five years has

* Professor of Public Health, University of Hawaii.
Received for publication May 12, 1964.

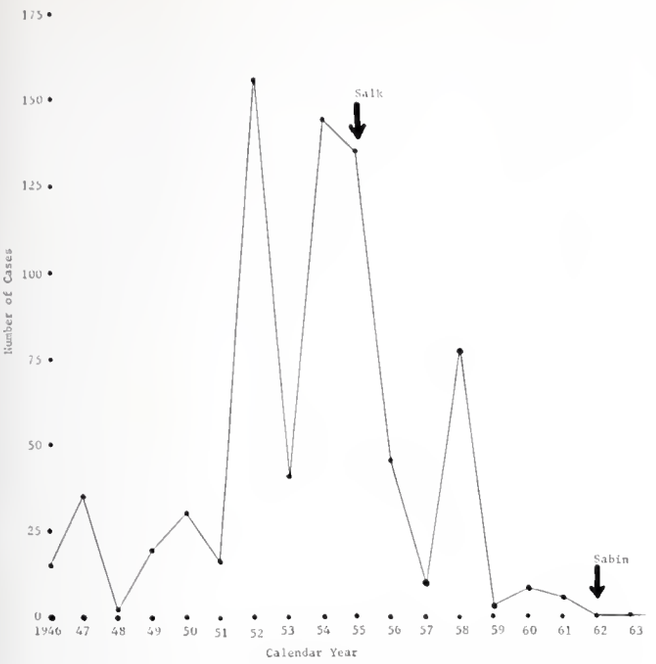

FIG. 1.—*Cases of poliomyelitis in Hawaii by year, 1946-1963.*

led to the eoneentration of epidemie poliomyelitis in the 0-4 age group.[2] Figure 1 shows the numbers of eases of poliomyelitis reported to the Hawaii Department of Health annually for the past 18 years. There has been only one sharp outbreak since the introduetion of Salk vaeeine, and not a single ease during the past two years, when Sabin vaeeine has been available. If one makes the reasonable assumption that most of the adult immigrants to Hawaii have already aequired immunity through natural or artifieial means, and that most ehild immigrants are military dependents who have been immunized, then the only remaining large souree of suseeptible persons added to the eommunity is the newborn infants—some 17,500 of them arriving per year to enter the ehild population.

Reeords of Salk and Sabin vaeeine sales in loeal pharmaeeutieal houses show that during the ealendar year 1963, sales of Salk vaeeine totalled 51,000 doses, of whieh (based on estimates from Well Child Conferenee experienee) about 20,000 doses were used for booster shots of older ehildren and about 30,000 doses were used for primary 3-dose immunization of 10,000 infants. In addition, about 4,500 doses eaeh of Type I and of Type II Sabin vaeeine were sold, and presumably were used for immunization of infants born after Operation Swallow. It may, therefore, be assumed that about 4,500 doses of the 45,000 doses of Type III that have been sold were also used for the same infants taking the 3-dose series, giving a total of about 14,500 infants who were immunized through eivilian sourees during 1963. The remaining 41,500 doses of Type III probably went to o'der children or adults after Operation Swallow III was called off. In addition, enough Sabin trivalent polio vaeeine has been sold to immunize 500 people. Also, approximately 3,000 babies a year are given Sabin vaeeine proeured direetly from the mainland for use in military elinies.

It would seem likely from the above that we now have a very large number of ehildren and young peop'e who are suseeptible to Type III polio in Hawaii today, but that almost all of our infants are being given proteetion—10,000 a year with Salk and 7,500 a year with Sabin vaeeine. We should be reminded of the following faets:

1) We could have a Type III polio epidemic in Hawaii, because Operation Swallow did not include that type, and because we have not had Type III wild polio here during the past few years when virus-typing has been done.
2) Salk-immunized children often have a rapid fall in antibody levels unless repeated booster injections are given. In recent years about 20 per cent of paralytic cases in the USA have been in children who have had four or more shots of Salk vaccines.[3]

The reeent tragie and entirely preventable Type I epidemie in the Marshall Islands should be a lesson to all of us.

It is reeommended that Sabin live-virus vaeeine (now also available in a eonvenient trivalent form) be used as the preparation of ehoiee for the routine immunization of all persons as part of their regular eare.[3] This would also give eonsiderable proteetion to the nonimmunized ehildren in the eommunity in either of two ways. First, the nonimmunized ehild has a ehanee of aequiring Sabin virus infeetion from his immunized neighbor, and seeond, even if he does not do so, the live-virus-immunized neighbor would no longer be able to aequire wild polio virus or transmit it to the nonimmunized minority in the eommunity.

In making this reeommendation, due weight has been given to the loeation of Hawaii, where many lines of world eommunieation eross, making us more vulnerable to an epidemie than many of the other 49 states. ■

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For a syndrome thought by some to be nonexistent, fat embolism seemed in these cases all too real!

Fat Embolism

Review, and Report of Two Cases

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• *A case report of a patient with fat embolism with severe neurological manifestations and complete recovery, and a case report of a patient with probable fat embolism, are presented. In most cases the diagnosis of fat embolism can be made from the history, clinical findings and a few laboratory tests. Careful funduscopic examination is especially advocated.*

THAT THE CLINICAL DIAGNOSIS of fat embolism is rarely made is evident from the fact that it has been coded only five times in the past ten years at The Queen's Hospital, in four instances by the same orthopedist. My recent experience with an interesting case of fat embolism with severe neurological manifestations, and an opportunity to review another probable case, prompted a study of this problem.

These case reports are presented to re-emphasize the problem of fat embolism, which probably is more common than generally supposed. Men interested in this problem have stated that fat embolism is often overlooked both clinically and pathologically; the former because the clinician is not mindful of its possibility and because it often mimics other disease states; and the latter because of the fat solvents usually used in the preparation of tissue sections. Today, in view of the ever increasing number of high-velocity automobile accidents, fat embolism is probably more common. It is hoped that this paper will stimulate an increasing awareness of this problem.

Received for publication December 27, 1963.

CASE REPORTS

Case 1.—On August 28, 1963 I went to another island to see an 18-year-old Hawaiian girl, severely injured in a one-car accident five days previously. She was gradually becoming comatose and spastic. Because of her generally poor condition, it was felt that she should not be transferred to Honolulu. Her initial injuries included multiple facial lacerations, fracture-dislocation of the left sacroiliac joint, fractures of both pubic rami with separation of the pubic symphysis, compound fractures of both femora, and a fracture of the right anterior tibial plateau. Despite these injuries, the patient was said to have been alert and lucid on admission. She had been taken immediately to surgery where her lacerations were sutured and open reductions of the femora were performed. Following surgery the patient appeared to be more drowsy and less responsive, and on the second day developed spasms of her upper extremities. She subsequently became semicomatose and spastic. The question of craniocerebral trauma with the possibility of a surgically correctable lesion was the prime reason for the neurological consultation.

Neurological examination on the fifth day after admission revealed a semicomatose girl, who responded only by withdrawing from painful stimuli. She would open her eyes intermittently, but her eye movements were random. She assumed a decorticate posture, with her neck and lower extremities hyperextended, her arms flexed at the elbows, her wrists flexed and internally rotated, and her fingers clenched, with the thumbs between her index and middle fingers. All of her limbs were spastic, more so on the left side. Her deep tendon reflexes were hyperactive and she had bilateral extensor plantar signs. Funduscopic examination revealed normal disc margins, but adjacent to the superior temporal vessels of the left eye were three cream colored, oval exudates, the third with a small petechia in its center. No definite lesions were seen in the conjunctiva or skin except for a faint discoloration of the anterior axillary folds. Lumbar puncture revealed normal pressure and a clear, colorless spinal fluid.

With these findings, a diagnosis of fat embolism was made and she was treated expectantly. I did not see the patient subsequently, but the orthopedist who saw her again 12 days later stated that she was conscious and well oriented, and had good use of her upper extremities.

Case 2.—A 23-year-old Filipino man was admitted to The Queen's Hospital on April 29, 1963, with a comminuted fracture of the right femur as the result of an airplane crash. He had been knocked briefly unconscious, but on admission appeared mentally alert and clear. He was seen at that time by a neurosurgeon, whose examination disclosed nothing abnormal. On the following morning the patient appeared quite well, but later that day developed a fever of 103° F. and a pulse rate of 120 per minute. Two days later he began to cough and complained of chest pain. He was restless and developed a petechial rash on his back and under his arms.

A chest x-ray taken at the time of admission was normal, but a subsequent chest x-ray at this time showed "diffuse bilateral irregular peribronchial parenchymal infiltrate attributed to the suspected pneumonia." The hemoglobin, which on admission was 12.9 gm, dropped to 10 gm on the fourth day, despite the fact that the patient had had a unit of blood on the day of admission. By the tenth day his temperature and pulse rate were normal. He had an open reduction of his right femur on the 15th day and was dismissed from the hospital on the 28th day. He is said to be doing well except for a shortening of his right femur.

Although the diagnosis of fat embolism was not entertained at the time, there are many points in this case which favor this diagnosis. The patient had a severe fracture of the femur. Following a 24-hour latent period, he developed fever and tachycardia. Subsequently he developed pulmonary symptoms and had a chest x-ray which could have been interpreted as that of fat embolism. At that time, he was restless and developed a minor petechial rash. Finally, there was a 3 gm drop in the hemoglobin level, despite the fact that a transfusion had been given initially.

DISCUSSION

The usual clinical picture of fat embolism is seen in a setting of trauma with fracture of long bones. There follows a latent period when, except for the effects of the original injuries, the patient is asymptomatic for a period of hours to days, generally 12 to 72 hours. Then the clinical manifestations of fat embolism become evident, with pulmonary and neurological symptoms and petechial hemorrhages.

By far the most common cause of fat embolism is fracture of long bones, especially in the lower extremities. The likelihood of fat embolism increases with the severity of the injuries and with multiple fractures.[1] Fat embolism has also been seen following orthopedic procedures. Other more unusual causes are soft-tissue trauma including surgery, severe burns,[2] decompression sickness,[3] osteomyelitis,[4] sickle-cell disease,[5] and so forth. In fact, Scuderi[6] states that "almost all diseases, poisonings, and infections" have been reported as having caused fat embolism at one time or another.

Fat embolism is often ushered in by a sudden tachycardia and fever. Pulmonary symptoms are usually present, with dyspnea, chest pain, cough, and rarely, hemoptysis. The chest may sound clear initially but rales, rhonchi and pleuritic friction rubs may be heard. Acute right ventricular failure may occur.

The neurological signs and symptoms can be quite variable, but usually are indicative of diffuse central nervous system involvement. These manifestations vary from mild disorientation, restlessness, and changes in the state of consciousness, to psychotic reactions, convulsions, decerebrate rigidity, coma, and death. Focal neurological manifestations are much less common but can occur. Silverstein[8] placed great emphasis on the similarity between the clinical findings in fat embolism and craniocerebral trauma; in fact, burr holes have been made in some patients to rule out epidural and subdural hematomas.[7] In spite of the serious neurological manifestations, the spinal fluid pressure is not increased and the spinal fluid is usually normal.[8] Sections of the brain are characterized by petechiae in the white matter, with sparing of the gray matter.

One of the best clinical evidences of fat embolism is the presence of petechiae, most common in the upper parts of the body, especially the supraclavicular regions, the anterior axillary folds, and the conjunctiva.[1, 9, 10] At times they may be quite sparse and have to be sought very carefully in good light or else they will be missed completely.

The retinal changes in the fundi have been adequately described[9, 11, 12, 13] but are not emphasized in most papers on fat embolism. These consist of creamy, glistening oval-to-round exudates, often present in groups, as well as small discrete petechiae. Newman[9] found these changes in four consecutive cases where a careful fundus examination was specifically performed. In the patient described earlier in this paper these retinal changes played a big role in clinching the diagnosis.

LABORATORY FINDINGS

Fat globules may be found in the sputum, blood, and urine. The sputum, however, is said to be unreliable because of too many false positives.[2] The urine is probably the easiest to examine. Inasmuch as fat floats on the surface, the bladder should be completely emptied. The "sizzle" test of Scuderi[6] is a simple test: a drop of the surface of the urine specimen is picked up on a wire loop and placed over an open flame. If fat is present, it makes a typical sizzling or crackling sound. It is, however, probably best to definitely identify the fat globules.[14] A fluorescent fat stain is said to make the identification of fat globules in the blood much easier.[15, 16]

Serum lipase usually becomes elevated three to five days after injury and reaches maximum values in five to eight days.[17] It is felt that this enzyme is secreted by lung tissue in response to the presence of neutral fat. As with the lipemia and lipuria, serum lipase becomes elevated in a substantial number of patients after trauma to bone and can occur in the absence of clinical manifestations of fat embolism.

Early in the course of fat embolism, there is a characteristic fall in the hemoglobin level.[18] This fall is attributed to the hemorrhagic infarcts in the lungs. Pipkin[19] feels that the fall in hemoglobin value is so reliable a diagnostic test that he does not usually look for fat globules in the urine.

The chest x-rays are not diagnostic but are quite characteristic.[20] Maruyama and Little[21] state that the chest x-rays in fat embolism show diffuse bilateral pulmonary densities resembling pulmonary edema but that the heart and pulmonary vessels are not usually enlarged. Nelson and Bowers[22] state that the patchy infiltration in fat embolism resembles pulmonary edema or bronchopneumonia.

Finally, the electroencephalogram is said to show a diffuse slow wave disturbance of a nonspecific nature.[23]

PATHOPHYSIOLOGY

Leonard F. Peltier of Kansas City has probably done more basic work on this problem than anyone else,[4, 14, 16, 17, 24-29] and although his views are not universally accepted, his theory of a primary mechanical phase followed by a secondary chemical phase helps to explain the latent period as well as the variable clinical picture of fat embolism.

As a result of the initial trauma, fat particles are released into the blood stream. The mechanical phase is characterized by blockage of the pulmonary and systemic vascular bed by these neutral fat emboli. This phase is accompanied by lipemia and lipuria. This phase often passes unnoticed but in severe cases, especially when accompanied by shock, acute right ventricular failure may occur.

The latent period corresponds to the phase of hydrolysis of neutral fat to glycerol and fatty acids by enzymatic activity. It is felt that the presence of neutral fat particles stimulates the formation of lipase, perhaps by the lungs.

The chemical phase is characterized by the classical signs and symptoms of fat embolism and is accompanied by elevated levels of serum lipase. Peltier[29] feels that this phase may be due to the toxicity of fatty acids producing endothelial damage and hemorrhages by virtue of its affinity for calcium ions. Others have also noted that fatty acids are much more liable to produce hemorrhagic infarcts as compared to neutral fat.[6, 18]

TREATMENT

The treatment of fat embolism is nonspecific and not totally satisfactory in the severe cases. Nevertheless, it can be quite effective.[4, 19]

Initially all attempts should be made to prevent development of clinical fat embolism. Careful handling, proper and rigid immobilization, and minimal manipulation are criteria which are always emphasized in handling fractures. Elevation of the injured limb has some theoretical value, since fat tends to float to the surface. Shock should be anticipated in the severely injured and prevented by early transfusion or infusion.

With the development of pulmonary symptoms, oxygen therapy should be instituted. A recent paper advocates 20 per cent carbon dioxide inhalation for its vasodilatory effects on cerebral vessels.[30] Rapid digitalization is indicated in the face of right ventricular failure.

Among the fat solvents or lipase inhibitors which have been tried, ethyl alcohol has probably had the

greatest aeeeptanee.[31] Adler, Lai, and Peltier[24] advoeate 2,000 ee daily of 5 per eent aleohol in 5 per eent glueose solution for a week. Pipkin[19] feels that aleohol should be administered in all patients with long bone fraetures as well as in all orthopedie proeedures.

The use of heparin is advoeated by some[1, 23] and opposed by others.[4] In view of its well-known anti-coagulant effeets, it would seem hazardous to use it in the faee of peteehiae and hemorrhagie infarets.

Finally it is advoeated that medullary nailing proeedures be postponed until the hemoglobin and lipase values are back to normal levels.[19] The use of a tourniquet is advoeated to prevent fat droplets from being disseminated during the surgieal proeedure.[28]

SUMMARY

The first ease presented is that of an 18-year-old girl with multiple fraetures, deeortieate manifestations and retinal ehanges typieally seen in fat embolism. The seeond ease is that of a 23-year-old man with a fraetured right femur. After a 24-hour latent period, he developed fever, taehyeardia, eough, ehest pain, restlessness, and a peteehial rash. An x-ray of the ehest, whieh was normal on admission, later showed diffuse infiltrates, and he showed a eharaeteristie drop in hemoglobin level despite a transfusion on admission. ■

888 So. King St.

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If an accident case "goes bad" 12 to 48 hours after injury, look for free fat in urine, sputum, or blood!

Fat Embolism

Fatal Case, With Autopsy Findings

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• *Fat embolism has a long history as a controversial medical enigma. It was induced in experimental animals in 1669 by Lower, and then described as a consequence of severe trauma in 1862 by Zenker. As recently as 1951, Whitson[1] questioned its very existence. However, fat embolism is generally appreciated as a distinct entity, although etiology remains unknown, recognition is often too late, treatment is inadequate, and outcome is often fatal.*

IN THE PAST, fat embolism has been the province of the orthopedic surgeon. However, with increasing appreciation of the incidence of fat embolism and its physiologic mechanisms, many other disciplines have become interested. Fat embolism is found in numerous disorders other than post-trauma states. In severe burns, blast injuries without fractures, fatty metamorphosis of the liver with or without trauma,[2] bone marrow infarction in sickle cell crisis,[3] inadvertent intravenous injection of oily contrast media in radiology,[4] fatty soft tissue injuries, in metabolic disturbances such as diabetes mellitus, and in the use of film-type oxygenators[5] in cardiopulmonary by-pass are instances in which fat embolism has occurred. In many of these states, however, there is embolization of fat, especially to the lungs, but no accompanying clinical signs of fat embolism.

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Presented at the Hawaii Regional Meeting of the American College of Physicians, February 1964.

CASE REPORT

A 31-year-old Caucasian woman was admitted to Tripler General Hospital early in the morning of August 24, 1963, shortly following an automobile accident.

She was alert and well oriented, but amnesic; blood pressure was 60/0, and she appeared to be in clinical shock, with multiple extremity injuries. There were multiple contusions and fractures. Lungs were clear to percussion and auscultation. Neurological examination was grossly normal. Her abdomen was tympanitic, with bilateral upper quadrant tenderness, absent bowel sounds and involuntary rigidity. There was tenderness over the entire pelvis.

Initial laboratory studies revealed hemoglobin, 6.2 gm%; hematocrit, 19%; grossly bloody urine, and a negative chest x-ray. Radiographic bone survey showed a comminuted fracture of the mid-

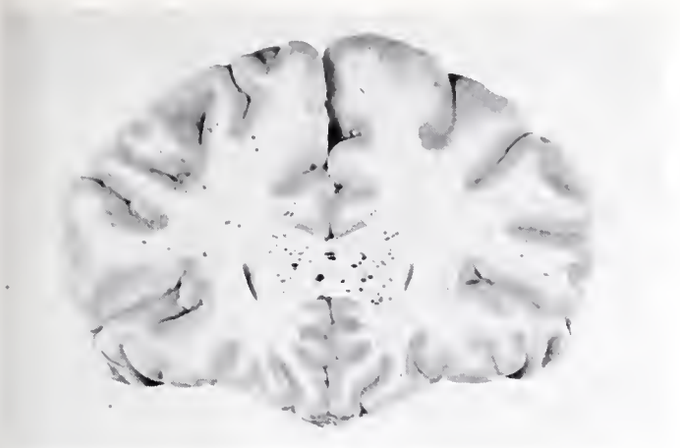

FIG. 1.—*Fat emboli in vessels of white matter of brain. Sudan III stain.*

shaft of the right tibia, a fracture of the superior ramus of the pubis on the right with subluxation of right sacroiliac joint, a comminuted fracture of left fibula, and a comminuted undisplaced fracture of right radius. Excretory urogram demonstrated satisfactory bilateral contrast excretion and no leakage of contrast material.

Initial resuscitative measures included blood replacement, skeletal traction for the right tibial fracture, debridement of lacerations, and tube decompression of the ileus. Four units of blood were administered the day of admission and two additional units on the second hospital day; vital signs appeared to stabilize. However, within 48 hours of the accident, the oral temperature rose to 102.2° F. and a tachypnea of 30/min. developed. She became very restless and agitated. Her level of consciousness and general improvement, which had followed resuscitation, rapidly declined. Chest x-ray on the third hospital day showed a diffuse blotchy infiltration involving the entire left lung field and the right upper lung field and a suggested widening of the upper mediastinum.

Within 70 hours of injury, the patient was increasingly restless, disoriented, cyanotic, and dyspneic and had a pulse of 140/min. Cyanosis responded transiently to nasal oxygen; the patient became comatose with labored respirations and increasing pyrexia. Spontaneous respirations and cardiac activity stopped 77 hours after injury despite endotracheal intubation and external cardiac massage.

A post-mortem examination showed pulmonary and systemic fat embolism. Grossly, the lung parenchyma was very congested. Microscopic sections revealed distended alveoli occluded with red blood cells, foamy macrophages and lipid material. Examination of the liver showed centrilobular congestion and a few small blood vessels filled with stained fat particles. Section of the kidney showed congested parenchyma and stained lipid material in some of the afferent arterioles. The brain grossly showed multiple petechial hemorrhages in the white matter. Sections revealed numerous "ball and ring" hemorrhages located primarily within the subcortical white matter. Occasional small vessels showed lipid material occluding the lumen.

DIAGNOSIS OF FAT EMBOLISM

The symptom-complex of systemic fat embolism is often incomplete and recognition will be infrequent if one demands classic signs and symptoms. Confusion may exist between the symptoms of systemic fat embolism and those of cerebral contusion, epidural hematoma, acute meningitis, delirium tremens, and cerebral embolism from some pre-existing medical condition. One is usually confronted with a patient who is severely injured; blood loss and internal trauma can produce some early signs suggestive of systemic embolism.

What are the signs of pulmonary and systemic fat embolism? How can one diagnose this condition ante mortem?

Post-mortem investigations have revealed a remarkable incidence of 80 per cent to 100 per cent of pulmonary fat embolism in those patients who have died after significant skeletal trauma. Following a study of 120 patients, Sevitt[6] concluded that the enormous functional reserve and extensive capillary network of the lungs prevented fat emboli from causing significant symptoms. He stated that pulmonary fat emboli are "not responsible for death even in patients with shock or hemorrhage." Systemic fat embolism, however, was felt to explain the entire clinical picture.

Systemic fat embolism can be classified as "fulminant," "classical," or "incomplete." In the

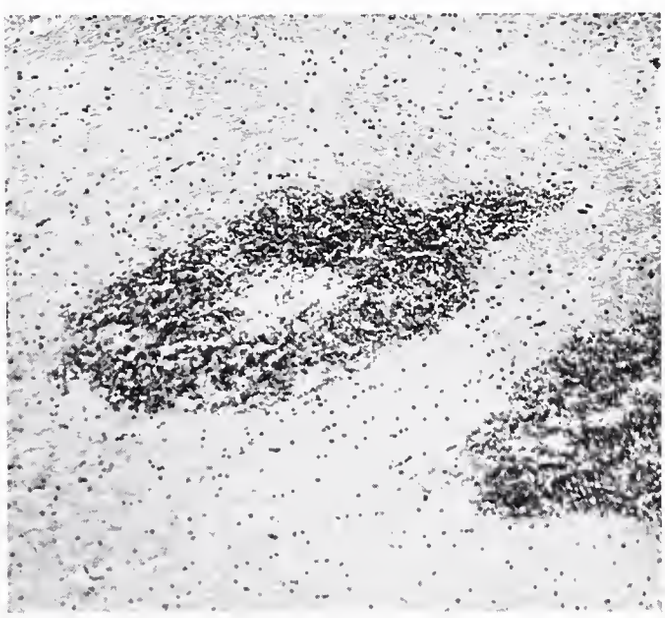

FIG. 2.—*"Ring and ball" hemorrhages in brain, produced by fat emboli. H&E.*

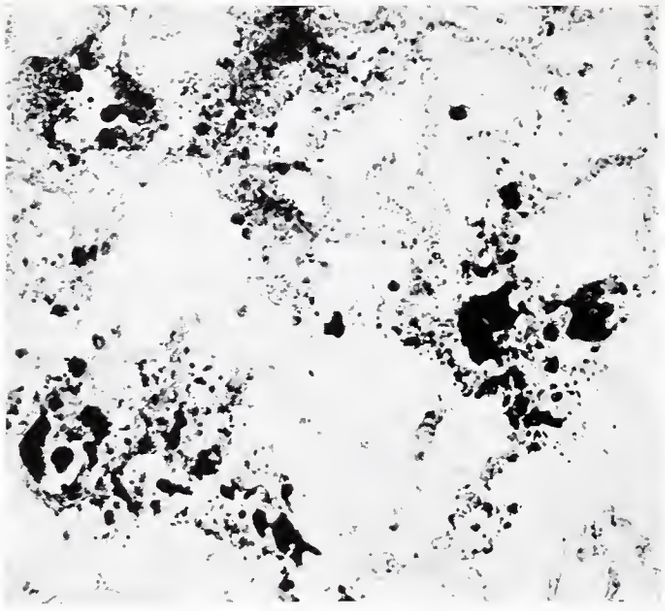

FIG. 3.—*Fat in small blood vessels and alveoli of lung. Sudan III.*

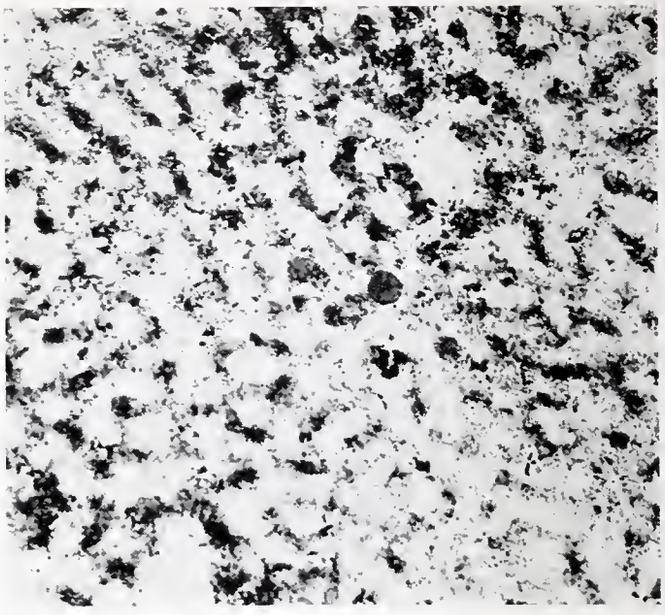

FIG. 4.—*Fat embolus in central vein of liver. Sudan III.*

"fulminant" form there is early onset of cerebral symptoms after injury and rapid devolution into coma. A common tale relates the patient who sustains severe injuries and then becomes lucid within several hours. Loss of consciousness and progressive central nervous system disturbances rapidly ensue, followed by death within one to three days.

In the "classical" form a latent or symptom-free period is quite characteristic; this lasts about 24 hours and is followed by sudden pyrexia of 102°-103° F., tachycardia of 100-120/min., and cerebral and respiratory signs. Symptoms start as early as 12 hours after injury in 23 per cent of the cases, and within 48 hours in 90 per cent.

Central nervous system symptomatology is variable; usually it begins as restlessness and irritability, proceeding to drowsiness and confusion. From this point the patient devolves through various levels of central nervous system involvement with Babinski's sign, clonus, flaccidity, Cheyne-Stokes respiration and finally death.

The respiratory distress, characteristic of other forms of cerebral disease, is characterized by dyspnea, tachypnea, cyanosis, and frank pulmonary edema without apparent systemic venous overloading. A very characteristic petechial rash, occurring in crops, starting on the second or third day after injury, may be observed over the upper chest, root of the neck, shoulders, and in the axillae.

The "incomplete" syndrome is marked by the lack of one or more of the "classic" findings.

The clinical suspicion of fat embolism may be confirmed by several laboratory techniques: urine fat determinations, renal biopsy, serum lipase studies, petechial rash biopsy and hematocrit. Free fat determinations of sputum and blood yield many false positive results.

The importance of lipuria in patients suffering extensive trauma was cited by Scriba in 1881. In 1941[7] Scuderi identified the excretion of intravascular fat through renal tubules. Lipuria may be detected only by emptying the bladder completely and testing the top layer of fluid in a volumetric flask. The material obtained should be stained with Sudan III or subjected to the "sizzle" test (the fat-laden fluid will sizzle if held in a platinum loop in a flame). Urine fat excretion declines rapidly during the first four posttrauma days. In a series by Glas[8] in 1953, 49 per cent to 55 per cent of moderately-to-severely-injured patients had lipuria; only 25 per cent of those with less severe injuries were positive.

The use of the percutaneous renal biopsy for detection of systemic fat embolism has been recommended. Biopsy of the typical petechial rash has also been advocated.

Serum lipase and tributyrinase determinations as a means of detecting fat embolism have been advocated by Peltier and Adler.[9] The enzyme is probably generated in the lung following extensive trapping of fat particles in alveoli. The level of enzymatic activity is considered to be proportional to the degree of bony trauma and release of fat into the circulation. Elevated lipases are usually noted by the fourth day.

Marked decrease in hematocrit following initial stabilization after injury has been utilized as an indication of pulmonary fat embolism. However, in a severely injured person, other factors may contribute to the falling hematocrit.

TREATMENT

Treatment of systemic fat embolism is largely empirical and unsatisfactory. Measures advocated

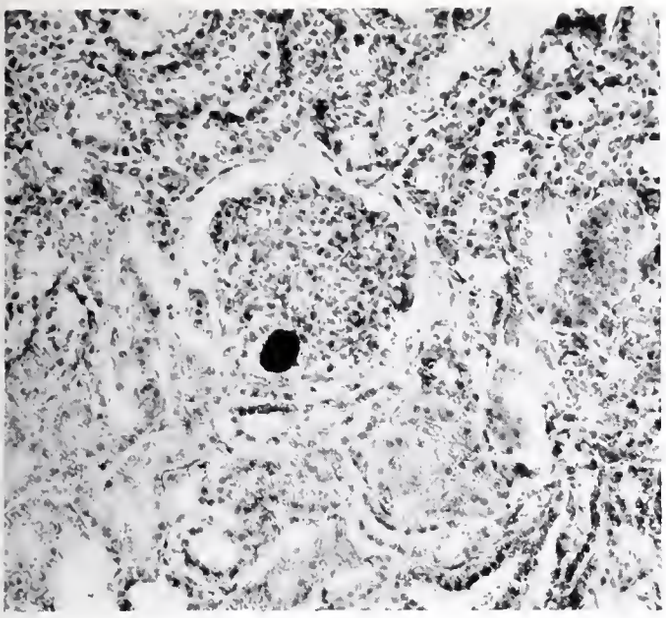

FIG. 5.—*Fat embolus in afferent arteriole of glomerulus of kidney. Sudan III.*

in the past have included: prevention (immobilization and elevation of the affected limb, use of tourniquets), positive pressure oxygen, hypothermia (to decrease metabolic needs of anoxic tissue), general supportive measures for comatose individuals, and chemical agents. The latter have included decholin and papaverine mixtures, the detergent "Tween 80," glucose and alcohol mixtures, and heparin. The efficacy of the alcohol mixture is unknown; its capability to emulsify *in vivo* fat is dubious. The sedative effects of alcohol may be the sole beneficial factor.

Heparin treatment of fat embolism has as many opponents and proponents as there are theories of pathogenesis of the malady. Some authors note that heparinization of rats before intravenous injection of fat has resulted in higher incidence of fatal systemic fat embolism. Others have not found this to be so in human subjects. Cobb and Hillman[10] have recommended doses of 10-50 mg of heparin every four to eight hours for its indirect lipolytic effect. Improvement in some severe cases were coincident with the start of heparin therapy.

Prognosis in fat embolism cannot be predicted with accuracy due to the difficulty in many instances in establishing the diagnosis. The fatality rate is certainly higher in those with severe cerebral involvement, or in whom symptoms occur shortly after injury.

SUMMARY

Fat embolism, once a concern only for the orthopedic surgeon, is being seen more frequently due to both increasing frequency and recognition. Because of the close resemblance that the syndrome of fat embolism bears to many problems in internal medicine, the internist must be prepared to diagnose and offer assistance in the management of this perplexing problem. ■

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Public Health in today's complex world aims at not only adding years to life, but adding life to years.

Quest for Truth in Health Practices[1]

IRA V. HISCOCK, M.P.H., Sc.D.,* *New Haven*

• *The Ira V. Hiscock Memorial Lectureship in the School of Public Health at the University of Hawaii was inaugurated on October 3, 1963, with a lecture by the honoree himself, Emeritus Professor of Public Health at Yale University. In it he outlines the factors that have changed the picture of the practice of public health today; the challenges that face the modern practitioners and proponents of public health; and the paths to be followed in meeting those challenges.*

INCREASING NUMBERS of people are seeking a treasure—a search full of drama, romanee, and satisfaction. The reward is of vital eoneern to all people. Everyone has a stake in the pursuit. Vigorous energy, imagination, and interest are required to reach the goal, while recognizing, with René Dubos, that scientific diseoveries and men of scienee are influeneed by the life about them and by the dreams of the human race. Three hundred and fifty years ago, Francis Bacon wrote:

To be fitted for the study of Truth,
have a mind nimble and versatile enough to catch the resemblance of things and at the same time steady enough to fix and distinguish their subtler differences;
be gifted by nature with:
desire to seek
patience to doubt
fondness to meditate
slowness to assert
readiness to reconsider
carefulness to dispose and set in order; and
be a man that neither affects what is new nor admires what is old, and that hates every kind of imposture.

PURPOSE OF QUEST

In these days of rapid ehange and technical development—an age of accountability—affeeting people's health in our eommunities, appraisal of resourees and evaluation of efforts are essential. Exploration, objeetively, is neeessary continuously. We fail often to use wisely the information whieh we do possess; perhaps we *know* better than we *do*. There remain many mysteries coneerning diseases and disabilities to be solved. Daily reminders of issues and untilled fields call for united aetion to help in answering such questions as the following:

1. Is there sufficient awareness of new knowledge being obtained from research, to let it be applied fully and wisely? If not, what needs to be done?
2. What are the most significant fields to be tilled?
3. How fully are the parts of our social structure (cooperation, coordination, joint participation!) intertwined?
4. Why is there a resurgence of venereal diseases and an upswing of tuberculosis cases?
5. How significant are today's headlines, such as:
   "President Signs Medical Aid Bill"
   "State Grants Urged" at University of California conference by Governor, who "Presents Cases for Regional Government"
   "Nation Now Wants More Children;" "Japan's Abortion Rate Exceeds Birth Rate—Abortion Is Legal, Cheap;" "Peking Pushes Sterilization;" "Experts and Fallacies About Twins and Quints;" "World Population Is Increasing by More Than 60,000,000 a Year"
   "City Sets Fluoride Hearing"
   "Education's the Answer"
   "Teen Age Is Time to Know About Venereal Diseases"
   "Slum Clearance and Redevelopment and Urbanization"
6. Is eradication of such diseases as diphtheria, malaria, and tuberculosis possible? Read the reports of the Territorial and State Board of Health, the Chamber of Commerce, the Oahu Health Council, publications of the HAWAII MEDICAL JOURNAL, and the *Honolulu Advertiser* of Sunday, August 17, 1950, on "Paradise Without Peril," while building Honolulu.
7. What is embraced in a concept of fitness? (Mental, physical, social?)
8. What is the significance of the "power structure"?

* Emeritus Professor of Public Health, Yale University.
[1] The first Ira V. Hiscock Lecture in the Department of Public Health, University of Hawaii, October 3, 1963.
Received for publication February 21, 1964.

9. Can progress in health affairs keep pace with eeonomic and technical advancement? National indicators of the USPHS in June, 1963, showed that the increase in health, education, and welfare expenditures represents an expansion of services to a larger population, an increase in the level and scope of services, and a rise in prices. Furthermore, in comparison with the primarily supported expenditures for space, defense, highways, and urban renewal programs, expenditures for health, education, and welfare programs continue to derive a substantial proportion of their support from private funds.

10. Are modern historians correct in their interpretation that changes are not primarily due to new information ("such discoveries do not account for the new look of American history")? The difference arises mainly out of new readings of old evidence in the light of changed conditions by historians with new preoccupations, sensitiveness, identifications, methods, and moods, says C. Vann Woodward.

Our purpose in the quest for truth is at least two-fold: to seareh for new seientific knowledge, and to find pathways of inereased clarity to insure that resources in personnel, faeilities, and funds are used with maximum efficieney for the optimum benefit of people.

Are we eorreet in our assumption that for the attainment of our purpose: (1) individuals need to know and to apply the fundamentals of personal health; and (2) simultaneously, to understand, and have such a favorable attitude toward essentials of eommunity health practiees as will eause them to exert efforts and influence for the advancement of necessary procedures? If there is validity in these concepts of growth, is it timely to emphasize that what needs to be developed, on a eommunity basis, is not the Region, but the Region's people? After all, the people of any area or plaee are its greatest resouree. Preparing people for modern living means not merely putting opportunities for health and education in their reaeh, but giving them the urge to take advantage of these opportunities. These are responsibilities along with the privileges.

SIGN POSTS

Suceess and progress in personal and publie health depend upon wise legislation, enough adequately prepared personnel, sufficient budgets, and the support of publie opinion (citizens and taxpayers, both professional and nonprofessional people). Realities of participation and praetiee, and experienee gained through personal involvement are neeessary to consider. Hence, it is important to find out what is on the minds of leaders and of those served in various "walks of life." Publie health as a profession can be dynamic, and has shown a capacity for changes in response to new knowledge, recognized health needs, and demands from the publie for health services. Giants of business and industry comment that the most important faetor in any equation of progress is people. Suceess in business can be related directly to the competence and devotion of the people throughout an organization.

Growth of knowledge has brought about an increasing amount of speeialization. Two important and essentially different lines of approaeh are concerned; on the one hand with the problem of health and sickness in the individual and, on the other hand, but simultaneously, with the problem of health and disease in the eommunity as a whole. Since World War II espeeially, we observe a trend to look on the "person" as a whole, as part of his family, and as a part of the eommunity in which he lives. Both in diagnosis and treatment, the physician has to take into aecount the social and emotional aspeets of illness.

The family doctor, obstetrieian, pediatrician, industrial physieian, geriatrieian, general praetitioner, and surgeon, all in their special fields, along with the dentist and nurse, are becoming more and more aware of the importanee of eonsidering the physieal and emotional environment in relation to siekness and ineapaeity, not only in praetieing their art, but also in teaehing and researeh. Meanwhile, progress is being made in the development of group praetiee of medicine along eonstruetive lines for the benefit of all coneerned.

Likewise, the hospital has broadened and deepened its program and strengthened the bridge between the home and the institution. This is true for the better mental health institutions as well as for general hospitals. Much is being aecomplished in many groups in planning for aftercare, nutrition, rehabilitation, radiation, resettlement, environmental safeguards, and treatment of mental disorders, for example.

The prevention, control or eradication of disease requires the participation and cooperation of large numbers of people of widely differing interests, ineluding politicians, administrators, doctors, teachers, nurses, engineers, soeial scientists, preachers, and espeeially the people themselves. Certainly the doctor and the priest must play a large part in this work, together and singly, while recognizing that the family is a part of the team and that public health is based on a number of scientifie diseiplines.

OTHER COMPLEX FACTORS

The economie trend is of consequenee, recalling that sinee health work and general community development are so intertwined, it is incumbent on health workers to understand this and coordinate their aetions with other types of improvement programs and to learn more about general processes of national and eommunity production and transformation. Even if good work is done, but informa-

tion about it does not flow promptly, or is not understood and interpreted rapidly and well, much of the value is dissipated.

Personnel resources are limited. Steps toward more effective recruitment and preparation, with means available for holding as well as finding qualified people, are indicated as an urgent requirement. According to W. W. Bauer, there are probably many ways to fitness, and each person must find his own for himself, in order to be able "to perform according to our obligations and to have something left over at the end of the day for play and recreation, an energy reserve, and emotional satisfaction in living." Fitness is the quality that Solomon aptly characterized, "A merry heart doeth good like a medicine, but a broken spirit drieth the bones."

THE POPULATION DILEMMA

The American Assembly has pointed out that never before in history have the security and welfare of mankind been so inseparable. Never before has man acquired the capability of achieving his own extinction. These circumstances require him to marshal his intelligence, control his emotions, and rise above his traditional thought and action in an unprecedented way. Failure to do so, according to the Assembly's recent publication, may threaten not only his prosperity, security, and peace, but even his survival.

Among the serious threats to welfare and security, and therefore to peace, is the accelerating rate of world population growth. A less tangible, but very real threat to personal development and the maintenance of family life must also be of concern: rapid population growth contributes to complex problems in the United States. A high birth rate obstructs the economic development of low-income countries. It diverts resources and hampers economic growth in less developed economies and makes it necessary to provide for a larger population rather than for a higher level of living. It contributes to imbalance in rural, urban, and regional population distribution. It generates an age structure with large numbers of young dependents in relation to workers. It impairs efforts to improve the quality of a population by restricting per capita expenditures, for improving health, raising educational levels, and teaching new occupational skills. It reduces natural resources per person. The urgency is apparent for a greater concern by our national, state, and local governments with our own U. S. population problems.

COMMUNITY HEALTH APPRAISAL

Meanwhile, the National Commission on Community Health Services, with $1,200,000, has launched a four-year action study, sponsored by the American Public Health Association and the National Health Council. Essentially, objectives are to estimate how far we have come, how far we can see ahead, and in which direction we should be going in providing health services in American communities. Some of the crude signposts that will orient the commission, cited by APHA, are such facts as those relating to our rapidly increasing and changing population (increasing at both age extremes, now having more women than men). Also, the make-up of the labor force is changing (more women working, more women supporting men).

Ethnic redistribution and the shift from rural to urban areas continue. Each year one out of five persons moves to a new place. Fewer farmers run fewer, bigger farms. More households contain fewer people under their roofs, and more of these families are better off financially. Coupled with the administrative dilemmas posed by new health hazards, these changes are occurring with speed,—faster than health departments and voluntary agencies can keep pace—and challenging universities to step up professional education, together with biological, epidemiological, and administrative research, in order to strengthen services.

As public health developed into a science in itself, it was realized that the methods of science must be employed. As objectives of a social program, such as improvement of public health, become more clearly defined, and as methods of carrying out a program are improved, the more rigid must be the standards and the more accurate must be the means by which we measure the efficacy of the program and the efficiency of the methods. No longer is the "putting over" of a project regarded as the final test of success. With changing outlooks, too, techniques were modified to emphasize positive measures in planning and organizing health and hospital services on a community basis. Meanwhile, since 1916, the purchasing power of the dollar in the U.S. has declined about 64 per cent, according to reports.

A time of change, and the impact evidenced on the National Health Council, illustrated effects on many other organizations and programs. This agency was established as the mechanism by which organizations interested in health might work together on questions of mutual interest. (The Oahu Health Council is an excellent example of a local body which has similar aims.) During 1962 the Board of the NHC concentrated much of its attention on re-examination of the purpose of the Council, its membership structure and requirements, its future role, and its base for financial support. At the end of 1962 the Board had formu-

lated recommendations for bylaw revisions designed to place the Council in a better position to provide the leadership that the Board, the member agencies, and other national interests seemed to believe were essential to the future of national health activity in the United States.

SOME ECONOMIC FACTORS

In an annual economic report on business development and island growth, the President of the Bank of Hawaii called attention recently to extraordinary expansion within limited island areas and the imperative necessity for long-range planning. "Only in this way can we assure sound growth designed to enhance the productive capacity of our economy and the quality of community life throughout the Islands." The 1963 report refers to a time of increasing need and growing potentials for development of Hawaii.

Simultaneously, business leaders and professional leaders in health and medical affairs must join forces in conducting and interpreting research findings in public health—a basic element of community structure—in order to insure for the people of the 50th State, and all concerned, that the public health and good medical services are maintained and advanced for the people at the same pace that the State is developing otherwise.

Is ground being lost already? What an unnecessary tragedy if this were to occur! Within a period of 30 years, Hawaii's health programs, official and voluntary, have become one of the best in the world.

It is essential that there be wide understanding, too, of the great need and opportunity for Hawaii to move forward in medical education, research, and training through the vehicle of higher education. The University of Hawaii's graduate training program in the biological and health sciences has an important part in advancing the excellence of this great and growing University and in meeting the challenging opportunities presented by conditions in the Pacific area and the Far East.

THE PHILANTHROPIC PICTURE

Increasing federal, state, and local government appropriations have not slowed the rate of private philanthropy. The major source of philanthropy in the U.S. is still the individual donor, principally the 60 million or more taxpayers who take the standard deduction or claim philanthropic deductions on their income tax returns.

Foundations have been termed "reservoirs of philanthropy," providing venture capital for advances for human betterment. Some 13,000 of the grant-making foundations contributed about $625,000,000 to the stream of philanthropy. This amounted to about seven per cent of the nation's gift dollar in 1960, according to the Foundation Library Center. A third major source is the business corporation whose participation in philanthropy has increased since permissive legislation was enacted in 1935. Preliminary returns for 1959-60, the latest available data from the Internal Revenue Service, show that 1,074,128 corporations filed returns reporting $481,541,400 in contributions, amounting to 1.01 per cent of their net profits. Distribution of philanthropic giving during 1962 may be approximated as follows: religion 51 per cent, education 16 per cent, welfare 15 per cent, health 12 per cent, other 6 per cent.

Incidentally, the custom of neighbor helping neighbor which prevailed in the simpler days of America is carried on today by volunteer services provided by individuals to gift-supported institutions. There are reportedly between 45 and 50 million volunteers engaged in one sort or another of philanthropic endeavor. Meanwhile, the goal in education is to prepare the rising generations for responsible citizenship, for effective participation in the nation's work, and for full development of each individual as a healthy human being.

EDUCATION

The School of Public Health as originally conceived was intended to spearhead the advance of public health in thought and practice, to provide the social perspective and the wealth of competence which would enable trained public health workers to perceive community health needs and to take necessary action. Today there is a greater need than ever for this kind of leadership, and it is to this aim that the School of Public Health must remain dedicated. International activities have been for many years an important part of the work of public health schools in North America and in England. These activities are continuing today on a broader front than ever, with increased overseas involvement of faculty; and a never-ending stream of students comes to North America from many parts of the world. The schools and the students can be "agents of change" in the countries to which students will return, and the students should adapt what they learn in North America to their own countries' needs and not simply adopt it verbatim.

Federal and state responsibilities in education for public health are becoming better recognized. Enactment of the U. S. Health Professions and Educational Assistance Act received wide support in 1963. And, shortly after World War II, the Federal government adopted the policy that Federal investments in medical research were a proper and essential function of government.

COMMUNICATION

One of the great barriers to advancement in health practice is the complex problem of communication between people, including inter-agency and inter-departmental communication. Despite the wonders of Telstar and space, of television and radio in the jet age, the problems of interpersonal relations, and the difficulties of coordination, cooperation, and understanding of languages and even of the meaning of "commonly used" phrases and words, seem to have become magnified. "The heaviest single information burden falls on the practicing physician, especially the general practitioner. No one in all of science is called upon more continuously for speedier life-and-death decisions —based upon recall of knowledge as to past findings and current procedure." Also, ". . . health education of the public fails to use the most modern media. The layman is confused by a bewildering number of reports of so-called new breakthroughs. Often he cannot locate information which he needs and which has been published by reputable medical authorities in his behalf."

Too many libraries are clogged. Some 4,000 medical journals throughout the world publish over a quarter million articles in over 30,000 issues yearly. Over 38,500 research projects currently underway are registered with the Life Science Information Exchange. The late Alan Gregg once said that "the medical literature today exemplifies all too fully the biological adage that life is choked by its own secretions." Deputy Surgeon General David E. Price of USPHS noted that "It is said that it is easier to repeat research than to dig it out of the literature." Yet the late Harvey Cushing inspired us with: "This, then, is the true function of the library, to quicken the dormant book so that it may speak again; and with those who treat it lovingly and compassionately its spirit enters eagerly into communion. To these a library becomes a laboratory for the crystallization of ideas perhaps long expressed, out of which process new ideas have their birth."

What is the image of health? What makes a complex political system tick? Someone has asked if Americans are going to be forced to give up one or the other of their favorite habits—living in cities, and driving automobiles. Our cities frustrate the motorist, and the millions of motorists are strangling the cities. City planning, our national highway program (costing billions of dollars), the suburb versus the city, the meaning of all this to the nation at large and to the individual citizen—their relation to our future comfort and well-being —these are our problems. The U.S. is the most prosperous nation in the world, but, paradoxically, many of the urbanized areas where its wealth was produced are blighted and unsightly, lacking in adequate facilities for living and working, and hardly a fit environment, because of the noise and air pollution, for realizing our social, cultural, and economic aspirations. Statistically, we lead the world, whether the statistics deal with bathrooms, dishwashers, automobiles, airplanes, or housing. Yet too many of our citizens live under conditions that ill become a successful country and threaten to have a negative impact on future generations.

A related factor may cause raised eyebrows. One study of the political structure of an American city, a little smaller than Honolulu, analyzed the changing patterns of leadership. Robert Dahl found that political power, once concentrated in a few hands, is now dispersed unequally through all strata of society. Interesting factors come to light as one looks closely at present-day distribution of influence in political nominations, in public education, in urban redevelopment. How much does distribution of political resources—social standing, money, education, popularity, jobs, information—influence political decisions? The question of "who governs?" may have been put many times in Athens, even before it was posed by Plato and Aristotle. Americans espouse democratic beliefs, says Dahl, with a fervency and a unanimity that have been a regular source of astonishment to foreign observers, from Tocqueville and Bryce to Myrdel and Brogan. What do beliefs actually mean, in the face of extensive inequalities in the resources different citizens can use to influence one another?

RESEARCH

It is gratifying to observe across the United States and abroad an overdue but increasing recognition of the fact that the planning of governmental and private or voluntary agencies depends for future program effectiveness upon a well-conceived scheme of research. This requires a continuing intensive effort: (a) to attract and prepare able medical, health, and social scientists who are temperamentally and otherwise equipped for essential tasks; (b) to learn more from each other; (c) to establish priorities related to the situation, with flexibility; (d) to exchange truth for fear of the unknown, including continuing exhaustive studies of such problems as leukemia, obesity, viruses, mental disorders, radiation hazards, etc.; and (e) to provide the facilities to insure productive work for the benefit of all concerned. For measurement of health and welfare and of results, we need extensive administrative research studies and surveys, and the development of better indices of measurement.

In the spring of 1958, the World Health Or-

ganization celebrated in Minneapolis the tenth anniversary of its inauguration, at which time Dr. Milton Eisenhower, representing the President, sowed fruitful seed while underlining a program for research:

"We need more rapid exchange of ideas and information between laboratories and scientists. We need more opportunities for scientists to meet together and discuss freely their work and their problems. We need to find the gaps in research and fill them. We need to develop research workers and give them scope and opportunity. We need a world-wide search to know where diseases occur and why." WHO has launched a more vigorous medical research program, to deal mainly "with communicable diseases—especially those prevalent in the tropics—and with virus diseases, vascular diseases, health problems arising from the use of ionizing radiations, and studies in human genetics." Fundamental principles have been developed for cooperative action, with standardization of nomenclature, definitions, techniques, and preparations, with suggestions of categories of inquiry which are regarded as appropriate for international collaboration. In cooperative enterprises with the National Institutes of Health of the U. S. Public Health Service and in the furthering of the WHO program, besides exploring problems of immediate concern locally and in neighboring island outposts, it is hoped that the University of Hawaii and other equipped professional organizations of this State may play a prominent role. The basic organizations and foundations here are strong, sound, and adequate for guidance and operation if wisely extended as circumstances warrant. Many subjects requiring skilled attention were presented in Honolulu during the Tenth Pacific Science Congress in 1961. Other epidemiological, laboratory, administrative, education, and statistical puzzles have come to light since that Congress.

CONCLUSION

We can agree with W. Hobson of WHO that public health has moved far since Galen dreamed of hygiene on the Acropolis at Pergamum. Disease and ill health, with the marshalling of so many forces against them, have given ground, and particularly rapidly during the past 50 years. History records a growth of understanding of health and of the value which society places on it.

In the "First Report of the World Health Situation," May, 1959, is contained a series of statements that summarize the ideas expressed above. Present knowledge and experience in the fields of medicine and public health (which are really big "plots" in the great "field" of human service) have enabled workers to erect reasonable safeguards for the mental and physical health of a people. The lack of comparable information on "social well being" confronts them with many problems that are beyond their control, as they look to the future. Health administrators are considering these pressing questions and becoming more familiar with the social and economic hazards affecting the health of the people. Contemplation of goals should not detract from action to meet immediate urgencies of quality health care and health promotion.

Just as the governments are recognizing their growing responsibility for providing services, so the people are becoming aware of the need for their own participation in the endeavor to build up the health of the nation. The truth has been realized that health cannot be imposed; its promotion requires teamwork within a community. People are no longer content with lowering the death rates, but also aim at reducing sickness and incapacity—not only adding years to life, but adding life to years. In other words, there is an effort to improve the quality of human life as the facts become known and understood. Research is turning from purely laboratory studies to field observations on the living patterns of different groups of people. Four broad areas of research in public health practice embrace: basic science research, administrative research, epidemiological research, and social science research. An important future responsibility of administrators of health practice will be to help bridge the gap between the knowledge gained from the medical and health sciences and the practical application of that knowledge.

Finally, in our quest for truth, we need faith, humility, imagination, judgment, and patience, made apparent through action rather than words

We may keep in mind also the old Hawaiian proverb, as translated for me by Sir Peter Buck when he was Director of the Bernice P. Bishop Museum:

Waves of the sea are overcome by the bow of canoe,
Waves of men are overcome by human courage.

EPILOGUE: RESPONSE BY DR. HISCOCK

Dr. Lee, President Aduja, Dr. Bernstein, friends: Mrs. Hiscock and I are grateful for the opportunity of meeting with you here; and for the unusually great honor of being identified with this lectureship. You have been far too generous in referring to my small role in Hawaii in the advancement of "community health care." You, Dr. Lee, a public health statesman, in the forefront of others in Hawaii, professional and nonprofessional, are responsible for having arranged for evaluation and periodic appraisals, and for implementation of ongoing programs under both official and nonofficial auspices. The list of participants is long.

Beginning with Dr. Frederick Trotter, John R. Galt, and Mabel Smyth, hundreds have been involved, as have many organizations, voluntary and governmental, including the Chambers of Commerce, the Community Chest, the Oahu Health Council, the Board and Department of Health, with backing and cooperation of County and State Medical Societies and the governors of the Territory, and later of the State, of Hawaii. Many officers of the military forces of the Army and Navy, too, have shared, at various times, in one of the most outstanding processes of joint participation that can be recorded in community health developments.

In this Paradise of the Pacific, where one finds the greatest social harmony, we are pleased to see developing, in an effectively planned manner, a productive combination of education, research, and service, for the betterment of mankind everywhere. This place in mid-Pacific has become a focus, too, for the holding of stimulating national and international, as well as state, scientific conferences and institutes; where serious discussions and studies may be enhanced in value by timely relaxation, varied sufficiently to meet different interests and desires. The benefits are appreciated by those in authority on the mainland and abroad.

The development of the Department of Public Health and of the East-West Center programs are great landmarks.

This lectureship in the University of Hawaii, made possible by friends and foundations, means more to me than my feeble words can express. While filled with a sense of humility, may I reemphasize the vital roles of the men and women who have participated directly and indirectly in the significant improvements in measures for personal and community health throughout the period of some 35 years since my first happy summer in Hawaii. Your efforts provided the conditions for continuing growth. We all recognize that there is much yet to be done to keep pace with increasing knowledge and changing conditions.

Hawaii and its letters to me spell health and happiness, ability and alertness, wisdom, attitudes favorable for advancement, imagination and interest—all constructive for living. May interest never wane! And may the march of science and education here be ever onward with sights high! ■

215 Highland St.

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The President's Page

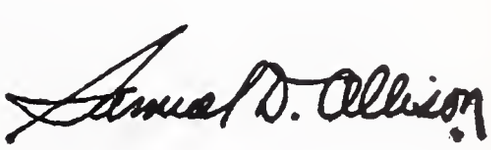
This is a brief report on some innovations in the operation of the HMA. A third of the year is over and it is possible to evaluate these changes to some degree.

We all owe much to our hard-working committees. Many of us know from first-hand experience the time and effort spent by them. Others may not know the complexities of their activities, nor that a number of them devote as much as several hours each week to Association affairs. Most of the committees meet at regularly established intervals and without their effective work our Association could not function.

With the concurrence of the 1963-64, President, Dr. Rodney T. West, most of our committees were formed prior to the onset of this administrative year. Committee assignments were made on the basis of requests by the members after evaluation by the President-elect, Secretary, Treasurer, and the Chairman of each committee. Neighbor island county society presidents selected members to work with the committees and the President of the Honolulu County Society reviewed the assignments prior to their finalization to assure adequate representation of his views. When Dr. O. D. Pinkerton became President-elect he was invited to designate the vice-chairman of each committee. With over 200 different members of the Honolulu County Society and most members of the neighbor islands serving on HMA committees; with selection made as it was; and with minutes of meetings going to committee members, Councilors, and to all county societies, there can be no legitimate complaint of lack of representation or lack of knowledge of what is going on in Association affairs. I am most gratified at the way the committees are functioning, and I'm particularly well impressed by the participation of the younger men in our Association. We need not fear for our future. I believe that there is need to formalize a method of early selection of committees in order that a full year may be devoted to their work.

The President and President-elect of the Association are members of all committees except nominating. I doubt if it is possible for a practicing physician to be an effective participant in three dozen committees, so it seemed desirable to share this responsibility. In the past Councillors have not been responsible for any committee activities and, as a consequence, sometimes they were not fully informed as to the activities of the Association between Council meetings. This year each Councillor and officer is participating in and reporting to the Council the activities of the several committees assigned to them. This assures a close liaison between the committees and the Council, and provides, in my opinion, a more informed leadership.

It is my belief that the HMA has developed beyond the point where it can be run effectively by a President and the staff. Semi-monthly officers' meetings have been instituted, thus providing broader participation of all the officers in the Association affairs, a sharing of responsibility, and as a consequence, a more democratic organization. I feel that these meetings have been desirable and that thought should be given to assuring a continuation of this or some similar form of expanded management of Association affairs.



HAWAII MEDICAL JOURNAL

Editorials

Polio Immunization

Elsewhere in this issue Dr. Robert Worth points out a potentially hazardous situation in our community in regard to polio immunizations. It is a simple fact that not enough polio vaccine of any kind is being sold in this State to immunize the susceptible population. It is a startling fact that only about 45,000 doses of Sabin Type III vaccine were sold in 1963 in this State, with a population of over 600,000, close to one-half of whom are under 18. At the heart of the matter is the question of safety of Sabin III. No favorable publicity about this vaccine has appeared in the lay press since the scare generated 18 months ago when Operation Swallow III was cancelled.

The question raised at that time has been clearly answered by the most prestigious bodies in American medicine. The Special Advisory Committee on Oral Polio Vaccine to the Surgeon General of the U. S. Public Health Service, after a careful scrutiny of the facts concerning the matter, concluded in its report on December 18, 1962, as follows:

> It is therefore recommended: (1) That community plans for immunization be encouraged, using all three types, and (2) that immunization be emphasized for children in whom the danger of naturally occurring poliomyelitis is greatest and who serve as a natural source of poliomyelitis infection in the community. Because of the need for immunization diminishing with advancing age and because potential risks of the vaccine are believed by some to exist in adults especially above the age of 30, vaccination should be used in adults only with the full recognition of its very small risk. Vaccination is especially recommended for those adults who are at high risk of naturally occurring disease; for example, parents of young children, pregnant women, persons in epidemic situations, and those planning foreign travel.

Since that date, nearly two years ago, the Special Committee has not changed its position. The "small risk" referred to means approximately one in a million. The Committee on Control of Infectious Diseases of the American Academy of Pediatrics states:

> On the basis of all available data, both the oral polio vaccines and the inactivated vaccines have been effective in the prevention of paralytic poliomyelitis and each vaccine is acceptable. However, evaluation of the virtues and the limitations of the killed and the live polio vaccines reveal a clear-cut superiority of the oral [live] polio vaccines from the point of view of ease of administration, immunogenic affect, protective capacity, and potential for eradication of poliomyelitis. It is therefore the vaccination of choice for community-wide vaccination programs for children and young adults and for routine immunizations of infancy.

On the local scene, these recommendations have been accepted by the Hawaii Medical Association's Polio Committee, and carefully considered and approved by the Hawaii Chapter of the American Academy of General Practice, the Honolulu Pediatric Society, and the Internal Medicine Society.

There has been no lack, therefore, of favorable reports in the medical literature supporting its use. But if this has helped clarify the problem in minds of physicians, it has done little to help public acceptance of this excellent immunization procedure. It is therefore the intention of the Communicable Disease and Immunization Committee and the Public Relations Committee of the Hawaii Medical Association to stimulate public interest in these vaccines through the press, T.V., and radio, and to encourage private physicians in their routine office use. There will be no mass program again similar to Operation Swallow I and II. It is therefore up to the private physicians to provide these vaccines for their patients and for the Department of Health to provide them for the indigents under their care.

So let's go! Let's catch up on all our old patients and routinely immunize our new infants and eliminate the threat of poliomyelitis in our comunity. SABIN ORAL VACCINES ARE THE VACCINES OF CHOICE.

The Physician, the Clergy, and the Whole Man

Throughout all ages there have been the inseparable physical and spiritual aspects of human disease. There have been periods when these have been seemingly blurred together, and other times when one aspect has seemed at least, to try to deny the other. In recent years there has been a rebirth of concern for the necessity to utilize man's faith in the treatment of his illnesses and infirmities, and because of the growing complexity of our communities, individual physicians have become more aware of the great differences in the faiths and beliefs of their patients. This may have been bewildering to them, and due to this, or possibly due to ignorance, they may have tried to ignore the spiritual life and its influence on the patients' illnesses. At the same time, the *modus operandi* of the physician has been so revolutionized that most clergymen are left understandably bewildered by the techniques and trappings of modern medicine. It is fortunate that renewed efforts are continually made for clergy and physician to meet together and to mutually explore these possible stumbling blocks to good total patient care.

One such effort was the establishment by the American Medical Association in 1961 of a Department of Medicine and Religion, whose Director, The Reverend Dr. Paul J. McCleave, was recently in Hawaii to help implement a program in our State (48 of the 50 states now have such programs).

The purpose of the Department of Medicine and Religion is to help create a proper climate for communications between the physician and the clergy that will lead to the most effective care and treatment of the patient as a whole man. To achieve this purpose, the medical societies will be assisted in sponsoring programs of various sorts to familiarize the physician with the religious attitudes held by his patients, which may very well differ markedly from his own beliefs, and which do vitally affect their health, particularly in time of illness. At the same time the medical community will make renewed efforts to bring the clergy up to date on certain medical problems which directly affect the religious life of his patients.

It is not the purpose of this new program to convert either the doctors or the patients, and there will be many cases when the clergy will not be brought in and, certainly, the clergy will not be brought in without the consent of all parties.

This is definitely a two-way street and each has much to learn from the other; and possibly we in Hawaii have the most to learn, since it would not be at all uncommon to have a Buddhist physician treat a Roman Catholic patient in a Seventh Day Adventist hospital. Our patients are usually someone's parishioners, and each patient is one whole inseparable person until he needs the help of neither of us.

JOHN R. STEPHENSON, M.D.

What is the A.M.W.A.?

The American Medical Writers' Association—a professional society of people engaged or interested in various aspects of medical communication—held its 21st Annual Meeting, September 24-27, 1964, in Philadelphia, the cradle of American medical education and a leading center of medical publishing.

The A.M.W.A.'s objectives are to improve the quality and efficacy of communications within the medical world, to provide a forum and publication medium for the interchange of views among its members, and to improve the status and recognition of the medical communicator.

The Association holds annual meetings at which outstanding exponents of various aspects of medical communication submit their opinions and experiences to their colleagues.

Other A.M.W.A. functions include the maintenance of a medical manuscript service, a roster of qualified lectures on medical communication, the presentation of fellowships and awards for "distinguished service in medical communication" to outstanding individuals and medical publications, and the provision of scholarship assistance to students of medical journalism.

Membership is available to any person "actively engaged or interested in any aspect of communication in the medical and allied professions . . ." Dues are $15 per year and the national office of the A.M.W.A. is located at 2000 P Street, N.W., Washington, D. C., 20036.

Hawaii Academy of General Practice

It seems that we have fallen onto the days of mass hysteria.

Whether it be a facet of Big Brother government; onee ereeping, now galloping, soeialism; a beneficent, burgeoning bureaucracy; or just plain madness, we are being overwhelmed by eommittees to study committees. There is a Committee to Study the Private Lives of Womenfolk; there is one to Study the Rite of Spanking; there is a Task Foree to Take Conception Out of Pregnaney for the Control of Indigency. It seems that this nation of do-gooders, onee hipped only on the matter of forcing everyone to have perfect teeth, has now gone stark, raving mad about doing good to the *rest* of our anatomy.

If the tremendous effort now being expended with the assistance of Unele Sam's scrip (Oh no! It isn't *our* money!) to study the mental health of every community, were diverted, and the money returned to the taxpayer, there would be less mental ill health to study.

Federal grants and subsidies are to be had for the asking, almost, by anyone. If a committee be appointed by the Governor or the President, there is no limit to either its scope or its budget.

In considering this mass hysteria over committees, the strangest thing of all is the attitude of dignified and sedate bodies, such as the AMA, for example. Remember the famous story about The Emperor's New Clothes? Not even the highest offieial of the eourt dared to suggest the truth of the matter, whieh seemed in itself to be invisible in the light of that hysteria. One gets the impression that the AMA is so fearful of being unpopular, so desirous of reversing its reeent poor image, that it dare not eritieally evaluate, mueh less oppose, any idea emanating from Washington. It seems that the AMA has reversed its poliey of opposition to most of these half-baked sehemes, and instead, favors "going along with," rationalizing its actions with the explanation that it intends to assume the leadership in the new projeet and will grasp the tiller later. Such ends rarely justify the means, when basie prineiples are thus put on the saerifieial altar of expedieney.

Perhaps aware of its own shorteomings in these respeets, the AMA must have seraped the bottom of the barrel when it eame up with its latest, an idea surely all its own, a Committee to Bring Doctors and Ministers Closer Together, and appointed the Rev. McCleave as its chairman.

I heard Rev. McCleave express and defend his views one morning recently on Don Carter's radio program, and I was more than somewhat horrified.

There is that in the physieian's art of healing that is a ministry of itself. There are also many people who, though religious, do not belong to a church and do not know a clergyman personally. To eall one in, at a time of serious illness, for the first time, would not only be hypocrisy, but would be like calling in a stranger as a third party, into the well-developed, very close, and very confidential doctor-patient relationship. These two factors; the physician as the minister and the ministers as a stranger, are of themselves sufficient to exclude the probing of any committee. It does not exclude, of course, the participation of the patient's strongest ally in his battle for health and life: his church and his pastor of long standing.

I was horrified to hear Rev. McCleave first bring up the ease of the man with a brain tumor who sought out a brain surgeon *on his own,* i.e. practieed self-diagnosis. It got even worse to hear him go on to suggest that the brain surgeon should call in a minister next, to assist him in dealing with the patient and his family. And, what of the patient's Family Physician? No word.

Too numerous to mention are the instanees in which a lay person will latch onto a specialist as his personal physician. There is nothing wrong with that. Every man will put his trust in one physician, trusting that doctor, if he be a surgeon, to take eare of his minor eold, trusting him to refer him to the right internist if his illness be pneumonia or diabetes. Mueh more fortunate is the patient who has a Generalist for a family doctor, the latter not only being knowledgeable in all things surgieal and medical, but probably a valued friend and medieal eounsellor to the entire family whose members he has taken eare of in the past.

A seriously ill or dying man eomes closest to his God through his family, a friend, his doetor, or his elergyman. Any one of these can minister to the patient's spiritual needs—it need not only be the man of the eloth. The family physieian is in the best position to serve whteher the tribulation is physieal, mental, or spiritual. ■

J. I. Frederick Reppun, M.D.
Secretary

HAWAII MEDICAL JOURNAL

This Is What's New!

• Artificial pacemakers for treatment of complete **heart block** continue to be improved. The source of energy for the **pacemaker** has been the electrical battery, but now the transducer is used to convert chemical energy to electrical energy, sufficient in amount to adequately stimulate the heart. The pulsations of the aorta generate enough mechanical energy, which, when converted to **electrical energy,** stimulates the heart to contract and maintain cardiac output and aortic pulse wave which, in turn, completes the cycle. (*Circulation* [Apr.] 1964.)

• It was hoped that the **thyroid radioscan** would help distinguish cancerous from non-cancerous nodules. "Hot" nodules, with a high uptake of radioactive iodine, are supposed to be benign; "cold" nodules, with a low uptake of radioactive iodine, malignant. However, workers at Roswell Park report that even though **none of the hot nodules,** in over 100 patients scanned, **contained cancer,** the procedure was not too helpful: not only were the majority of the malignant lesions cold, but the **majority of the benign nodules were also cold.** (*Arch. Int. Med.* [July] 1964.)

• Two hundred eighty patients with **chronic tension headaches** were treated with **amitriptylin (Elavil).** Three-quarters of the patients experienced complete or partial **relief of headache.** Although the drug is usually used for metal depression, there was no correlation between the improvement in the headaches and the presence or absence of depression. (*Lancet* [June 6] 1964.)

• A review of the literature suggests that **oxygen consumption** by **bacteria** or **cancer cells** may be enough to cause **death to the patient from hypoxia.** Ten to twenty grams of bacteria in systemic bacterial infections, or three to six kilograms of cancer cells, are sufficient to cause death from this cause alone. (*Lancet* [June 6] 1964.)

• The following figures may or may not indicate the maximal and minimal interest of American physicians in medical matters. At the scientific sessions at the AMA Meeting in San Francisco this past June, a maximal meeting attendance of **995 physicians** was recorded. This was a lecture on the **Zollinger-Ellison syndrome** given by R. M. Zollinger. The least attended meeting was Group Therapy of Psychosis in the Military Medicine Section—only 19 physicians attended. In June, 1963, also at the AMA Meeting, this time in Atlantic City, **1,254 physicians** turned out to hear a talk on **Effective Weight Reduction** which was in contrast to 15 physicians who attended a lecture on Prevention of Adhesions to Healing Digital Flexor Tendons and Grafts. There must be some subtle reason why one year physicians will turn out in large numbers to hear about obesity, a disease that everyone sees and everyone tries to treat, and the next year the majority turn out to hear about a disease that few have seen and fewer have treated. (Figures from the AMA Meetings, 1963 and 1964.)

• Canadians investigated the use of initial heparin therapy in acute myocardial infarction and found a mortality of 30 per cent in patients treated with heparin over the first 48 hours, and 28 per cent mortality in patients not treated with heparin. They naturally concluded that **intravenous heparin does not lower the mortality** in patients with **acute myocardial infarction,** nor does it **prevent impending myocardial infarction** in patients with acute coronary insufficiency. (*Canadian Med. Assoc. J.* [June 13] 1964.)

• Atlanta psychiatrists studied wife-beaters' wives in Massachusetts. The wives were dominant and aggressive while the **wife-beating husbands** were **passive, socially inept,** and much **concerned about masculinity.** In spite of frequent fights, the marriages tended to be long-lasting. "Doctor, how can I make my marriage last?" (See above.) (*Arch. Gen. Psych.* [Aug.] 1964.)

• Parathyroid adenomas causing hyperparathyroidism are almost never palpable. Radioisotopes will almost certainly prove to be better than the finger tips in diagnosing parathyroid adenomas. **Methionine labeled** with **selenium-75** located one **parathyroid adenoma** weighing 3.3 grams, evidenced as an area of increased radioactivity on the photoscan. This still is not good enough to detect the smaller parathyroid adenoma. (*J. Nuclear Med.* [June] 1964.)

• Without side effects, therapeutic failure or relapse, **Ampicillin** was used in the successful treatment of eight patients with **typhoid fever.** (*Lancet* [June 6] 1964.) ■

FRED I. GILBERT, JR., M.D.

In Memoriam – Doctors of Hawaii.....

This is fifty-first installment of In Memoriam—Doctors of Hawaii.

Vladimir D. Sezenevsky

Vladimir D. Sezenevsky was born April 21, 1869, in Moscow, Russia.

Soon thereafter the family returned to their original home in St. Petersburg where he received his elementary, high school, and pre-medical schooling.

DR. SEZENEVSKY

In 1888 he entered the Imperial Medical Academy in St. Petersburg, and graduated with a degrce of Physician and Surgeon in November, 1893. He then entered the Army Dental Surgeon's College in Warsaw where he studied dentistry and was Professor of anatomy until the cnd of 1898.

In September, 1899, at thc spccial request of the late Professor I. P. Pavlov, he was recallcd to thc Academy for further studies and research work in St. Pctersburg.

On April 20, 1900, Dr. Sezenevsky's rcsearch work was interrupted by a call to active duty. During the Chincsc Boxer rebellion he served as commanding officcr and chief surgeon at a Red Cross hospital in Manchuria.

Returning to the Academy on June 30, 1901, the doctor completed his rcsearch work, passcd a series of spccial state examinations, published his disscrtation, and maintainccl his thesis before a board of professors. On January 11, 1903, he received the degrec of Doctor of Medicine and returned to resume his army career.

In the Russo-Japancse war in 1904, Gcncral Sezenevsky was commanding officer and chief surgcon of a Russian army hospital. He served again as commanding officer of various army organizations during the threc and a half years of World War I.

He married Olga Aimée Amélie de Gueé on May 26, 1906, in St. Petersburg.

Following the World War, the General was chief officer of the army medical service. He held this post all through the losing battle against the rising Communist forces.

From 1919 to 1922 he headed the army hospital in Vladivostok and was consulting physician for the last Russian democratic government.

Leaving Vladivostok in 1922, General Sezenevsky took command of a Red Cross hospital for wounded Russian refugees, which was organized by the combined foreign relief committee headed by the Amcricans in Korea.

When Russian troops were evacuated from Korea, the General left with them, ready to begin a new life at 56. His wealth, personal property and real estate, and the insurance and pensions to which he was entitled after 35 years of service were all swept away.

He became a physician and surgeon at the Insular Lumber Company, an American concern, in the jungles of Occidental Negros, a large island in the Philippines, about two days' travel by boat from Manila, after he first obtained a temporary license to practice medicine in Manila. He then cmbarked on a tour of Australia, New Zealand, and Tahiti, continuing his studies of leprosy. Work in this field brought him to Honolulu in 1927. Shortly thcreafter he was appointed to the staff at Kalaupapa. In 1928, he was transferred to Leahi Home, where he remained until he left to go to the Mayo Clinic in 1935.

Dr. Sezenevsky became a naturalized American citizen on August 27, 1932.

While en route to the Mayo Clinic, Dr. Sezenevsky died May 2, 1935, at Sparta, Wisconsin, at the age of 66.

He was a member of the Honolulu County Medical Society and the Territorial Medical Association, and an Elk.

Shogo Tokuyama

Shogo Tokuyama was born on September 10, 1886, in Shita-machi, Tamanaga Fukui-shi, Fukuoka Prefecture, Japan.

He received his early education at Koto Gakko, graduating in 1908. His medical degree was earned from the Imperial University of Kyushu Medical College in 1912.

Dr. Tokuyama came to Honolulu in September 10, 1914. After passing the Territorial Medical Board examinations, he went into private practice

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Bureau of Medical Economics

A doctor called me up recently with regard to one of his delinquent medical accounts. It appears that The Bureau of Medical Economics had mailed to him a form known as "Suit Authorization." This form has to be signed by the doctor, or a responsible party from his office, before the Bureau will start legal proceedings against a debtor for the recovery of a delinquent medical account.

SECOND THOUGHT?

The main reason for this form is to get the doctor's "second thoughts" pertaining to legal procedure on any of his delinquent accounts. The doctor, while interested in getting his money, felt that in this particular case there were mitigating circumstances of which the Bureau might not be aware, and by virtue of which, he preferred to wait awhile rather than take immediate action.

Exactly what is meant by "second thoughts"? It means just this: When you assign a delinquent account to a collection agency, you give the agency full right to file a suit without any further notice to you. If you read the assignment form issued by The Bureau of Medical Economics, Ltd., you will note the following paragraph at the top.

> For good and valuable consideration, the receipt whereof is hereby acknowledged I, Dr. ..... do hereby sell, assign and transfer to the Bureau of Medical Economics, Ltd., the balance due on account of services rendered by me to each of the hereinafter named persons, as set forth opposite the name of each said persons, with full power to collect the same by all lawful means to cash, or deposit to your order, checks or drafts payable to and drawn to my order.

With the assignment sheet signed by the doctor or a responsible person from his office, this is sufficient in itself to permit the Bureau to institute legal proceedings for and on behalf of the doctor who has assigned the account, and I understand that it is a practice for the majority of collection agencies to use this as a final authorization.

It cannot be stressed too strongly that medical men should insist that before a collection agency files suit, the doctor should receive a specific "Suit Authorization," as is the practice of The Bureau of Medical Economics, Ltd. This gives the doctor the opportunity of reviewing the matter and deciding whether or not he wishes to have a legal procedure instituted against his patient at that particular time.

IS CLIENT STILL SICK?

It could well be that the delinquent is still a sick person and is under medical care. Very few medical men would permit a collection agency to harass a patient under such circumstances. The collection agency must be made aware of the doctor's code of ethics: it is not just a question of collecting a debt; as I have already stated, a patient's well-being might easily be at stake, and it is the doctor's responsibility to protect the patient whether or not he is financially obligated.

The mere fact that a third party is in a position to make such an important decision, without first consulting the doctor, is anything but a sensible practice; the doctor must at all times have the final say in the matter. Therefore I repeat, insist that your collection agency resubmit all accounts to you personally before filing suit. It must be remembered that circumstances surrounding a delinquent account can materially change from the time an agency receives an account to the time the agency proposes to file legal suit. Conditions could have materialized of which only the doctor is aware, and by virtue of this, an agency should not be permitted to act as the final judge in the matter. It is well known that some agencies are primarily interested in collecting their commission, and give the excuse that they are acting in the doctor's interest. This is sheer nonsense, as it must be realized that while the financial aspect is important, the doctor's reputation and good name should be the first consideration, a reputation that could easily be marred by the practices I have mentioned.

Without question, The Bureau of Medical Economics, Ltd., example should be one that all doctors should insist that their agency copy in respect of filing any form of litigation, in other words *let the doctor decide,* whether or not legal procedure should be taken against his clients. It is his money, reputation, and goodwill the collection agency is playing with. ■

GABRIEL ROGERS
Manager

HAWAII MEDICAL JOURNAL

Book Reviews

The Temporomandibular Joint, 2d Ed.

Edited by Bernard G. Sarnat, M.D., D.D.S., M.S., F.A.C.S., 260 pp., $12.50, Charles C. Thomas, 1964.

THIS IS A VERY comprehensive study on the temporomandibular joint. It even includes entire chapters on histophysiology and roentgenography. However, the book seems to be oriented more towards the student than the clinician.

There are excellent illustrations in the chapter on anatomy and roentgenography, for instance, but very few concerned with the operative procedures.

The general impression is that this is too comprehensive for a clinician's book shelf.

TOM KEIZO TAIRA, M.D.

★Textbook of Otolaryngology, 2d Ed.

By David D. DeWeese, M.D., and William H. Saunders, M.D., 523 pp., $9.25, The C. V. Mosby Company, 1964.

THIS BOOK is written primarily for the medical student and general practitioner. A most comprehensive textbook, it covers the entire subject of otolaryngology plus the new concepts of diagnosis, treatment, and rehabilitation of the last two and one-half decades. The discussions of anatomy and physiology contain adequate data for orientation that are brief and concise. The emphasis is on diagnosis and treatment.

Special discussions are made on problems and diseases of the salivary glands, the facial nerve, tumors of the head and neck, and speech problems, which are areas and conditions of importance that are often involved.

I highly recommend this book to the medical student and general practitioner as a guide and reference. It is also comprehensive enough for the otolaryngologist to review periodically.

L. Q. PANG, M.D.

Current Psychiatric Therapies, Vol. IV

Edited by Jules H. Masserman, M.D., 315 pp., $9.75, Grune & Stratton, 1964.

JULES MASSERMAN has again edited a remarkably well-selected group of contributions in this fourth annual volume on contemporary psychiatric therapies. This volume emphasizes in its choice of contributors, the rationale and techniques of group, family, and community therapies, which take up most of its pages. There is only one small section on physical treatment of psychiatric illness. This emphasis is consonant with the present-day emphasis on psychiatry of viewing the identified patient as a dynamic participant in the interpersonal processes of his family, his peer groups, and his community. This is in contrast with earlier views focussing on the patient's illness as a phenomenon isolated from the environment in which he lives and works.

Although the selection of contributors is plausibly not comprehensive for a volume of this size, the editor has chosen articles on unique and well-designed approaches in treatment by various workers in this country. Particularly interesting to this reviewer were the articles by Eric Berne on "Transactional Analysis," and Don D. Jackson's article on "Family Homeostasis and Patient Change."

It is hoped that the series of annual volumes will continue to be as well edited as this volume is.

EDWARD F. FURUKAWA, M.D.

★ means highly recommended.

★Gastroenterology, 2d Ed., Vol. II

By Henry L. Bockus, M.D., 1,241 pp., $28.00, W. B. Saunders Company, 1964.

THE SECOND VOLUME of this excellent monograph is as good as the first. It exhaustively covers diseases of the small and large bowel, plus anemias associated with digestive tract disorders. The final chapter deals with diagnostic lymphangiography. Each chapter is preceded by an outline that permits one to pick out any isolated facet he wishes to look up. Hundreds of charts and pictures, including many x-rays, illustrate the discussed material lucidly. Following each chapter is a bibliography restricted to key articles. The index is more than adequate. This book can be recommended to anyone who needs guidance in any area of gastroenterology. You can readily find what you want in it.

RAYMOND DE HAY, M.D.

★Christopher's Textbook of Surgery, 8th Ed.

Edited by Loyal Davis, M.D., 1,481 pp., illus., $18.50, W. B. Saunders Company, 1964.

THIS CLASSIC TEXT, again edited by Dr. Loyal Davis, now appears in a completely revised form as the 8th Edition. This book covers the wide scope of surgery, including the many subspecialties. In this almost impossible task of keeping down the size of the text, an excellent job has been done in editing. He has been able to keep a fairly good balance in the text to devote space to the various aspects of surgery including only the more important areas and leaving out details, which would have no place in a textbook of this type. Sections are covered according to anatomic regions, but other special topics of surgical interest such as metabolism, shock, judgment, and the future of surgery are also discussed. With this revision, I believe that the Christopher's *Textbook of Surgery* will retain its place of excellence among the textbooks of its kind.

VICTOR M. MORI, M.D.

Correctable Renal Hypertension

By Chester C. Winter, M.D., F.A.C.S., 190 pp., $7.50, Lea & Febiger, 1964.

AN ATTEMPT to review all the literature in a currently popular topic such as correctable renal hypertension would be a major task indeed. However, Dr. Winter, whose work and interest in this problem has been considerable, has done the "leg work" for us. By extracting and condensing the findings of other investigators as well as those of his own experience, he has written a compact little book which presents the most recent thoughts on the subject, beginning with the theories and mechanisms of renal hypertension on through the pathologic lesions responsible, methods of diagnosis, treatment, results, and prognosis.

The longest and most important chapter covers the methods of screening and diagnosis, and the relative merits of tests such as differential renal function studies, arteriography, radioisotope renography, and renal scintiscan. Understandably, the author places slightly more emphasis on the usefulness of radioisotope renography, a field in which he has excelled and contributed much. However, all sides of various issues are fairly presented so that the reader may form his own opinion.

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Infant Death Study

The infant was a 4 lbs. 9½ oz. girl, born five days prior to the EDC.

ANTE PARTUM COURSE

The mother was a multigravida in her early thirties. Her largest child had weighed 6 lbs. Her antepartal course was uncomplicated except for a total weight gain of 32 lbs. She was admitted to the hospital in active labor and breech presentation was diagnosed. She was cross-matched for 2 units of whole blood and an IV was started. The first stage of labor was rapid. Sterile vaginal examination revealed the cervix to be completely dilated and the breech was at 0 station. For this reason she was taken to the delivery room and the anesthetist and pediatrician were called. During the "prep" her membranes ruptured spontaneously with the loss of a large amount of amniotic fluid, after which FHT's could not be heard. Vaginal examination revealed a slowly pulsating cord alongside the anterior foot. The cervix was found to be 8 cm dilated.

DELIVERY

Under nitrous oxide and oxygen the complete breech was broken and a foot was brought down for traction. The baby was extracted slowly and Piper forceps were used to deliver the after coming head. During the complete breech extraction the patient was very apprehensive and hyperactive. She pulled her right leg from the stirrup and attempted to roll off the table at the time the baby's head was being delivered. It was not determined whether the forceps slipped or the head hit a portion of the table.

Following the delivery the infant was apneic and limp. The pediatrician in attendance intubated and started mouth-to-mouth resuscitation with oxygen. There were only occasional "gasping" respirations. Heart beats were never more than 20/min and cyanosis was marked. The infant was pronounced dead 5 hours and 40 minutes after delivery.

AUTOPSY FINDINGS

Major autopsy diagnoses were as follows: (1) Bilateral tentorial laceration; (2) Laceration of the great vein of Galen; (3) Depressed skull fracture of the left parietal bone; (4) Anomalous left coronary artery communicating with the right ventricle; (5) Congenital hypertrophy of the heart; (6) Aneurysm of the left coronary artery; (7) Congenital atelectasis; and (8) Patent ductus arteriosus.

CONCLUSIONS AND RECOMMENDATIONS

Following unrestricted discussion of the case the committee classified this case as an obstetrical death and preventable from a practical point of view. The following conclusions and recommendations were made:

At the time prolapse of the umbilical cord was discovered, the presenting part should have been dislodged to relieve compression of the cord and the patient should have been given general anesthesia for complete relaxation of the uterus and birth canal. Attempting to perform a complete breech extraction following breaking up of a breech under nitrous oxide analgesia is completely inadequate and dangerous. Rupture of the uterus and irreparable harm to the baby may have resulted by persisting in such a procedure.

Violent physical reaction of the patient during the process of breaking up a breech and breech extraction under nitrous oxide analgesia alone is an expected event. Under these circumstances forceps application to the after coming head should not have been attempted because of the dangers involved in applying forceps in the presence of violent movements and lack of relaxation of the birth canal.

Depressed fracture of the parietal bone is mute evidence of the slippage of Piper forceps on this infant's head. Piper forceps should not be used for delivery with traction of the after coming head. Piper forceps should be used only if the after coming head is presenting at the perineum and delivery of the head can be accomplished by flexion of the baby's head.

A pathologist and a cardiologist were present at this meeting. Both agreed that the congenital abnormalities found in the patient's heart were not the cause of death.

The intracranial damage to this infant was evidently secondary to the depressed fracture of the left parietal bone following slippage of the forceps and not secondary to the baby's head striking a portion of the delivery table. ■

MATERNAL & PERINATAL MORTALITY
STUDY COMMITTEE

HAWAII MEDICAL JOURNAL

Hawaii Medical Association

MINUTES OF THE COUNCIL MEETING

August 13, 1964—8:00 P.M.
Sheraton Maui, Kaanapali

PRESENT

Dr. Samuel D. Allison, presiding; Drs. Andrews, Chinn, Fong, K. K. Fujii (for Dr. Wade), Lum, Miyamoto, Nishijima, Pinkerton, West, and Robert Wong (for Dr. Tomita); plus guests Drs. J. A. Burden, James Fleming, George Goto, A. Q. Pang, B. A. Richardson, and R. P. Wipperman; and the Rev. Paul J. McCleave, who gave a brief outline of the role of the AMA's new Medicine and Religion Committee; Mr. Tom Thorson, and Drs. Windsor Cutting and Richard Lockwood, who spoke on the University's proposed biomedical science program.

MINUTES

The minutes of the April 8, 1964, meeting failed to note that Dr. Fong was present. The minutes were approved as corrected.

CORRESPONDENCE REQUIRING ACTION

Mental Health Committee: The Council was advised that the officers recommend that the Mental Health Committee be advised it will be in order for them to solicit funds from one foundation for one physician to attend the November Mental Health Conference in Chicago. They also recommended that no pharmaceutical firm be approached for funds to send anyone from Hawaii to this meeting. The question arose whether the granting of this request would set a precedent and the Council was advised that similar action was taken two years ago.

ACTION:

It was voted to accept the recommendation of officers; i.e., that the Mental Health Committee be permitted to solicit funds for one medical member to attend the convention.

HAMPAC: A request from HAMPAC asking that the Council recommend to each county that its bills for 1965 dues include a request for a voluntary $20.00 donation for AMPAC and HAMPAC was reviewed and the four county presidents were asked to comment. Dr. Fleming advised he did not know what the reaction of Maui County members would be. Dr. Wipperman said there would be some in Hawaii who would object but that was to be expected. Dr. Fujii said there would be some objections on Kauai. Dr. Richardson said arrangements would be made to include this in Honolulu County's billings.

ACTION:

It was voted to grant the HAMPAC request and to ask the county societies to include HAMPAC contributions with their regular dues billing.

REPORT OF THE SECRETARY

The Secretary was advised that Hawaii County had reported Dr. Zelco's affiliation. It was requested that two members of Hawaii County be granted waiver of dues because of financial hardship. The Council voted on and passed this request. Maui County requested investigation of a member to determine if his county affiliation was in order. It was noted that since the Secretary's Report was compiled, Maui County had brought all its memberships up to date; Drs. Heder and Joyeuse having been dropped from their roster, the latter was transferred to Honolulu County.

ACTION:

The Secretary's Report was accepted with inclusion of additional information and corrections supplied orally by the counties.

REPORT OF THE TREASURER

AMA Meeting Expense: Dr. Fong requested that the Council be given a breakdown on the requested budget, the approved budget, and the actual expenses for 1963-64.

Bookkeeping Service: The requested increase in fee of the present bookkeeper was noted, along with the one quotation received from another source.

ACTION:

It was voted to empower the officers to make further investigation and determine which service to accept.

Council and Interim Meeting Expenses: Dr. Chinn advised that the amount received from Merck, Sharpe & Dohme for the Interim Scientific Session should be corrected to read $250.

ACTION:

It was voted to give each guest speaker $75 and use the $25 balance to make up part of the deficit.

Telephone System: It was pointed out that the Honolulu County Medical Society and the Hawaii Medical Association are at the present time sharing a common telephone number and take turns in answering the telephones. Mr. Thorson advised that Honolulu County will now have one less girl to answer the telephones. He felt the two organizations should have separate numbers. Dr. Pang advised that in accordance with the HMA request the Mabel Smyth Building is again exploring the possibility of installing a central answering service. Dr. Wong said the officers of the County Medical Society had studied this matter for over a year. It has been discussed on many occasions and the officers are positively in favor of a divorce as far as telephone service is concerned immediately. They have found it is very confusing and takes up a considerable amount of time. Dr. Pinkerton suggested waiting for a report from the telephone company. Several alternatives were suggested. Dr. Wong said it would be too late if they waited for a report. The officers have made up their minds; there is no doubt.

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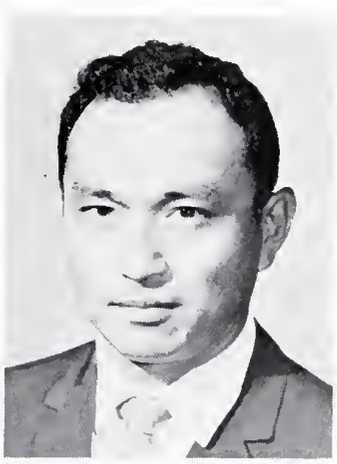
New Members

John A. Krieger, M.D.
1441 Kapiolani Blvd., Suite 520
Honolulu, Hawaii 96814
OBSTETRICS & GYNECOLOGY
New York University–
Bellevue Medical Center
College of Medicine
Internship: Atlantic City Hospital
Residency: Hahnemann Medical
College & Hospital



Francis H. Fukunaga, M.D.
Kuakini Hospital
347 N. Kuakini Street
Honolulu, Hawaii 96817
PATHOLOGY
University of Michigan
Internship—St. Joseph Hospital
Residency—Tripler Army Hospital

County Society News

Honolulu

There were no Honolulu County Medical Society meetings during July and August.

About 175 members attended the September 1 meeting which opened with the showing of a film explaining how the American Medical Association's retirement plan operates. Pamphlets were passed out and members were urged to write direct to the AMA to obtain further information. The plan incorporates two types of investments.

"Handling of Mass Trauma" was the subject of the scientific session. There were three guest speakers: Colonel William H. Moncrief, Jr., from The Tripler General U. S. Army Hospital; Mr. John Whitney, from the State Department of Health's Emergency Health Mobilization Branch; and Dr. Mor James McCarthy, chairman of the HCMS Disaster Committee. A question-and-answer period followed.

The following new members were presented: Drs. Eldon R. Dykes, Francis H. Fukunaga, H. William Goebert, Jr., René Joyeuse, John A. Krieger, and William J. Natoli. Dr. Gerald N. Davis was not present.

After several announcements from the Chair, Dr. Carl Lum proposed amendments to the bylaws which had been circulated by mail. His motion to accept the proposal was amended to permit more latitude in the appointment of the Medical Care Plans and Fees Committee, which is now a combined committee.

Maui

Guests present at the March meeting were Drs. Rodney West, Samuel Allison, and Amos Christie, who spoke on "Histoplasmosis and Current Concepts in Immunization for Common or Routine Childhood Diseases." Ten members were present.

It was voted to officially endorse Type III Sabin Vaccine.

Dr. Bertram Weeks was elected to membership.

Correspondence read to the membership included a letter from Dr. Majoska regarding draft call of doctors, and the proposed study of the Children and Youth Commission on illegitimacy laws.

Drs. Hamilton Anderson, Richard McGovney, and T. William Kanda were approved for Honorary Membership status in the Society.

Dr. Burden's motion to invite HMSA to the next regular meeting was approved by unanimous ballot.

Sixteen members were present at the April 21 meeting, which was called to discuss the Society's position on legislative matters and its position on matters to come before the House of Delegates of the HMA. No official actions on these matters were taken.

Thirteen members and five guests were present at the May 19 dinner meeting. Mr. George Moorhead gave a short talk on the program of the Hawaii Heart Association, which is cooperating with the pharmacists to supply oral penicillin for rheumatic heart patients at cost. The Society voted unanimously to support the Heart Association's program of work with the cardiac handicapped. Four HMSA representatives enlightened the membership on different phases of the workings of HMSA.

Dr. Mark Sowers was elected to membership in the Society and Dr. Guy Heder, who left the County, was dropped. ■

HAWAII MEDICAL JOURNAL

Notes and News

Dr. Casimer Jasinski has resigned as Notes and News editor. His place has been taken by Dr. Henry Yokoyama.

Professional Moves

The Queen's Hospital has already lost **Louis L. Buzaid** and is about to lose **W. Harold Civin,** pathologist. **Grover J. Liese** has been named to replace Dr. Buzaid as chief radiologist, but no one has yet been named for Dr. Civin. **Paul Y. Tamura** will soon leave St. Francis Hospital to head up the Pathology Associates Medical Laboratory, but will retain his position as pathologist at Castle. Following **Peter J. Washko's** resignation, **Robert G. Rigler** became head of the Straub Clinic's Radiology Department. **Frank Fukunaga** is **Grant Stemmermann's** new associate in pathology at Kuakini.

New physicians now in practice in Honolulu include **Millard Seto,** who will practice in the same offices with his father **Y. S. Seto,** and brother, **Dudley Seto. Otto Eichmann,** former Queen's psychiatric resident, has moved to Kauai and is practicing with **Sam Wallis.** Pediatrician **Harold Y. Nekonishi** has recently moved to the Medical Arts Building. Straub Clinic has announced the addition to its staff of **Daniel D. Newbill, Jr.,** otolaryngologist, and **Albert Y. T. Kong, Jr.,** orthopedic surgeon. **Naomitsu Tajima** has joined **Luke Tajima,** no kin, and **Edwin T. Ichiriu** in the practice of anesthesiology. **George Kimata** has joined his brother **Harold T. Kimata** in the practice of otolaryngology at 1126 So. King Street. Obstetrician **John A. Krieger** is in solo practice at the 1441 Building.

New vistas have been announced by the **Wilmot Boones** who have left Paauilo for Kona. **Robert O. Bright** has returned after several years on the mainland and has located at Paauilo. **Henry M. Bockrath,** former district health officer on the Big Island, is now taking a psychiatric residency at Pontiac, Michigan. **Richard Durant** closed his offices in Waikiki and has contracted to be Chief Medical Officer at Johnston Island. Ophthalmologist **Thomas P. Frissell** is now in solo practice at 1441 Kapiolani Blvd. **Charles H. Belcher** is the newly assigned district psychiatrist for Hawaii County. He is working under the supervision of **R. P. Wipperman. Audrey Mertz** has forsaken private practice to become Chief of Preventive and Clinical Services for the Mental Health Division of the Department of Health. New USPHS medical officer in Honolulu is **Robert Hartley.** He arrived from New York City to fill the vacancy created by the retirement of **Edgar Norris.**

New offices have been acquired by urologist **Albert Y. T. Kong,** who moved from the Young Building to Room 205 at 181 So. Kukui St. Orthopod **Robert L. Smith** is back from the mainland and has resumed practice at the Medical Group. **Herbert M. Nam** has moved his offices to the York International Building.

The Medical Group's Kailua office will officially close on November 1. **James L. Mertz** will join the Group's Honolulu office. **Samuel J. Buist** and **Robert G. Dimler** will remain in Kailua. Dr. Buist will join the Windward Medical Center and Dr. Dimler will be in solo practice.

RALPH ELIJAH CLOWARD, M.D.
1883-1964

Dr. Ralph E. Cloward's death last May 7, at 81, further diminished the dwindling ranks of physicians who lived to see medicine's transition from the horse and buggy era to the jet and atomic age.

Dr. Cloward, grandson of a Utah pioneer, was born April 24, 1883, in Burrville, Utah. After his marriage to Virginia Staker in 1904 he served four years as a Mormon missionary in Samoa. This experience later gave him a keen interest in the welfare of the Samoan colony at Laie; he also helped obtain educational appropriations for Samoa.

His medical education began at the University of Utah and was completed at the University of Maryland, in 1913. After a period of general practice in Price, Utah, he was commissioned in the Army, where he served in an ambulance company of the Fourth Division in France. After the war he took graduate work in eye, ear, nose, and throat, then resumed his Army career, which he terminated in 1926 to join Dr. Straub in "The Clinic," which had just lost its original otolaryngologist through death. He practiced with the group for 13 years, contributing to its growth and helping to plan and build the new building at Thomas Square. He was active in medical affairs, helped to organize the Hawaii Eye, Ear, Nose, and Throat Society and the EENT Clinics at Palama and Kalaupapa Settlement, to which he gave considerable time. He was known to perform as many as 25 tonsillectomies at the Palama Clinic in one morning!

Angina forced Dr. Cloward to retire from practice in 1939 (his wife had died in 1937). In this year he married Elisabeth Connolly, and moved to Los Angeles, where he was to reside for 20 years. During this time he read and studied philosophy, history, economics and religion, attending two philosophy conferences in Honolulu. He also became an amateur oil painter of considerable talent. He took two trips around the world, studying governments and types of medical practice in China, the USSR, and Europe.

In 1960 he returned to Honolulu to stay. He was appointed to represent his alma mater, the University of Utah, at the inauguration ceremonies for President Thomas Hamilton.

He was an active member of the National Order of World War Veterans and the Elks Club of Honolulu.

He is survived by his widow, Elisabeth; two sons, Dr. Ralph B. Cloward of Honolulu and Colonel Glannin A. Cloward, U.S.A.F.; a daughter, Mrs.. Wallace M. Clinger of Utah, and 14 grandchildren.

Dr. Cloward lived a rich and full life of service to his fellow man and his family. No more can be said of any man.

RALPH B. CLOWARD, M.D.

Elected, Appointed, and Honored

H. W. Crawford is serving on the advisory committee which is making recommendations to the Health Facilities Planning Council. Three physicians are on the Maui Community Hospitals Board: **William E. Iaconetti, Frank A. St. Sure,** and **F. H. Tong. William N. Bergin** is on the Board of Regents of Chaminade College. Governor Burns's appointments included **Cesar B. De Jesus** and **Chew Mung Lum** to the Board of Health and **Thomas S. Min, Theodore T. Oto,** and **Willis Butler** to the Board of Medical Examiners, the last three replacing **Harry L. Arnold, Jr., Kikuo Kuramoto,** and **Francis F. C. Wong. T. David Woo** was elected President of the Big Island Division of the Hawaii Heart Association. **Richard You** was among the 38 who were chosen to assist Honolulu Planning and Redevelopment Agencies. **Henry L. Yim** was installed as President of the Aloha Civitan Club of Kaneohe. The Maui Unit of the American Cancer Society elected **Milton M. Howell** and **William Iaconetti** to its Board. **William John Holmes** was elected to a three-year term on the Board of Governors of the East-West Center. **Rodney T. West** was elected to the Board of Directors of the Oahu Health Council. The National Cystic Fibrosis Research Foundation has appointed **Gene J. Ahern** and **Alexander Roth** to its Medical Advisory Committee (Hawaii Chapter). **Philip J. W. Lee** was installed as Chairman of the Board of Managers of the Nuuanu YMCA. **Leo Bernstein** received a plaque from the American Podiatry Association in recognition of his services to that profession. **Clarence E. Fronk** was honored at the 5th Annual Horse Show for his many contributions. **Joseph W. Lam** was presented with an honorary life membership to the Moanalua Golf Club.

Visiting Physicians

Pediatrics Professor **Paul Gyorgy,** from the University of Pennsylvania, reported on his comparative research on the merits of breast-feeding and bottle-feeding. Civil Defense Health Plans were reviewed by USPHS official **G. P. Ferrazano,** who said that while they were not perfect, they were "the best we've seen." **Arnold Rustin,** a clinical associate in urology at the University of Oregon, spoke on "The Use and Abuse of Hypnosis in Medical Practice." The HMA's Interim Scientific Session held at Kaanapali featured three distinguished visiting professors —**Sidney Gellis** from Boston University, **Irvin Kaiser** from the University of Utah, and **Henry J. Bahnson** from the University of Pittsburgh. **Kitetsu Imaizumi,** one of Japan's leading eye surgeons, stopped off to meet with local doctors while en route to the International EENT Symposium in Chicago. The local GP's presented **Gordon F. Madding** from Stanford Medical School in a three-day symposium.

Sportsmen

On the Greens: Waialae was the scene of triumph for **Richard Chun** who scored 82-13—69 to pace B flight the same day he and **B. Allen Richardson** tied as a team for the best ball tournament. **Kikuo Kuramoto** was up 3 in B flight. **Masato Mitsuda** scored 40 points to pace the A flight and **Thomas Fujiwara** was the leader with 37 points in B flight. Together they won the team tournament. **K. S. Tom** paced the C flight at Waialae a week after **Takeo Fujii** tied for B flight honors. **William Ito** topped C flight with 36 points. Up Nuuanu way **James Marnie** was a member of the winning duo with 83 points. **Marquis Stevens** missed winning the match play against par at OCC when he ended two up. The monthly Ace found **Harold Johnson** with a net of 66 and **William Walsh** with 68. Over on Kauai **K. K. Fujii's** six handicap gave him a net of 74 and he missed out on first prize.

At the Turf: The **Raymond Eklunds** were among the many islanders who cheered their favorites at the Parker Ranch Independence Day Races.

On the Briney: **Harold Sexton** and his son Jimmy accounted for two marlin in a recent fishing expedition. **Philip Corboy** and his team took fifth place in the Billfish Tournament when they gathered 562 points. The fishing hui composed of **Coolidge Wakai, Richard** and **Calvin Sia, Noborn Ogami, Roy Kaye,** and **Donald**

RANSOM JOHN McARTHUR
1902-1964

Ransom John (Jiggs) McArthur was born at East Barre, Vermont, on February 2, 1902, to John Harvey and Georgina (Hilton) McArthur. When he was seven, the family moved to Oregon, where "Jiggs" graduated from high school in Baker in 1919 and from the University of Oregon in 1923 and its medical school in 1929. He interned at Multnomah County Hospital in Portland.

After practicing for a year at Woodland, Washington, Jiggs accepted a position on the staff of Kula Sanatorium on Maui, leaving it five years later, in 1936, to become Superintendent of Malulani Hospital in Wailuku.

While at Kula, in 1933, he married Mrs. Mabs Breckon in Honolulu; they were divorced in 1945. An adopted son, Arthur John, was killed in an automobile accident in 1962, at the age of 20. In 1946, Dr. McArthur left Maui to enter practice with his brother in Portland, but he returned in less than a year and resumed practice in Wailuku, where he remained.

In 1947, Jiggs married Mrs. Dorothy Davis Fox in San Francisco, and a son, Stephen Alexander, was born to them on June 22, 1948.

Jiggs died on April 8, 1964, in Honolulu, at the age of 62, of peritonitis following rupture of an inflamed colonic diverticulum.

Jiggs was an active member of the Maui County Medical Society (President, 1939-1941 and 1942-1943), the Hawaii Medical Association (President, 1952-1953), the AMA, the American College of Tuberculosis Physicians, the American Academy of General Practice, the Maui Unit of the Hawaii Chapter of the American Cancer Society, the Maui County Chapter of the National Foundation (Board of Directors), and the Maui Health Council (President, 1947). He was a member of the Maui Rotary Club, Maui Chamber of Commerce, Shrine Club (Past President), Masonic Lodge, Puunene Club, Maui Country Club, Maui Fair and Racing Association, Maui Yacht Club, Phi Kappa Psi, and Nu Sigma Nu medical fraternity. He contributed his services to the cause of amateur boxing, first as ringside physician and later as Deputy State Boxing Commissioner for Maui. He was an enthusiastic fisherman.

Jiggs' keen mind made him a doughty competitor across the bridge table or the chessboard. He was a member of the American Contract Bridge League.

His friend Ezra Crane, Editor of the *Maui News,* said of him editorially—among other things—"'Jiggs' loved life, happiness and friendship and the gaiety of laughter; and while the healing hand of the physician and the deft hand of the surgeon will be missed on the Valley Isle, it will be the loss of a good friend, a kindly man, and a civic-minded citizen that will fill with sadness the hearts of people of all walks of life in this community."

It was a true prediction!

HARRY L. ARNOLD, JR., M.D.

Poulson have been supplying their families with mahimahi. **Theodore K. L. Tseu** pulled in some big ones too.

On the Sidelines: **Marvin Brennecke** was named the official physician for the West Kauai Rotary Club's annual track meet held at Kekaha. **James Marnie** was team physician for the East team at the annual Police Benefit football game. **Richard You** was on hand when the Ala Moana Jaycees sponsored a breakfast to raise funds to send island athletes to the mainland Olympic tryouts. **Samuel Yee,** Hawaii Islander Team Physician, and **Philip S. Arthur** traded viewpoints on the possible dangers of children developing "Little Leaguer's Elbow."

Hors de Combat

Maurice De Harne followed his convalescence with a vacation in Kona and is now back at his Wahiawa office. Twice daily news bulletins reported **Ralph B. Cloward's** condition after he fell asleep at the wheel of his Mercedes Benz and suffered a skull fracture. He is now vacationing in Europe. **William D. Moore** contacted with some underbrush which resulted in a lacerated cornea. He did not enjoy his enforced vacation.

Members Speak Up

R. T. Eklund paid tribute to Eddie Escorpise who, before his death, was the x-ray and laboratory man at Honokaa Hospital. **Jorge T. Froilan,** an employee of **H. E. Crawford,** addressed the Hilo Lions Club on ear, nose, and throat problems. When **Masato Hasegawa** addressed the 1399th Veterans Club he asked them to aid charity groups. **Paul Caldwell** is teaching Hilo police officers how to cope with emergency child deliveries. **Richard Ando,** Chairman of the Oahu School Advisory Council, headed a recent conference on school councils. He admonished those who attended the workshop that they were "heading for an obituary or a rebirth." **Philip Corboy** was master of ceremonies at the meeting of the Spanish Group of the International Institute. **Edmund Tompkins** spoke to the Maui Rotary Club to explain the efforts to test an entire district's (Hana) population for tuberculosis infection. **Richard You** told the press that four local track stars may make the U. S. Women's Olympic team. **Ed Helms** addressed a meeting sponsored by the University Extension Clubs. His topic was "How to Grow Old Gracefully." **Masato Hasegawa** was guest speaker at the graduation of practical nurses held at Kapiolani Technical School.

Entrepreneurs

The York International Building is another of **Richard** and **Wonsik You's** enterprises. It is named after a famous barbell which is manufactured in York, Pennsylvania. **Joseph E. Andrews,** Vice President of Maui Savings & Loan Assn., was on hand when that organization moved to its new quarters. The United American, a Filipino-oriented bank, lists **Clarence E. Fronk** as one of its incorporators. Acme Travel has elected **E. Wonsik You,** President and Board Chairman. **Clarence Sugihara** is vice president of another bowling alley, The Windward Bowl.

Local Boys and Girls Make Good

Kamehameha graduate **Abraham T. Cockett,** formerly of Wailuku, received special commendation from his alma mater for making an outstanding name for himself in his profession. He is Chief of Urology at Harbor General Hospital in Torrance, California. Maui born **Roger Iwao Ogata** resigned as Acting Director of the Northwestern Arthritic Research Unit to assume his new duties as official physician of the Wesley Health Service Office in Chicago. **Hen Yung Ing's** son **Gordon** is now interning at Wesley Memorial Hospital following his graduation from Northwestern Medical School. The **Patrick Cockett's** son Paddy has entered Occidental College in Los Angeles as a pre-med student. Outside the medical field, the **James G. Harrison's** daughter Debbie is on the Lio Lii Pony Club team which placed third in a regional horse show at Watsonville, California. The **E. K. Chung-Hoon's** son Richard P. St. Clare has been selected for naval aviation officer training at Pensacola.

House Staff Items

The husband of **Herita Yulo Agmata,** resident at Children's, will be on active military duty for two weeks at the Judge Advocate's office at Hickam. Not too much of a change from his regular duties in the City Attorney's office. **Alexander J. Ferreira,** a St. Louis University Medical School graduate, who was formerly working for **Sam Wallis** on Kauai, is now interning at Queen's. Another Queen's intern from Kauai is **Patrick Aiu** of Wailua Houselots.

Department of Health

Shepard Ginandes, psychiatrist, is spearheading the program at the Hawaii Youth Correctional Facility to help make the youngsters "feel like children, not crooks." Epidemiologist **William F. Lyons** is issuing regular bulletins to keep the public advised of current status of communicable diseases. He reported a flare-up of bacillary dysentery on Oahu in early August. June was mumps month on Maui County when they accounted for nearly 50 per cent of the communicable diseases reported to health officer **F. H. Tong.** Kauai's West Side TB Survey conducted by **Peter Kim** checked more than 98 per cent of the people in that area. **Walter Quisenberry** has been appointed to head up the State Government Job Safety Committee's health division. **Robert Spencer** has doubts that supplying a teacher for the 20 mentally disturbed children at the State Hospital on an hourly basis is the answer. He would still like to see a full-time teacher there, a position that was eliminated by action of the last Legislature. A feature story of **Miss Jeanne Paty's** duties as health education director for the Department of Health noted that she has served under three chiefs: **Charles S. Wilbar, Richard K. C. Lee,** and **Leo Bernstein.** Dr. Bernstein expressed shock and deep sorrow at the death of **Elwyn C. Cook,** Clinical Director of the State Hospital. Although recruiting of personnel has presented problems, Maui district health officer **F. H. Tong** pointed with pride to his County's comprehensive mental health and public health services which will be used by the National Institute of Mental Health to demonstrate to the rest of the U.S. how rural areas may develop such a program. **Peter Kim,** as district health officer for Kauai, explained the basic objective of that County's heart survey, sponsored by the USPHS, is to determine the extent of certain measurable characteristics known to be associated with coronary heart disease.

Walter B. Quisenberry is Acting Director of the Division of Mental Health.

Altarations

Walter Y. M. Chang and his new bride, the former Wilma Tyau, are at home in Manoa after a Kaanapali honeymoon. Phyllis (Halstead) and **George Garis** had their first party to celebrate the bride's birthday. Queen's resident **Charles Schiro's** new bride, Janet Lani Chun-Fat, is a former Kauai resident.

Three Medical Assistants were summer brides. **James Marnie** and **William Kirker's** medical assistant Janet is now Mrs. Arsento Siggayo. Edith Wakida, in **Reynold Shirai's** office, is now Mrs. George Nishimiya. Mrs. Raymond Sunao Tamura is the former Carol K. Taniguchi. She works for **Ichiro Nadamoto.**

The sons of four of our member doctors have exchanged vows during the past summer season. **John Corboy,** who graduated from the University of Illinois College of Medicine, was married in June to Mary Jo Stelk in Chicago. The **Homer M. Izumi's** son Allan was married in Honolulu to the former Dana Harimoto. The **Shoyei Yamauchi's** son Shosei married Miss Carol Noreen Dannis. Mary Ethelwyn Marx was the September

continued page 68

The Doctor's Visit, Jan Steen 1626-1679, Mauritshuis, The Hague

In Diverticulosis and Diverticulitis...

METAMUCIL® brand of psyllium hydrophilic mucilloid

"Diverticulosis ... a low-roughage diet is advisable.... Constipation is avoided, preferably by the daily use of Metamucil.

"Diverticulitis Mild, chronic symptoms of diverticulitis, such as diarrhea or flatulence also are treated[1] by low-roughage diet, adequate fluid intake and Metamucil...."

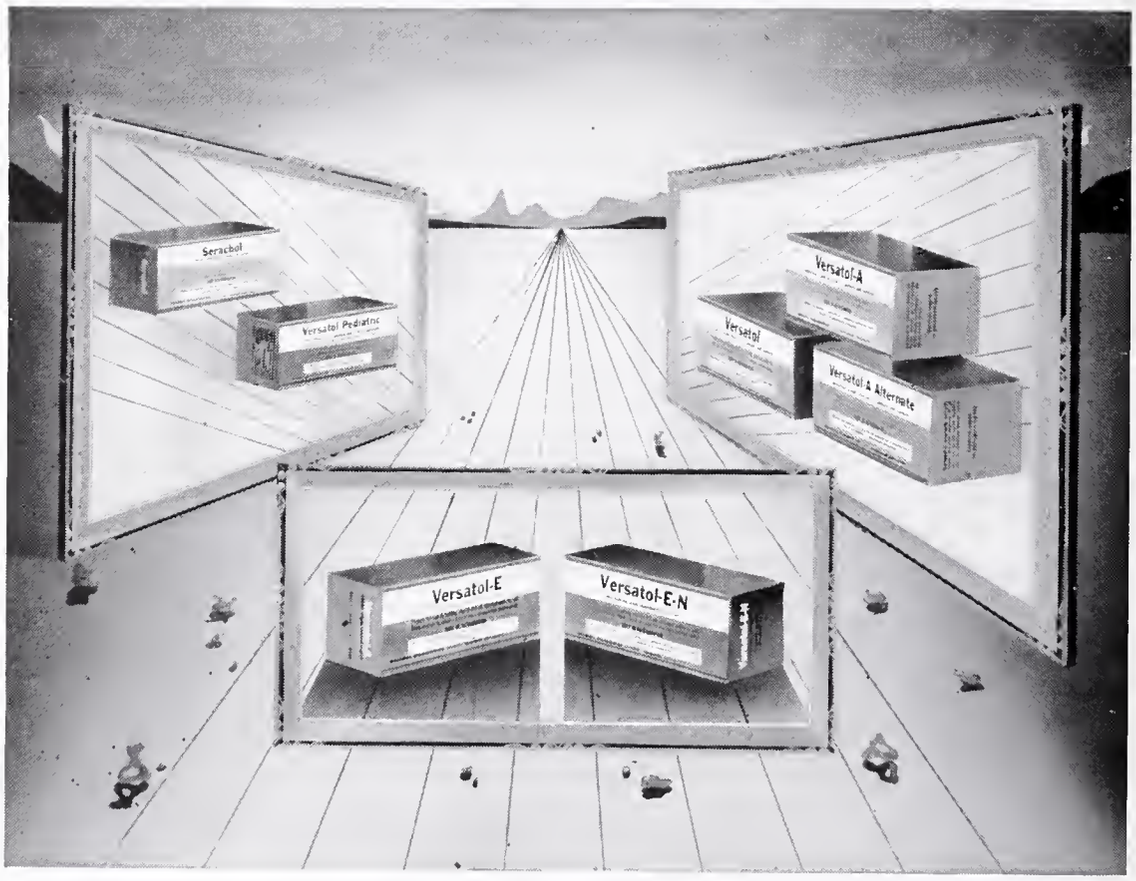
Usual Adult Dosage: One rounded teaspoonful of Metamucil (or one packet of Instant Mix Metamucil) in a glass of cool liquid one to three times daily.

Metamucil is available as Metamucil powder in containers of 4, 8 and 16 ounces and as flavored Instant Mix Metamucil in cartons containing 16 and 30 single-dose packets.

1. Welch, C. E., Diverticula of the Alimentary Tract, in Conn, H. (editor): Current Therapy—1961, Philadelphia, W. B. Saunders Company, 1961, pp. 224-225.

SEARLE

Research in the Service of Medicine



Turn darkness into daylight with full range quality control

Most test systems are designed so normal levels are determined under optimal conditions. Recovering the value on a normal sample is like reading results at high noon.

In an abnormal sample, the concentration of end-product is *not* optimal. There's either an excess or a deficiency. This variation in concentration of end-product may affect the test system to such an extent that a small error in procedure may cause a large error in results. Recovering the value on an abnormal sample is like reading results at dawn or dusk—where accident potential is greatest.

A control with constituents weighed in to abnormal levels brings to light small defects, defects that may affect abnormal samples before they affect normal samples—and normal controls. In the clinical laboratory such an abnormal control is as important, if not more important, than a normal control.

Use of an abnormal standard in serum prevents quality control from being just a shot in the dark. You know how close you come to a true value. You know you have control of instruments, reagents, conditions and technique—through every step of the test.

The Versatols are the only standards in serum—with serum constituents weighed in to normal and abnormal levels.

Ask your General Diagnostics representative about: *Versatol®|Versatol-A|Versatol-A Alternate|Versatol-E|Versatol-E-N|Versatol Pediatric|Serachol®.*

GENERAL DIAGNOSTICS DIVISION
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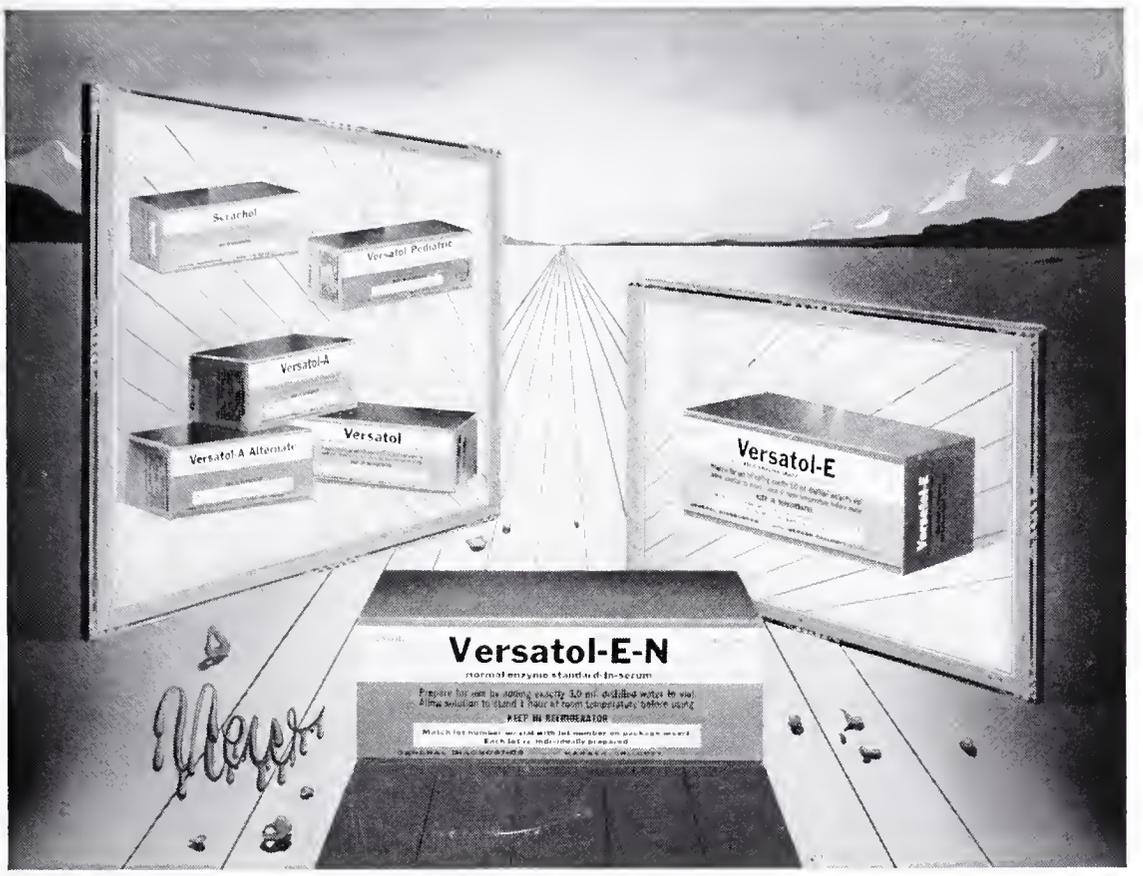

Turn shadows into sunlight in enzyme calibration and control

Until now enzyme calibration curves were anything but easy to prepare. Calibration curves based on artificial chemical standard solutions were inadequate because enzyme determinations measure activity. In many instances there is no linear relationship between concentration and activity.

Now new Versatol®-E-N, the standard in serum with six serum enzymes* weighed in to normal levels, throws new light on standardization. Versatol-E-N and Versatol-E** (and mixtures for intermediate levels) standardize every step of the test procedure because they have the same physical and chemical characteristics as patient serum. Your calibration curve is based not on concentration, but on the units of activity of the method you are using.

Nor is control of enzyme determinations any problem. Versatol-E controls the abnormal elevated range. New Versatol-E-N monitors the normal range. And an appropriate mixture of Versatol-E-N and Versatol-E will bring to light errors that may affect shadowy borderline samples.

Use of standards in serum prevents quality control from being just a shot in the dark. You know how close you come to a true value. You know you have control of instruments, reagents, conditions and technique. The Versatols are the only standards in serum—with serum constituents weighed in to normal and abnormal levels.

Ask your General Diagnostic representative about: *Versatol-E-N | Versatol-E.*

**alkaline and acid phosphatase, amylase, lipase, transaminase (SGOT), lactic dehydrogenase*
***the standard in serum with six serum enzymes weighed in to abnormally elevated levels.*

GENERAL DIAGNOSTICS DIVISION
WARNER-CHILCOTT DIV. MORRIS PLAINS N.J.

HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: JAMES YANO, Kaiser Foundation Hospital

Standing Committee Chairmen for 1964-65

Membership: Lorene Leong, The Queen's Hospital
Program: Edith Eckstein, Tripler General Hospital
Scholarship: Ronald Miyakawa, Waimano Training School and Hospital
Constitution and Bylaws: Louise Wulff, University of Hawaii
Education: Ann Stegmaier, Blood Bank of Hawaii
Convention: Grace Kagawa, Straub Clinic
Finance: Gloria De LaCruz, Pathologists' Medical Laboratory; Richard Kurisu, Pathologists' Medical Laboratory
Nomination: Elizabeth Hughes, Hawaii State Hospital
Recruitment: Joyce Mizokawa, St. Francis Hospital
Publications and Public Relations: James Yano, Kaiser Foundation Hospital
Hospitality: Jack Furuta, Kalihi Medical Clinic

Open Letter to All Medical Technologists

It is an established fact that the medical technologist, as a skilled professionalist, must apply himself diligently through years of academic preparation in order to become a most valuable member of the medical team. However, it must be realized that at the completion of this foundation, academic preparation must *not* end, but rather must be put to an effective use throughout an entire lifetime.

There are many facts to be considered concerning the importance of membership in our professional societies. These facts *demand* our attention.

FACT NO. 1: From 1955 through 1963 the total number of persons becoming registered medical technologists, MT(ASCP), grew from 26,684 to 43,770, an increase of 17,086 in eight years.

FACT NO. 2: Of this 17,086 only 3,665, or approximately 21 per cent, had been student members of their professional societies.

FACT NO. 3: Today the ASMT is composed of 27 out of every 100 eligible members. Out of every 100, 73 are *not* members.

The above facts should arouse serious concern.

I believe that it is an ethical requirement to belong to one's societies. Growth of your professional society is made possible by your active participation. Active participation requires a professional maturity. We invite you to join the ASMT.

GROW BY HELPING MEDICAL TECHNOLOGY GROW!

Sincerely,
ROSE M. MORGAN, MT(ASCP)
Chairman
ASMT Membership Committee

32d Annual ASMT Convention Report

SCIENTIFIC PROGRAM—With the convention theme of "Launch Into Tomorrow," the 32d Annual Meeting of the American Society of Medical Technologists was recently held in Kansas City, Missouri, June 14-19. It was my first attendance at a national convention and like the other 1,526 participants, who included 1,200 medical technologists, I found it a very rewarding experience. It was truly stimulating and indeed wonderful to have the opportunity to meet and converse with other medical technologists from all parts of the country, to be privileged to attend interesting and well-organized seminars and workshops, and simply to witness a large organization such as ours in smooth operation.

Miss Anna Lauri Peeler, outgoing President of the ASMT who served as chairman of the opening session, introduced Dr. Charles Kimball of Midwest Research Institute, who gave the keynote address which formally opened the convention. At this time, the scientific and technical exhibits were also formally opened by Mr. John N. McConnell of Scientific Products.

The program for the convention offered many diverse and interesting lectures and workshops. I was fortunate enough to attend three workshops: Quality Control in Hematology, conducted by Dr. Dennis Dorsey; Mycology, presented by Dr. Michael Furculow; and Photofluorometry, by Dr. Robert Phillips. Some of the other excellent workshops included Toxicology, Cytogenetics, Quality Control in Hematology, Blood Banking, Chromatography, Space Medicine—just to mention a few. Within the next few months, many of the scientific

papers presented at the convention will be published in the *ASMT Journal*.

The highlight of the scientific session, on Thursday morning of June 18, was a 90-minute transatlantic telephone broadcast between the ASMT panelists in Kansas City and the designated speakers representing 400 delegates from 16 nations at the 10th Congress of the International Association of Medical Laboratory Technologists in Lausanne, Switzerland. The "hot line" discussion extensively covered the important and indispensable quality control program. One speaker termed quality control "a child of mass production that can lead to improved diagnostic sensitivity" while another speaker emphatically stated that "no matter in what country you are, if you have good quality control, you have a good laboratory—and only then." The ASMT panelists included Dennis B. Dorsey, M.D., pathologist at Lake View Memorial Hospital, Danville, Illinois; Ralph E. Thiers, Ph.D., Assistant Professor of Biochemistry at Duke University in Durham, N. C., James Greer, Ph.D., microbiologist at Henry Ford Hospital in Detroit, and Miss Shirley Bush, B.B.(ASCP), Technical Director of Mt. Sinai Medical Research Foundation Blood Center in Chicago. From Switzerland, Roland Richterich, M.D., Assistant Professor of Biochemistry at the University of Berne, and Miss Elisabeth Pletscher, Executive Secretary of the International Federation, responded on this international telephone panel while Dr. A. E. Rappoport assisted them. English was spoken by most of the panelists; however, some presentations were in German or French. This unique "first" of international cooperation with a transatlantic telephone broadcast from the heart of America to the heart of Europe was presented by the Warner-Chilcott lectureship, sponsored by Warner-Lambert Pharmaceutical Company, General Diagnostic Divisions, Morris Plains, N. J.

COMMITTEE CONFERENCES—Of the twelve standing committees of the ASMT, eleven conducted conferences. During the Education Committee Conference, chaired by Jeanette S. Carter, Ph.D., MT(ASCP), the emphasis was on workshops at the state and local levels. They reminded the members that the Board of Registry is anxious to assist workshops for educational purposes from the Seminar Fund. The second conference I attended, that of the Finance Committee, budgets and tax problems of nonprofit organizations were discussed by Mrs. Heloise Canter, CPA. These conferences gave the individual members an opportunity to learn more about the organizational and functional aspects of various committees within the Society.

HOUSE OF DELEGATES MEETING—At one o'clock Thursday, in the Grand Ballroom of the Hotel Muehlebach, the House of Delegates began deliberations on matters of great importance to the profession of medical technology. There were many items of business on the agenda: adoption of various amendments to the Constitution and Bylaws, recommendations made by committees, resolutions to be accepted or not accepted, and the election of new officers. The meeting continued through Friday.

Two of the more important resolutions passed were: one by the Ohio State Society of Medical Technology, which in essence stated that the Registry should revise the Standards and Conduct section with the adoption of the statement that "an individual may, after receiving his training, his degree, and a certain number of years of experience in a hospital, be permitted a higher and more independent standing so he may elevate his own status and make medical technology more appealing as a career for both men and women who depend on it to support themselves and their families; and that the question of ownership be eliminated as not vital to the ethical operation of a medical laboratory. The other resolution, by the Illinois Society, stated that "the ASMT shall set aside one or more times and places for members to meet the candidates informally during the days of the annual convention before the first session of the House of Delegates." The resolution submitted by the North Carolina Society, requesting to remove the section of histologic technic training from the curriculum of our approved Schools of Medical Technology, was defeated.

It was voted to meet in 1969 in Philadelphia. As a matter of interest, the 1965 convention site will be Cincinnati, Ohio; 1966 will be Los Angeles, California; 1967 will be in Miami, Florida, and 1968 in Houston, Texas.

SOCIAL CALENDAR—Of course, one will realize very quickly that it wasn't all business at the convention. Beginning with the cocktail party at the President's Reception on Sunday evening and climaxing with the Awards Banquet on Thursday evening, there were many happy and relaxing hours of parties, entertainment and socializing. At the President's Dinner, sponsored each year by the Coleman Instrument Company, I was given special recognition by the host, my friend, Mr. Charles Humes—a warm handshake and a glass of water.

On Tuesday, we visited various places of interest, such as the Truman Library, Nelson Art Gallery, Midwest Research Institute, and the Linda Hall Science-Technology Library. This was followed by a delightful dinner at the Ranch Mart. Hilarious after-dinner entertainment was provided by the Greene County Boys, a group of physicians from Springfield, Missouri.

Highlighting the Awards Banquet was the presentation of the Corning Award to the nation's outstanding medical technologist of the year: Miss Isabelle Havens, a research associate in the Department of Microbiology at the University of Chicago. She received an engraved glass urn and a $500 award from Corning Glass Works, Inc. Hawaii's nominee, Mrs. Louise Wulff, received an Award of Merit. It was indeed a pleasant and unique sight to see Louise accept the award dressed so elegantly in her "party-muu" and decked with a beautiful red carnation lei.

The entire convention—meetings, workshops, lectures, social hours—was excellent, so much so that I hope that some day all of you will have the same experience that I had. For all this and more, I would like to extend my thanks and gratitude to the entire membership of the Hawaii Society of Medical Technologists for the opportunity to represent Hawaii at the 32d Annual Convention of the ASMT in Kansas City. Now that I have returned, I am eager to undertake my task as President of our Society. I would like to ask for your earnest support and cooperation throughout the coming year. Only with your help can we look forward to a rewarding year of growth and progress. We will aim to increase our total membership in the HSMT this year, along with clarifying and standardizing our scholarship fund among other things. Once again, mahalo!

KENNETH SATO, MT(ASCP)
President, HSMT

Hawaii Medical Association *continued from 50*

ACTION:

It was voted the telephone lines for the Hawaii Medical Association and the Honolulu County Society be separated.

MSEA and PR Meeting in Chicago: The Council was advised of the discussions held relative to who was to be sent to the August meeting. Mr. Dodge has offered to pay half his expenses to attend the meeting.

ACTION:

It was voted to purchase a round-trip, economy fare ticket to Chicago for Mr. Dodge and that he pay for all other expenses incidental to attending the meeting.

It was voted to approve the Treasurer's Report in its entirety as amended.

COMMITTEE REPORTS

The Councilors reported on the committees for which they are responsible. The only committees on which there was no report were the Chronic Illness & Aging, Hospital, Indigent Medical Care, Legislative, and Pharmacy. The President advised that in talking with Dr. Tomita he was advised that these committees had nothing to report that required Council action. Presidents of the county societies were asked to refer three matters to their societies for discussion: (1) possible changes in the Medical Practice Act, (2) the establishment of hospital utilization committees on a county level, and (3) statewide participation in Careers Day. The County presidents reported on the status of the utilization committees in their jurisdictions. Central Maui Memorial medical staff has gone on record as approving the establishment of a utilization committee. The County Society, however, is not unanimous on whether there is a necessity for having such a committee. Not all are willing to serve and some feel this should be a separate committee. On Kauai this is still in the talking stage. Hawaii County has a utilization committee consisting of the Chief of Surgery, Chief of Obstetrics, Chief of Staff, and the County Medical Society President. The Department of Social Service is proposing to appoint a nonphysician on a half-time basis to check utilization. The Council asked that a check be made of the various AMA-ERF fund raising projects with a view of eliminating multiplicity.

Only one report, Publications, required Council action.

ACTION:

It was voted to reappoint Harry L. Arnold, Jr., Editor of the HAWAII MEDICAL JOURNAL and send to him a letter of thanks for the fine job he has been doing over the years.

UNFINISHED BUSINESS

Mabel Smyth Building: Dr. H. Q. Pang discussed the several reports which had been distributed to the Council, and the eight questions posed to him by the officers. He explained that the movie projector was very complex and required a trained operator. The Council was advised that Mr. Lytle had checked this machine and decided that he did not want to be responsible for its use.

There was considerable discussion about the reserve funds for Mabel Smyth and the use of the depreciation factor in its accounting system. Dr. Pang said that if the fund is built up, the maintenance rates will be reduced. As of May, 1964, the fund was about $13,000. The allocation of 15 per cent of the total operating budget to the reserve fund was questioned. Dr. Chinn pointed out that the Association has funds which could be loaned to the building if needed. Dr. Pang advised that in 1954 the building had to cash two bonds in order to meet the payroll.

The utilization of meeting space was discussed. Dr. Pang advised that the doctors use the building 90 per cent of the time and the nurses 10 per cent. He asked that if the doctors have differences, that these be brought to the Association's representatives on the Board. The Board is now discussing the possibility of converting the mezzanine into meeting rooms.

The Physicians Exchange anticipated operating loss was discussed. Dr. West said the Straub Clinic had asked for limited service which would have given the Exchange about $1,700 in additional income. They were turned down and are now contemplating establishing their own radio call service.

Dr. Pang was asked to continue evaluating the possibility of a central telephone exchange and come back to the next Council meeting with a report.

The Mabel Smyth problems will be brought up at the next Council meeting for recommendations.

Interim House of Delegates Meeting: It was felt that the dates proposed by the officers, February 6 and 7, were too close to the opening of the Legislature.

ACTION:

It was voted to hold the interim House of Delegates meeting on January 16 and 17.

continued page 64

WHAT DOES VISION MEAN TO HAWAII'S DOCTORS?

"Where there is no vision, the people perish."
Proverbs, XXIX, 18.

In HMSA, the doctor today has a sure way to meet radical challenges to the voluntary financing of medical care — and to voluntary medicine itself. Only the foresight and energetic action of all doctors can expand the effectiveness of the voluntary prepaid medical concept. Declared one doctor: "The future of medicine and Blue Shield may well rest upon the wisdom of our decisions and our willingness to act. Let the record show that we stood fast to preserve our voluntary health care for future generations."

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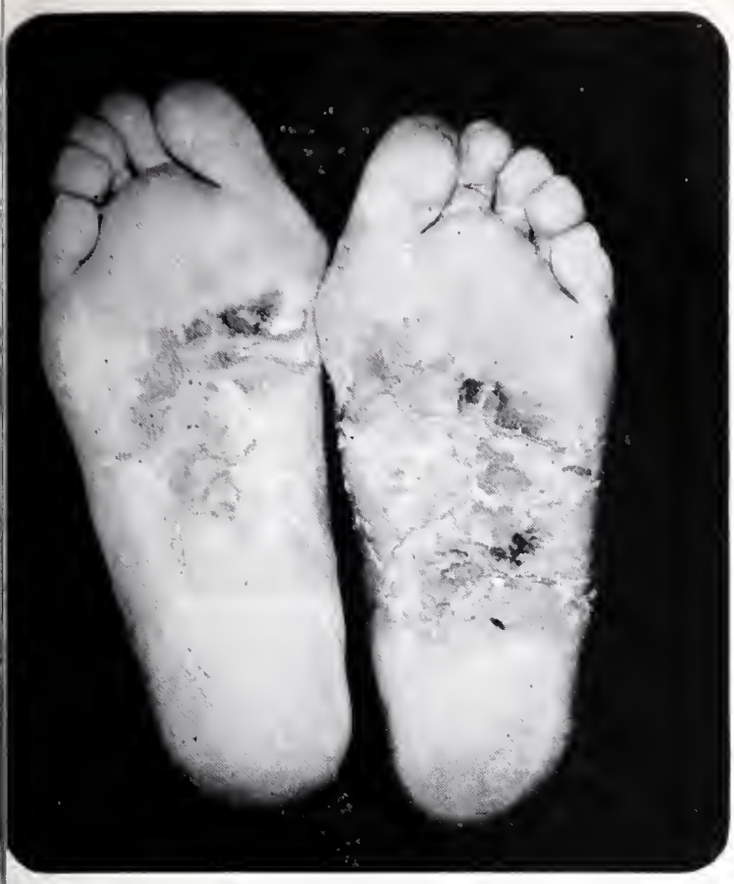

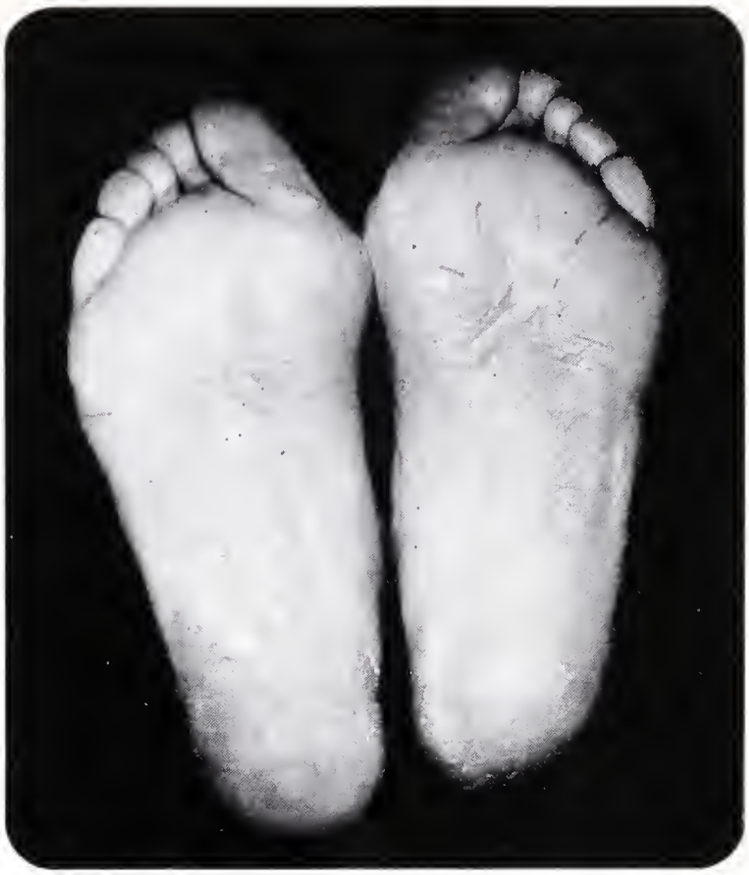

A.W., age 62—Psoriasis: 4 years' duration...cleared in 11 days†

Effective alone in atopic dermatitis, eczematous dermatitis, seborrheic dermatitis and certain cases of psoriasis. The use of occlusive dressing in psoriasis will normally enhance effectiveness. The 0.1% Cream or Ointment is usually effective in abating symptoms of skin conditions responsive to topical triamcinolone, but the 0.5% Cream may be found preferable in more resistant cases. *Dosage:* Apply small quantity to area 3 or 4 times daily. *Side Effects* are rare. *Contraindications:* tuberculosis of the skin, herpes simplex and chicken pox. Use with care on infected areas. Supplied in 5 and 15 Gm. tubes and ½ lb. jars. Also available with Neomycin.

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Nierman, M. M.: Triamcinolone in Psoriasis and Other Dermatoses, A New Method of Topical Application. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, November 25-28, 1962.

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Hawaii Medical Association *continued from 60*

NEW BUSINESS

Retirement Fund: The Executive Secretary's report was circulated. She stated that she did not favor the County's selection of carrier in view of the high loading charges and low yield, and asked the Council to give the officers permission to select a carrier for the Association. Mr. Thorson said the County was not wedded to the investment program it selected but felt that they could not delay in making their decision.

ACTION:

It was voted to leave the selection and type of investment program for the retirement fund to the discretion of the officers.

ODMC Contract: There was considerable discussion on whether negotiation of fees should be attempted with the execution of the new contract, which must be accomplished before August 31, 1964. The delay in completing the fee survey was discussed.

ACTION:

It was moved to sign the ODMC contract now with the present fee schedule and wait for the completion of the relative value study. The motion was tabled.

It was voted to authorize the chair to sign the contract and make the necessary changes in the tympanoplasty section pending decision of the Federal Medical Services Committee.

AMA Clinical Meeting: The possibility of again inviting the AMA to hold a Clinical Meeting in Honolulu was discussed.

ACTION:

It was voted to invite the AMA to hold a Clinical Meeting in Honolulu and inform the Convention and Seminar Committee as well as the HVB of the Association's action.

The meeting adjourned at 11:15 P.M. ■

RANDAL A. NISHIJIMA, M.D.
Secretary

In Memoriam *continued from 46*

from 1915 to 1933. In 1933 he returned to Japan and continued his studies. Dr. Tokuyama held a professorship at the Imperial University of Kyushu Medical College until 1937 when he returned to Honolulu where he remained in practice at his Vineyard Street office until 1939.

He received his Ph.D. degree from the Imperial University of Kyushu Medical College in 1939. He was a member of the Japanese Hospital Medical Society and served on many committees. He was an enthusiastic tennis player.

Dr. Tokuyama and his wife, Kei, had three sons; Ichiro, Jiro, and Saburo.

He died on October 6, 1954, in Fukuoka, Japan, at the age of 68. ■

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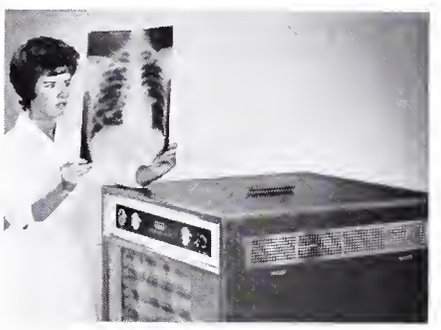

Except for the film-feeding station in the darkroom, the rest of the unit—about 35 inches in length—is in a lighted area.

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Reports & Snorts

Winstrol (stanozolol, Winthrop) is a new nonandrogenic anabolic steroid which has induced significant weight gain in underweight patients.

• • •

A man had just rented the last room in a motel on a cold winter night when a young lady came in and was told there were no vacancies. Greatly distressed, she said to him, "Sir, you don't know me, and I don't know you, and the manager doesn't know either of us; surely it could do no harm if he were to put a spare bed in your room and let me sleep there tonight?" He agreed, and it was done. But after an hour or so she woke him and said "Sir, it's awfully cold, and since you don't know me, and I don't know you and the manager doesn't know either of us, surely it couldn't do any harm if I were to slip into bed with you, and we could have both the blankets, and get some sleep?" He agreed, of course, and all was well. But in another half-hour or so she had second thoughts, and wakened him, and said "You know, since you don't know me, and I don't know you, and the manager doesn't know us, what harm could it do if we were to have a little party?" He thought about it a moment, and then replied, "Well, since you don't know me, and I don't know you, and the manager doesn't know either of us, and we don't know him, who the heck could we invite?"

• • •

If you need high-grade rubber tubing, ask about Dow Corning's new silicone elastomer tubing, at greatly reduced prices. Nonreactive and antifungal, it resists repeated sterilization.

• • •

Pentazocine, a new morphine-antagonizing narcotic, officially declared nonaddicting by the Committee on Drug Addiction and Narcotics, was favorably reported on in the July 20 JAMA by Dr. Max Sadove, a University of Illinois anesthesiologist.

• • •

Syntex was licensed (nonexclusively) on July 11 to manufacture and study the usefulness of dimethyl sulfoxide (DMSO).

Blue Cross hospitalization insurance plans, which have doubled their enrollment in 15 years, covered nearly 60,000,000 persons during 1963, and paid out over 2⅓ billion dollars to 8½ million to beneficiaries.

• • •

Mead Johnson put a cream-milk mixture in a 6-ounce can for Sippy ulcer treatment and was charged on May 27 by the FDA with unlawful and unauthorized production of a new drug. The FDA charge was disclosed in a press release instead of being directed to Mead Johnson, according to a statement by the president of the company.

• • •

Smith Kline Instrument Company, 1500 Spring Garden Street, Philadelphia 19101, will sell you an Ekoline 20 for about $7,000. It uses ultrasound to measure precisely such inaccessible parameters as the biparietal diameter of the fetal head, or the lateral displacement, if any, of the falx cerebri.

• • •

A zoo which provided certain medication for its animals in the form of an aerosol, delivered through an air-conditioning system, became the first institution in the world to furnish medical air for the caged.

• • •

The *London Hospital Gazette* suggests the following collective nouns for medical use: a body of anatomists, a giggle of nurses, a flood of urologists, a pile of proctologists, a dodder of geriatricians . . . and the Eaton M. D. *Notebook* adds a hive of allergists, a rash of dermatologists, a gag of laryngologists, a chest of phthisiologists, a complex of psychiatrists, and a culture of virologists—among others. Add your own! A foot of podiatrists—a crack of orthopedists—a smear of cytologists?

• • •

Saunders advertises on page 3, of this issue three books worth your attention: Moore on tissue transplantation, Nelson's Pediatrics—the 8th edition!—and Elliott's Clinical Neurology, an up-to-date authoritative text. Look 'em up!

Notes and News *continued from 54*

bride of the **William H. Wilkinsons'** son Robert, who is a second year student at Tulane Medical School.

Community Notes

Edmund Lum is a member of the Kuhio Den, which won kudos for being the Lions Club with the most outstanding public service programs and perfect attendance. **Richard You** was listed as one of the signers urging reapportionment. The *Kalihi Press* remembered that **Lyle G. Phillips** was one of the most outspoken opponents of statehood when it ran its story on Hawaii's fifth statehood anniversary.

The East-West Philosophers' Conference received $1,000 contributions from **H. Q. Pang, Richard K. C. Chang, David Lee Pang, Richard Y. Sakimoto, K. S. Tom, Raymond C. Yap,** and **Richard You.** The **Howard Hondas** and **Mario Bautistas** were among the many hosts who entertained the philosophers.

Travellers and Social News

The **Robert Chungs** travelled extensively this past summer and included in their itinerary a trip to Jerusalem in order to attend a wedding of a young man they sponsored at the Middle East College near Beirut. **Richard You** took in the United States–Russia track and field meet on the West Coast but announced that he was not able to attend the Olympic Weightlifting Committee meeting because of business commitments. While **Milton Howell** was away from Maui, **William Tam** took over for him. **Richard K. C. Chang** accompanied Diana Moncado to Pennsylvania where she died following surgery. It was the Orient for the **Calvin Sias** and **Rodney Wests** and Europe for the **Colin McCorristons** and the **George Henry** family.

Richard You was on hand at the opening of the Maui Health Center, which will be operated by Tommy Kono. The **Sam Wallises** were among the local people of Kauai who met the Japanese officers from the training ship "Nippon Maru." Ladies' Day for the Honolulu Lions Club found **John** and **Zell Holmes** in its pride. **Richard You** attended the Sportsmen Maui installation banquet. Visiting surgeon **Henry Bahnson** and his wife stayed at the **James Cherry** home while they were in Honolulu. The Rev. John Morrett and his wife entertained them at a dinner party that included the **Niall Scullys, Ralph Beddows, Charles Judds,** and **Walter Strodes.** Among the doctors and their wives and daughters who attended the opening of La Revue Pariesienne were the **Grover Battens** and **Irvin Tildens.** The **Fred K. Lams** and **Masato Hasegawas** were also present. The **James Flemings** and **Kenneth Halings** were among the hosts who entertained the 40 Fulbright scholars who visited Maui. The **Richard Yous** attended the Korean Fashion Show at the Royal Hawaiian Hotel. **Lawrence Winter** revealed his musical talent when he supplied the bass music at a party on Papu Circle.

Vernon K. S. Jim recently returned from a trip to the Far East where he presented a clinic and demonstration in Plastic Surgery at Bangkok Hospital in Thailand. He also visited the Plastic Surgery Department of Singapore General Hospital, and the leading Plastic Surgery Clinics in Tokyo—Tokyo University Hospital, Tokyo Metropolitan Hospital, Jujin Plastic Surgery Clinic, and Chiyoda Plastic Surgery Clinic. Mrs. Jim accompanied Dr. Jim on this trip.

Names in the News

Clyde H. Ishii was granted $16,819 in damages as a result of an auto accident in 1959. **David Bronder** is care-

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Notes and News *continued from 68*

fully watching the construction of his Kahuku Medical Center, a one-story building which will be adjacent to the existing Kahuku Hospital. **Kazuo Miyamoto** entered the mango controversy and claimed that the best ones are grown on St. Louis Heights. He prefers Piries and particularly the ones that come from his tree which was grown from a cutting from Mrs. Cooke's Nehoa St. home. Recent national magazines have pictured the homes of the **Pershing Los, Thomas Richerts, James Harrisons,** and **Howard Liljestrands.** It must have taken a wide-angle lens to pose the ten tow-headed children of **Mor McCarthy** who beamed while their mother told the *Pali Press* that she and her husband operate on the assumption that the children are loaned for a little while; they are not possessions.

Nobuyuki Nakasone helped with the preparation of the program for the Majikina Honryu dancers. It included a brief history and description of Okinawa dance and music. **Marvin Brenneeke** was forced to compromise when the County decided it wanted 3,825 square feet of his land. The Legislature will be blamed by **Robert D. Kemble** if its policy will result in the final loss of residency approval for the two Hawaii psychiatric training programs. The AMA decision is being appealed by **William J. T. Cody.** The **Edward C. Wo Lums** plan to use the plumeria which is a landmark to local residents as a focal point of their new landscaping plan. **Richard K. C. Lee** will work with the University's associate engineering professor on a training program in water supply and pollution which is supported by a $38,883 Federal grant. **David T. Woo** noted that the incidence of rheumatic heart disease had dropped preceptibly in the last ten years. He announced the low-cost drug prophylaxis program for rheumatic fever victims which has been established on the Big Island. British speed ace, Donald Campbell, was met at the plane by **Ceeil A. Saunders, Jr. George Mills,** President of the State Association of Hawaiian Civic Clubs, presided at the installation of the newly-elected officers of the New Queen Emma Hawaiian Civic Club. **Robert Speneer** told the press that the State Hospital needs more male nurses. **Robert Simpson** helped with the plans for the community Fourth of July celebration. **Shoyei Yamanehi** co-chaired the conference on Leadership Training for Community Action of Aging at the Princess Kaiulani hotel. **R. J. Maffei** disagreed with nutritional scientist John Hudkin when the latter tried to blame sugar consumption for hardening of the arteries. Looters took **Mitsuo Kuramoto's** cash box, **Yen Pui Chang's** Demerol, but just messed up the office of **Francis K. Lum.**

University Activities

Richard Lockwood and **Windsor Cutting** attended the HMA Council meeting to give a progress report on the proposed Biomedical Science School. Subsequently the Kellogg Foundation announced that a $1,250,000 grant would be available to them if the University could raise the balance. Both doctors are now on the mainland to see if they can get additional funds.

A Biomedical Council has been appointed for the exchange of information and views. It will meet the second Thursday of each month at 3:00 P.M. in the Pacific Biomedical Research Center Building. Invitations to attend the first meeting went out to twelve representatives from the University, two from the Legislature, one from the Department of Health, seven hospital administrators, and **Drs. Charles S. Judd, Jr., Harold M. Sexton, Fred I. Gilbert, Jr., Masato Hasegawa, Samuel D. Allison, Harry L. Arnold, Jr.,** and **B. Allen Richardson.** Additional physicians will be invited to future meetings.

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Notes and News *continued from 70*

HMA members who were among the first to be tapped for the faculty of the School of Public Health were **Earl D. Lovett**, who has since left to take up permanent residence in California; **George F. Schnack**; **R. Frederick Shepard**; and, of course, **Richard K. C. Lee.**

Bulletins

The Los Angeles Radiological Society will hold its 17th Annual Midwinter Conference at the Biltmore Hotel January 30 and 31, 1965. For further information, contact John L. Gwinn, M.D., 4614 Sunset Blvd., Los Angeles 27.

The Public Health Service, HEW, has announced a change in deadline dates for receipt of applications for research grants. Deadlines for new and supplemental applications are October 1, February 1, and July 1. For renewal applications the deadlines are September 1, January 1, and June 1.

The annual scientific meeting of the American College of Nutrition will be held at the Americana Hotel in New York City on October 25. For further information, write Robert A. Peterman, M.D., 3 Craig Court, Totawa Boro, New Jersey, 07512.

E. A. Butler & Associates, management consultants from 115 No. Broad St., Doylestown, Pennsylvania, is looking for a physician who is oriented toward sales support and whose duties will include determining the correctness of labeling, developing medical brochures, etc., and some new drug research. The starting salary is $20,000. □

Book Reviews *continued from 48*

The physical make up of the book itself is more than adequate. The reviewer's only criticism is the unsatisfactory reproduction of some of the renal arteriograms.

For those interested in the subject of renal hypertension who want to be spared the annoyance of burdensome detail, this book is recommended as worthwhile reading.

JAMES B. H. YOUNG, M.D.

Fundamentals of Otolaryngology, 4th Ed.

By Lawrence R. Boies, M.A., M.D., Jerome A. Hilger, M.D., M.S., and Robert E. Priest, M.D., M.S., 553 pp., $8.50, W. B. Saunders Company, 1964.

MODERN MEDICATION and the treatment of ear diseases have just about been rewritten since this book's first edition (1949). The so-called nonallergic hypertrophic rhinitis causing nasal obstruction, which makes up a large percentage of the physician's practice, is well analyzed. A frank discussion with the patient is recommended regarding possible emotional and environmental factors. This compact book would induce many physicians to read this book in its entirety.

TADAO HATA, M.D.

★Accident Surgery, Vol. II

Edited by H. Fred Moseley, 374 pp., $12.00, Appleton-Century-Crofts, 1964.

THIS BOOK is the second series of lectures on accident surgery given by a distinguished faculty at the postgraduate course "Emergency and Accident Trauma" organized by the Accident Service in association with the Postgraduate Board of the Royal Victoria Hospital. The editor is the Director of Accident Service and Surgeon of Royal Victoria Hospital.

This particular volume is a collection of thirty-one different papers related to accident surgery, including both general surgical and orthopedic trauma. Each of these is presented by a recognized authority. There is a enlightening section on the organization of accident services and

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a recommendation for emergency room organization, equipment, and resuscitation measures. This single series of lectures cannot be complete in its coverage of accident surgery. Volumes one and three are necessary to cover the subject more completely.

This book is highly recommended to physicians caring for patients who sustain acute trauma and it would be well to have it and the accompanying volumes available in the emergency room of the hospitals for the house staff's use.

JOHN S. SMITH, M.D.

★The Atrioventricular Node and Selected Cardiac Arrhythmias

By David Scherf, M.D., F.A.C.P., and Jules Cohen, M.D., F.A.C.P., 466 pp., $18.75, Grune & Stratton, 1964.

THIS IS AN EXCELLENT monograph on cardiac arrhythmia for any physician who encounters this problem in his practice or for those in academic institutions.

The whole field is discussed from the basic anatomy and physiology to the clinical diagnosis and therapy. The references are voluminous and probably not of much practical use.

COOLIDGE WAKAI, M.D.

★The Lung and Its Disorders in the Newborn Infant

By Mary Ellen Avery, A.B., M.D., 224 pp., $7.50, W. B. Saunders Company, 1964.

THIS MONOGRAPH is the first of a series entitled *Major Problems in Clinical Pediatrics*. It is to be hoped that other volumes will maintain as high a standard. It is appropriate that neonatal pulmonary malfunction be given the first volume inasmuch as it is the most frequent cause of death in the pediatric age group. Although it is disturbing to realize that the causes of most of the major problems set forth in this book are unsolved, we should be pleased to learn that much can be done to help many infants with pulmonary disorders. The excellent review of the development of the lung and the transition from intra-uterine to extra-uterine function is required reading for all who escort young humans through the hazards of the first week of life. It is recommended that the last chapter be read first so as to whet the appetite for all that come before.

G. N. STEMMERMANN, M.D.

Fundamental Aids in Roentgen Diagnosis

By Charles B. Storch, M.D., 370 pp., $14.75, Grune & Stratton, 1964.

SUMMING UP THE IMPORTANCE of fluoroscopy, the author quotes a fellow radiologist as saying: "A radiologist without a fluoroscope can be like a one-armed paper hanger." To help the radiologist and nonradiologist alike, he has put together an extensive compendium of fluoroscopic techniques based primarily on personal experience. As a result this is a practical thesaurus, useful in particular to interns, residents, and the nonspecialists in roentgenology who desire to do their own fluoroscopy.

Certain chapters emphasize facets of fluoroscopy frequently overlooked; e.g., fluoroscopy of the opacified gall bladder, and of suspected intestinal obstruction. However, image intensification and cinefluorography are given but brief mention, although properly described as "the future of diagnostic radiology." The "future" is already here in many radiology departments, and an ever increasing body of published information has been available for some years. Nevertheless, the general principles present in the book are applicable to image intensified fluoroscopy and

cinefluorography, as well as to conventional fluoroscopy.

For teaching purposes, the subtitles of many of the fine illustrations are in a question-and-answer format, i.e.

> Question: How does this defect in gastric contour come about? Answer: Pressure from the spine . . . etc.

This approach arouses curiosity and stimulates interest.

In summary, the book would be of value to interns, residents, beginning radiology residents, and those physicians who use fluoroscopy in their practice without having had formal roentgenologic training.

GROVER J. LIESE, M.D.

Communicable and Infectious Diseases, 5th Ed.

By Franklin H. Top, A.B., M.D., M.P.H., F.A.C.P., F.A.A.P., F.A.P.H.A., 902 pp, $21.00, The C. V. Mosby Company, 1964.

THIS FIFTH EDITION was necessary because of many recent advances in chemotherapeutic and antibiotic agents, specific prevention of certain communicable diseases, acute respiratory infections, primary atypical pneumonia (mycoplasmal pneumonia), and the enterovirus infections. Revision of the fourth edition (1960) is more extensive than any of the previous ones, with the addition of 110 pages.

There are new chapters on malaria, infectious encephalitis, and Coxsackie and ECHO virus infections. The chapters on mycoplasmal pneumonia, respiratory infections, brucellosis, rabies, and dermatologic conditions such as impetigo, pediculosis, scabies, and ringworm of the scalp have been revised considerably.

This is a very handy reference book, containing many good illustrations in color.

W. A. MYERS, M.D.

★Advances in the Treatment of Menstrual Dysfunction

Edited by Alvin F. Goldfarb, M.D., 188 pp., $4.00, Lea & Febiger, 1964.

THIS SYMPOSIUM on menstrual dysfunction held on April 7, 1963, was divided into four parts: physiology, therapeutics, ovulation control, and an epilogue. This group of authorities presents a review of the most recent information on menstrual dysfunction with a basic approach, the clinical application of newer drug therapy, and the aspects of ovulation control in child spacing.

Discussions by the well-selected panelists are interesting and informative. This book is timely and good reading for those busy practitioners who cannot digest the voluminous material in the literature. Many suggestions given by the well-known clinicians based on the newer concepts in menstrual physiology can be used readily in the daily office practice. In short, I would highly recommend this book for those physicians who would prefer reading concise articles based on the research and experiences of the group of contributors who write on the topics of their special interests.

THOMAS K. OSHIRO, M.D.

★Leukemia, 2d Ed.

By William Dameshek, M.D., and Frederick Gunz, M.D., Ph.D., 594 pp., $25.00, Grune & Stratton, 1964.

THIS BOOK represents an excellent comprehensive review of the subject of human leukemia. In this second edition the more recent advances and studies in the field of leukemia are added to the already thorough and complete compilation of the first edition published five years previously. Many references are included for each chapter. This book is probably the best attempt to integrate and present all the more important information on leukemia today. For those interested in leukemia, this book is to be highly recommended.

ROBERT T. S. JIM, M.D.

The Specialties in General Practice, 3rd Ed.

Edited by Russell L. Cecil, M.D., and Howard F. Conn, M.D., 676 pp., $17.50, W. B. Saunders Company, 1964.

THIS BOOK follows the usual criteria of a well-written text. The presentation of material is rather haphazard depending on the prejudices of the various authors. Most of the chapters are worth reading but the chapter on Orthopedics was very sketchy compared to last year's edition. The book could be classified as a large handbook for general practitioners replete with frequent admonitions to refer—probably justifiably so, in view of the title.

ALAN LUNING, M.D.

Atlas of General Surgery, 2d Ed.

By Joseph R. Wilder, M.D., F.A.C.S., 325 pp., illus., $23.50, C. V. Mosby Company, 1964.

THIS IS A COLLECTION of 105 topics in general surgery. Text and illustrations depicting various aspects of the surgical procedure involved are on facing pages. The illustrations of the maneuvers are beautifully done, with clarity. However, because of the limited scope of this text, there is a lack of the necessary details which would be important for every operating surgeon to keep in mind. Because of this shortcoming, this type of text would be useful only to the medical student with some special interest in the technical aspect of surgery.

VICTOR M. MORI, M.D.

Also Received

Diseases of Medical Progress

By Robert H. Moser, M.D., F.A.C.P., 543 pp., $19.75, Charles C. Thomas, 1964.

THIS IS A WORTHWHILE text for most clinicians since it stresses the iatrogenic diseases created by modern drugs and therapeutic procedures. An informative reference text which is at times cumbersome to read but nevertheless necessary for all of us using implements of "medical progress."

★Business Management of a Medical Practice

By Bernard D. Hirsh, LL.B., 190 pp., $7.75, The C. V. Mosby Company, 1964.

A MUCH NEEDED book for any physician and particularly in group practice. It is clearly and concisely written and should be valuable asset for any doctor's library. A must for the young physician about to start practice.

X-ray Technology, 3rd Ed.

By Charles A. Jacobi, B.Sc., R.T. (A.R.R.T.), and Don Q. Paris, R.T. (A.R.R.T.), 452 pp., $11.50, The C. V. Mosby Company, 1964.

A VALUABLE, concise text for technologists written by two of them. The illustrations and drawings are clear and valuable.

An Essay on Color Vision and Clinical Color-Vision Tests

By Arthur Linksz, M.D., 254 pp., $15.75, Grune & Stratton, 1964.

A WONDERFUL REFERENCE source for those interested in this subject. The genetic implications are also discussed. Somewhat too complex except for those specializing in ophthalmology.

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Book Reviews *continued from 77*

★The Treatment of Mycotic and Parasitic Diseases of the Chest

By John D. Steele, M.D., 259 pp., $14.75, Charles C. Thomas, 1964.

A WELL WRITTEN book covering an aspect of pulmonary disease of great current interest. The major emphasis is on the surgical treatment of these diseases. A good reference source for the practicing physician.

★Clinical Investigation in Medicine: Legal, Ethical, and Moral Aspects

By Irving Ladimer, S.J.D., and Roger W. Newman, LL.B., 517 pp., $5.95, The Law-Medicine Research Institute, 1963.

AN EXCELLENT TEXT for those considering or participating in clinical investigation with emphasis on the philosophy of humor testing in medical research.

Aids to Psychiatric Nursing, 2d Ed.

By A. Altschul B. A. (Lond.), S.R.N., R.M.N., 332 pp., $4.50, William & Wilkins Company, 1964.

A GUIDE and perhaps a stimulant for better psychiatric nursing.

The Clinical Use of Dextran Solutions

By Amiel Segal, B.A., 74 pp., $4.50, Grune & Stratton, 1964.

A CONCISE monograph on this oft used plasma expander.

Science and Psychoanalysis VII Development and Research

Edited by Jules H. Masserman, M.D., 296 pp., $9.75, Grune & Stratton, 1964.

ADVANCES and changing concepts in psychoanalysis.

Ciba Foundation Study Group No. 17 Diet and Bodily Constitution

120 pp., $2.95, Little, Brown & Company, 1964.

CURRENT CONCEPTS of many aspects of diet in growth, development, and disease.

★Physical Examination of the Surgical Patient, 3rd Ed.

By J. Englebert Dunphy, M.D., F.A.C.S., and Thomas W. Botsford, M.D., F.A.C.S., 396 pp., $8.50, W. B. Saunders Company, 1964.

AN EXCELLENT TEXT on physical examination particularly of value to medical students, interns and residents. The drawings are clear and the techniques described valuable. Perhaps all practicing physicians should peruse this most essential and often neglected aspect of practice.

Ego Psychology, Group Dynamics, and the Therapeutic Community

By Marshall Edelson, M.D., Ph.D., 242 pp., $8.50, Grune & Stratton, 1964.

A RATHER VERBOSE text on the effects of psychotherapy on an individual in relation to group activity and the value of group dynamics on the ego psychology.

The Tired Business Man

By Sir Heneage Ogilvie, K.B.E., F.R.C.S., M.D., $4.75, Charles C. Thomas, 1964.

AN INDIVIDUAL analysis of diseases believed to be due to that all inclusive term *Stress.* ■

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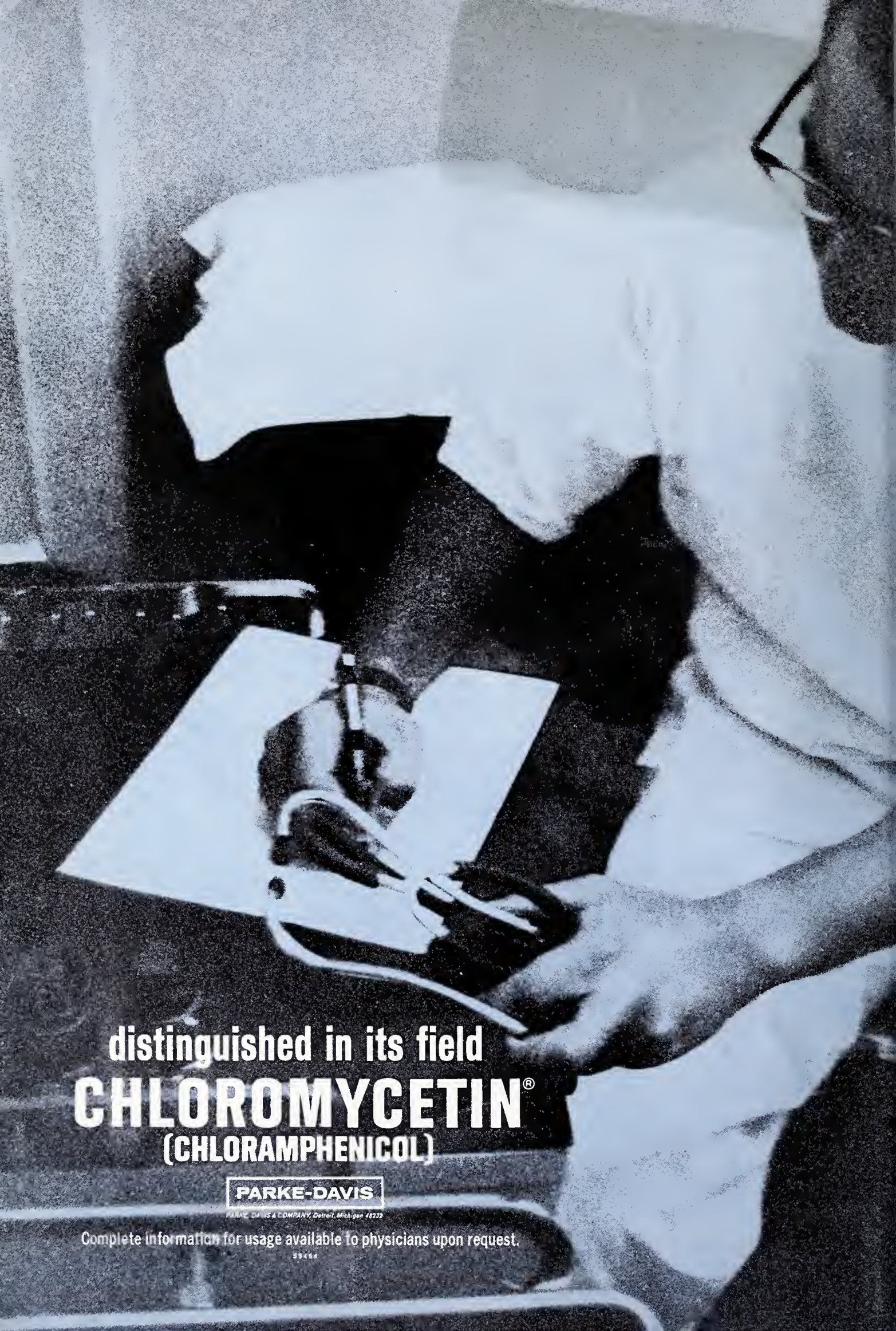
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Published Bi-Monthly by the HAWAII MEDICAL ASSOCIATION (Incorporated in 1856 under the Monarchy), 510 S. Beretania St., Honolulu, Hawaii 96813 • *Editor,* HARRY L. ARNOLD, JR., M.D. • *Assistant Editor,* DORIS R. JASINSKI, M.D. • *News Editor,* HENRY N. YOKOYAMA, M.D. • *Managing Editor,* LEE MCCASLIN

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HAWAII MEDICAL JOURNAL

Contents

Volume 24, Number 2, November-December, 1964

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BRIEF SUMMARY

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CONTRAINDICATIONS: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

PRECAUTIONS: Administer with caution in the presence of incipient glaucoma.

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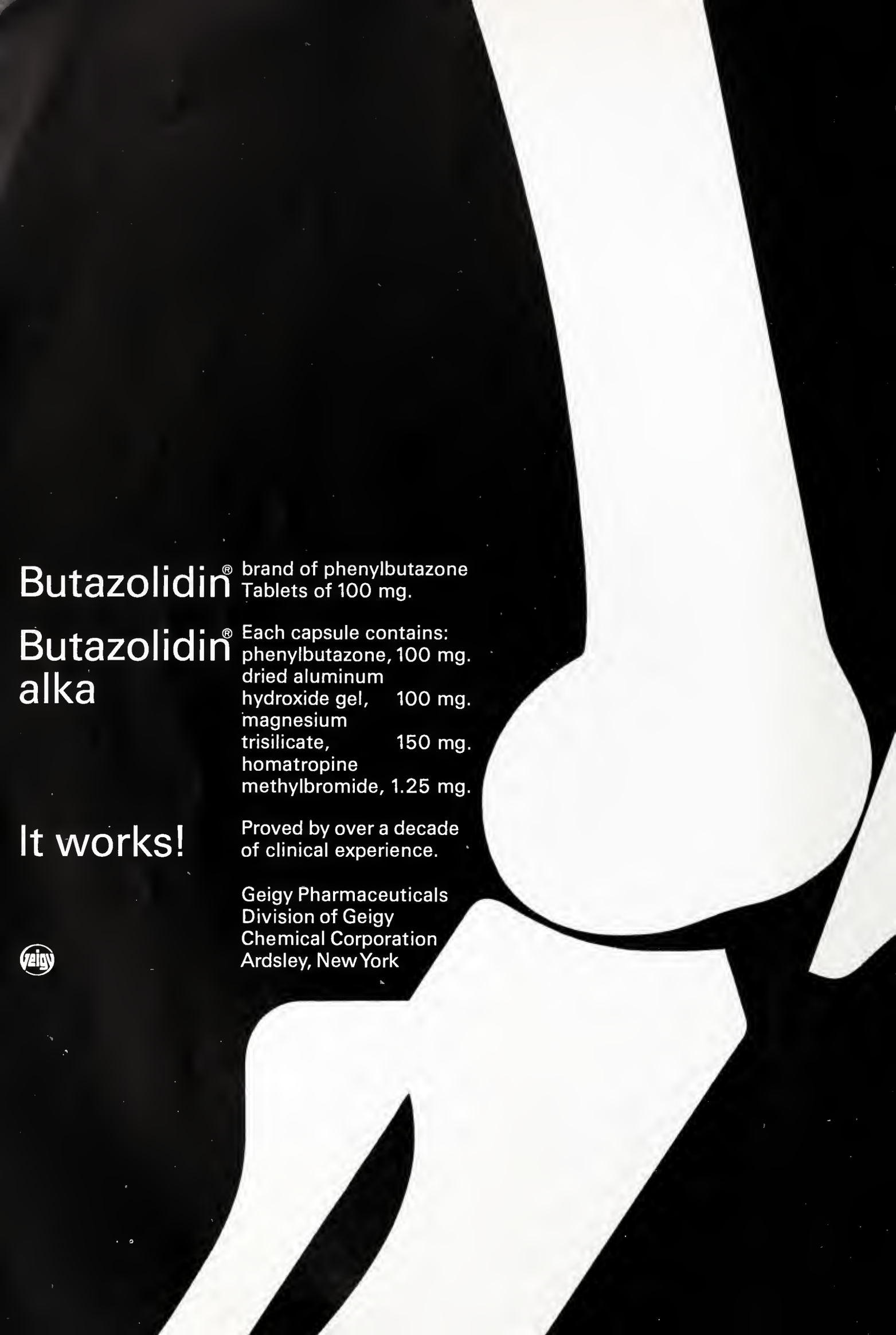
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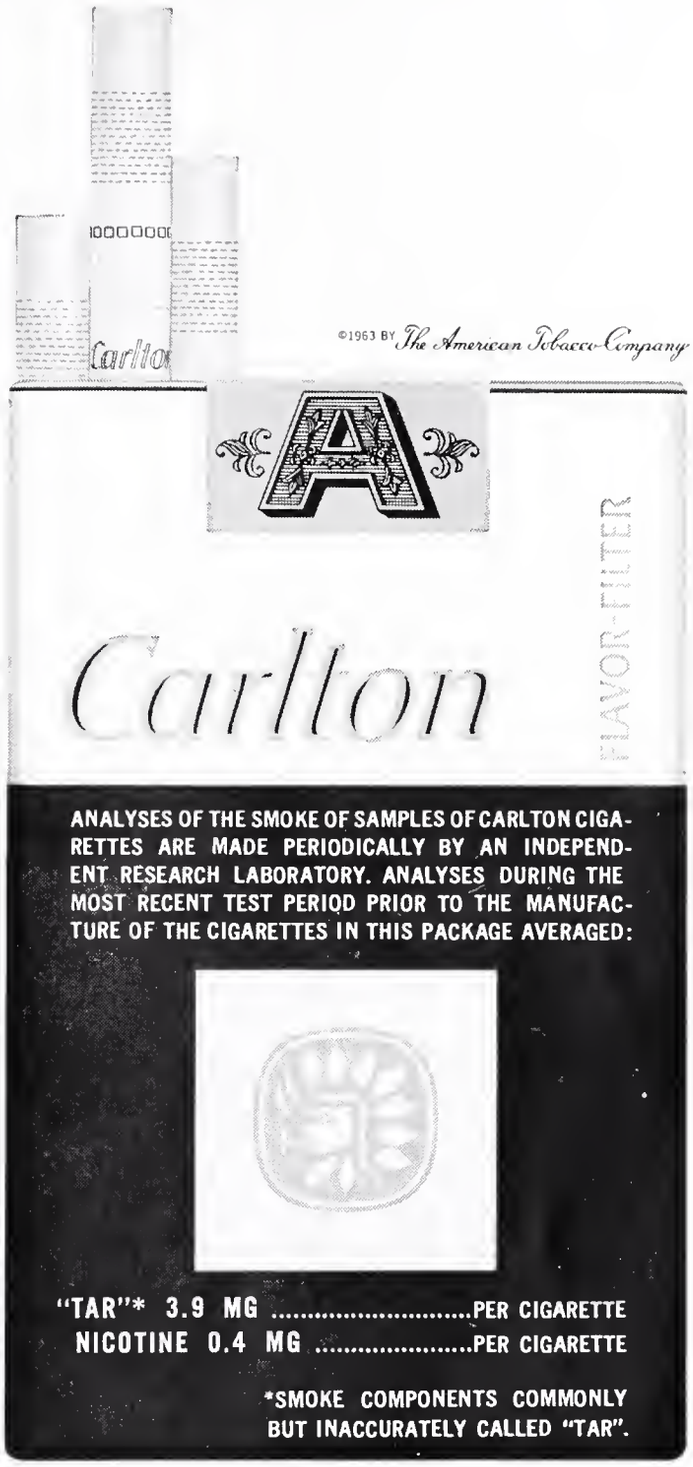

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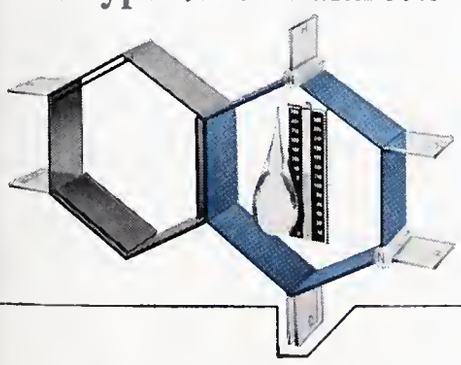

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CONTRAINDICATION: Anuria.

1. Steigmann, F., and Griffin, R.: Evaluation of Quinethazone, a New Diuretic. J. Amer. Geriat. Soc. 11:945 (Oct.) 1963.

2. Schwartz, M.: Office Evaluation of a New Diuretic in Patients with Hypertensive Diseases. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, Nov. 25-28, 1962.

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Reports & Snorts

• *The author of the following letter, a gentleman of wit and unparalleled spirit, is a laryngectomee who recently became a (partial) pneumonectomee as well. His pidgin English description of the process, for a friend, is printed here, with his permission.*

October 23, 1964

Dear Joe:

So here is how I cum to get sliced again! One day the man says "I don't like the looks of wot you coff out of your breath hole." So I says "So what?" So he says "We call in chest sturgeon." So I see him and he take x-ray pitchers like I am his last speciman. (I think by now I had so many x-rays maybe all my sperm cells is inactive—which might not be a bad idea at that.)

So anyhow the chest guy he don't like the pitchers so he stick a broncoscope down my neck puka and get so excited he cut off a bunch of samples from wherever he can see. So you guessed it—them samples is some maligerent or whatever you call it. Right away he say "More better we cut out leetle-a-bit you lung." I say "How much?" an right away he present his bill so I say "No dice."

"How big leetle-a-bit lung you want cut?" So now he say "Not much. Only top lobe left side—you still keep about ¾ of you blow." Now I think maybe, OK, I do, cause lots people many years say planty times "Kamaka, you a blow-hard" so maybe this fix. I say "OK, let's go."

You know what that son fa bitch do? He make cut start middle of back an all around shoulder blade and then in front—just like cut wing off Thanksgiving turkey. Only he no cut off wing. Next he,—and whole bunch fellows bully for strong, get thing call "rib spreader" an they spred and they spred till *all* (I think) get inside. Then they prowl around all day for 5 hours to cut out only ½ of 1 lung. Work by hour, I guess!

Next sew up all tite inside and out except punch 5-6 pukas for drain and all like that. Now all fix and Kamaka only ¾ blow-hard—maybe only ½. Hurt too much—I no blow good yet. Now I home, get go fine. Sorry no news—nothing ever happen aroun here. Ag she feel good too.

Aloha nui oe,

Ben

P.S. Chest sturgeon say he cut all out da kine maligerant stuff so no more trouble. Alla same I make big resolution I no fool around no more da cancer stuff. I quit! I figure fella fool dat stuff too much pretty soon he get kill for sure—I no want!!

LANIOLU

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Of 11 pathogenic serotypes of E. coli, seven have been found in Hawaii, and they can cause fatal enteritis!

Enteropathogenic E. coli Infections and Carriers of Bacterial Enteric Pathogens Among Hospitalized Children

MAX LEVINE, Ph.D., Sc.D., JAMES R. ENRIGHT, M.D., and GEORGE CHING, B.S., *Honolulu**

• *The highly enteropathogenic 0111:B4 serotype of Escherichia coli was isolated from an infant with diarrhea in Honolulu in 1957. In the next two years enteropathogenic E. coli of this or less often other strains was found in 118 children with diarrhea, and 63 without it. Of the cases, 80% were under one year; of the carriers, 80% were over this age. Two-thirds of the carriers were over two years. Salmonellae, usually panama or derby, were isolated from 55 children hospitalized for surgery or nondiarrheal disease, and shigellae from five. Such carrier states may well be an important factor in institutional outbreaks of diarrhea.*

THE ROLES of salmonellae and shigellae as causes of enteric disease in man have long been recognized and accepted, but the status of E. coli as an etiologic agent in diarrheal disease of infants has been the subject of controversy ever since the species was first recognized.

Emmerich, in 1884, isolated from the stools of cases of "cholera infantum" in Naples, an organism which he considered to be the cause of the children's affliction. However, in 1885, Escherich, in Germany, observed that an organism (Bacterium coli commune) which he considered to be the same as that of Emmerich was constantly present in stools of normal infants. Thereafter, such bacteria have generally been regarded as normal nonpathogenic inhabitants of the intestinal tracts of man and animals.

The organisms first isolated by Escherich and Emmerich are presently designated as Escherichia coli and E. coli var. neapolitana, respectively, the latter being differentiated from E. coli by fermentation of sucrose with acid and gas production.

MANY TYPES OF ESCHERICHIA

For about 50 years it has been recognized that what is now known as the genus Escherichia comprises many varieties which can be differentiated on the basis of motility, liquefaction of gelatin, and fermentation of various carbon compounds, with production of specific end-products. The view that some of these varieties might be associated with diarrhea has persisted, but could never be adequately demonstrated.

Adam, in Germany, as far back as 1927, described a biochemical type of the coliform group which he considered to be the etiologic agent in diarrhea of infants and designated it as "Dyspepsie-Koli." However, differentiation on the basis of biochemical characteristics was not at all convincing, with the result that his views, for all practical purposes, were ignored.

It was not until 1943, when Kaufmann, of Denmark, first reported on the presence of thermolabile antigens associated with the envelopes, sheaths,

* From the Hawaii State Department of Health. Dr. Levine is the retired Director of Laboratories; Dr. Enright is the retired Epidemiologist; and Mr. Ching is the Department's Microbiologist.

This paper is based on a presentation by the senior author at the Children's Hospital, Honolulu, Hawaii, August 1962. Received for publication Sept. 15, 1964.

or capsules of the coliform group and, with coworkers, later developed a system of bacterial classification, or typing as it is now called, on the basis of antigenic structure, or analysis, that a dependable basis for demonstrating the association of specific varieties ("types") of coliform bacteria with diarrheal disease was established. This technique opened a new and productive path for differentiation and identification of all of the enteric bacteria —coliforms, salmonellae, shigellae, and intermediate varieties—which is of fundamental epidemiological importance.

THE THREE ANTIGEN-TYPES

Briefly stated, three classes of antigens—"O" (somatic), "H" (flagellar), and "K" (the latter being associated with the envelopes, sheaths, or capsules around the body of the bacterial cell)—have been demonstrated for the coliform group. The "O" antigens are alcohol- and heat-stable, whereas the "H" antigens are liable to these agents. The "K" antigens, which comprise three antigen subtypes—designated as "L", "A", and "B"—have the property of inhibiting the agglutination of live bacteria by "O" antisera, but this phenomenon may be eliminated by heating the test bacteria at 100° C. for an hour. Considering the multiplicity of antigenic components—there are presently recognized 135 "O", 40 "H", and 77 "K" (30 "L", 26 "A", and 21 "B") antigens—it is evident that complete serological typing may well become a Herculean task. In general, however, determination of the "O" and "B" antigenic components has been found adequate for routine work. For specially detailed epidemiological studies, however, it might be found necessary to determine the "H" antigens.

PATHOGENS IDENTIFIED

Ewing, Tatum, and Davis (1957) of the Communicable Disease Center of the USPHS in Atlanta, Georgia, recognize the following eleven serotypes of enteropathogenic E. coli (E.E.C.) to be associated with diarrheal disease in the U.S.: 026:B6, 055:B5, 086:B7, 0111:B4, 0112:B11, 0119.B14, 0124:B17, 0125:B15, 0126:B16, 0127:B8, and 0128:B12. Others will, no doubt, be found as more outbreaks are studied. Seven of these types have been encountered, to date, in Hawaii.

Bray (1945) reported an interesting finding in a study of an outbreak of gastroenteritis among babies in England in 1943. The diarrheal stools were characterized by a peculiar seminal-like odor and he isolated coliform organisms from practically all such stools (but rarely from stools of non-diarrheal babies) which produced a similar peculiar odor on artificial cultural media. He found these organisms to be serologically the same when examined by the ordinary agglutination techniques. He designated the strain as Bacterium coli var. neapolitanum.

Giles, Sangster, and Smith (1949) reported on a study of several hundred cases of infective diarrhea among infants in Aberdeen, Scotland, in 1947, in which there was a 50 per cent mortality. They isolated organisms which were serologically alike, on the basis of the ordinary agglutination technique, and named the organisms Bact. coli alpha. In another outbreak, which occurred in 1948, they again encountered organisms from the various cases which were serologically alike but which differed serologically from their Bact. coli alpha and designated it Bact. coli beta.

Taylor, Powell, and Wright (1949) isolated coliform organisms, which appeared to be identical serologically, from a large proportion of infants affected with diarrhea in several nursing homes in London, whereas such organisms were not detected in stools from normal babies. They designated the organisms Bact. coli D433.

In 1946, Varela (Olarte and Varela, 1952) isolated a strain of E. coli from the feces and purulent secretion from the external ear of a two-month old infant, who died of acute enteritis, and from five children and a woman employee, in an outbreak of diarrhea at the Hospital Infantil of Mexico City, and he named it E. coli-gomez. An especially interesting thing about this organism was the fact that, although it had the cultural characteristics of the genus Escherichia (the coliform group) it was agglutinated in high dilution by antisera prepared with Salmonella adelaide, and it was demonstrated that its "O" antigen was apparently the same as that of Salmonella adelaide—namely, XXXV of the Kaufman-White classification of Salmonella. It is interesting to note that Varela was using the antigenic analysis technique, at this time, as no reports on such work had apparently appeared in the U.S. literature before about 1950.

ANTIGENICALLY IDENTICAL

Olarte and Varela (1952) reported the very significant finding that the Bacterium coli neapolitanum of Bray, Bact. coli alpha of Giles and Sangster, Bact. coli D433 of Taylor, Powell, and Wright and their own Bact. coli-gomez were all antigenically identical with Escherichia coli 0111:B4 of the Kaufmann classification, which is apparently closely related to, if not identical with, E. coli var. neapolitana. The Bacterium coli beta of Giles and Sangster is now recognized to be identical with

E. coli 055:B5. Thus, the system of antigenic typing of E. coli strains has brought order out of chaos and may have served, after a lapse of almost 70 years, to vindicate the views of Emmerich who ascribed the cause of "cholera infantum," in Naples, to the coliform organism which he had isolated.

E.E.C. MOST COMMON

That E.E.C. may be much more frequently associated with diarrhea of infants and young children than are salmonellae or shigellae is well illustrated by the experiences of the Cincinnati and Detroit Children's Hospitals. Thus, during the two-year period, March, 1954, to March, 1956, E.E.C. were isolated from 188 patients whereas salmonellae were found in 85 and shigellae in 88 children at the Cincinnati Hospital (Cooper, Keller, and Walters, 1957).

The Detroit experience was even more striking. Thus, in the nine-month period, October, 1954 to June, 1955, Stulberg and Zuelzer (1956-57) reported that, of 460 infants admitted with diarrheas, shigellae were detected in only four and salmonellae in but ten patients. E.E.C., comprising eight serological types, having been isolated from 106 children, were ten times as prevalent as salmonellae and 25 times that of shigellae. Gamble and Rawson (1957) express the view that between one and two per cent of the population may, at any time, be excreting E.E.C. Solomon, Weinstein and Joress (1961), in a study of 1,078 children constituting a pediatric population, detected E.E.C. in 85, of which 51 were asymptomatic carriers, some harboring several serotypes.

Laboratory reports, "Negative for bacterial enteric pathogens," and the associated inferences that the diarrheas may therefore be due to viruses—when salmonellae and shigellae are not found in fecal specimens, are all too common. That E.E.C. may actually be the etiological agents when viruses are suspected, is strikingly illustrated by the following illuminating experience at two hospital outbreaks in 1947 reported by Neter, Korns, and Trussell (1953). Stool specimens collected during the course of the outbreaks in 1947 had been preserved by storage—at –40° C to –70° C—presumably for virus studies. E. coli 0111:B4 was isolated from each of two specimens still available from one of the hospitals and from three specimens in the other, when examined in 1952.

KOCH'S LAWS FULFILLED

The association of E.E.C. as the etiological agents in infant diarrheas has been based solely on epidemiological evidence, but recently "Koch's Laws" have been adequately satisfied for three types—E. coli 0111:B4, 055:B5, and 0127:B8. The following examples with 0111:B4 are illustrative of typical findings. Neter and Shumway (1950) fed 100 million E. coli 0111:B4 to a two-month-old infant with multiple congenital defects. Diarrhea developed within 24 hours, a weight loss of seven ounces was observed, large numbers of this coliform type were present in the stools, and the organism was also recovered from the throat and nasopharynx. Within 48 hours after administration of Terramycin, the symptoms subsided and the organism disappeared. Ferguson and June (1952) fed a mixture of three strains of E. coli 0111:B4, isolated from diarrheal infants, to volunteers at the State Prison of Southern Michigan. Those fed large numbers (9,000 million of the organisms in milk) developed diarrhea within about ten hours after feeding, the organisms were present in large numbers in their stools, and a large proportion of the volunteers developed specific agglutinins for the test organism. Feeding similar numbers of a culture isolated from a normal nondiarrheal infant produced no untoward effects. Administration of Chloromycetin effected a prompt disappearance of symptoms and also the test strain of E. coli 0111:B4.

Diarrhea Associated with Enteropathogenic E. coli in Hawaii

(Oahu, 1957-58)

On February 26, 1957, E. coli 0111:B4 was detected, for the first time in Hawaii, in a four-month-old hospitalized infant suffering from a very severe diarrhea. A survey was instituted to ascertain the incidence of infection among children in the hospital. In April it was requested that rectal swabs be submitted to the Department of Health from all children being admitted for nondiarrheal diseases, with a view to determining the incidence of carriers of enteropathogenic E. coli serotypes. Hospital A, at which the above case occurred, submitted 7,366 specimens from all such admissions during the period, March, 1957, to December, 1958; from hospital B, 1,084 rectal swabs from nondiarrheal children were received during the 10-month period, April, 1957, to January, 1958; and a third hospital C participated for a short period. April to July, 1957, submitting only 41 specimens from admissions of nondiarrheal children.

SEROTYPES FROM CASES AND CARRIERS

During the course of the investigation, enteropathogenic E. coli were isolated from 118 children with diarrhea, 63 children admitted for surgery or various nondiarrheal ailments, and one hospital employee (a student nurse). Of the 63 children

considered as carriers, one was from hospital C, eight from hospital B, and 54 from hospital A.

The distribution of cases and carriers among the seven enteropathogenic E. coli types which were detected is indicated in Table 1. It is apparent that the highly pathogenic E. coli 0111:B4 was by far the most frequently encountered type, accounting for 92 (78%) of the cases with diarrhea and 25 (39.7%) of the carriers. It might also be of interest to note that the three types—055:B5, 0111:B4, and 0127:B8—which have been demonstrated experimentally to cause diarrhea and development of specific antibodies in sera of volunteers fed large numbers of these organisms, were isolated from 106 (89.8%) of children with diarrhea and 37 (58.8%) of the carriers.

The potential hazard of unrecognized carriers admitted to children's hospital wards or nursing homes is strikingly illustrated by the following experience in Pittsburgh in 1953 as reported by Stock (1956). A child which had been in the Pittsburgh Children's Hospital with erythroblastosis fetalis was returned to maternity home A where 12 children (the entire population) developed diarrhea. Stool specimens from nine of these were examined and yielded E. coli 0111:B4. One of the three children, who had not been cultured, was transferred to maternity home D where 20 of its 45 infant population came down with diarrhea. Three of the latter were so sick that they were sent to hospital E where eight infants came down with diarrhea and E. coli 0111:B4 was isolated from two of them. An infant returned home from this hospital E, developed diarrhea and was sent to hospital F where six cases developed, all yielding E. coli 0111:B4.

AGE DISTRIBUTION OF CHILDREN INVOLVED

In Table 2 is shown the age distribution of cases and carriers of enteropathogenic E. coli. Of the 118 cases, 111 (94.1%) were children under two years old whereas of the 63 carriers, 40 (63.6%) were two years or older. Taking the line of demarcation at one year, it will be noted that 95 (80.5%) of the cases were children under one year, whereas, in sharp contrast, 52 (82.5%) of the carriers were in the one-year-or-older age groups. The importance of early detection of carriers among children admitted, especially to infants' wards, as a safeguard against infection of the newborn and very young infants, is manifest and really cannot be overemphasized.

ANTIBIOTIC SPECTRA OF E.E.C. TYPES

Reports in the literature on susceptibility of E.E.C. to various antibiotics are, as might be expected, not in complete agreement. This may be due to (1) the proportion of various serotypes in a collection of strains under investigation, (2) variations of individual strains in a given serotype, and (3) the history of strains with respect to previous exposure to sublethal concentrations of various antibiotics. There seems to be complete agreement, however, that neomycin was especially effective, both *in vitro* and *in vivo,* against these pathogens.

Neter and Shumway (1950) employing nine strains of E. coli D433 (0111:B4) found each of them to be highly susceptible to 10 mcg/ml of Aureomycin, Chloromycetin, Terramycin, and polymyxin B and to 400 U/ml of Bacitracin, whereas only three of the strains were inhibited by 100 mcg/ml of streptomycin and none were susceptible to 100 U/ml of Bacitracin or to 500 U/ml of penicillin. Goryzynski and Neter (1953) in a study of 29 strains comprising three serotypes (0111:B4, 055:B5, and 026:B6) observed that all were sensitive to neomycin in the range of 1.5 to 50 mcg/ml but that seven strains grew in 100,000 mcg/ml of streptomycin. They observed further that neomycin was bacteriostatic and bactericidal and that resistant strains developed when grown in increasing concentrations of both agents, especially streptomycin. The speed of development of resistance to streptomycin by coliform bacteria is indicated

TABLE 1.—*Incidence of cases and carriers of enteropathogenic E. coli among hospitalized children* (Oahu, 1957-58).

E. COLI TYPE	CASES		CARRIERS		TOTAL	
	No.	%	*No.*	%	*No.*	%
026:B6	4	3.4	7	11.1	11	6.1
055:B5	11	9.4	7	11.1	18	10.0
086:B7	.....	.....	1	1.6	1	0.5
0111:B4	92	78.0	25	39.7	117	64.7
0125:B15	1	0.8	.....	.....	1	0.5
0126:B16	7	5.9	18*	28.6	25	13.8
0127:B8	3	2.5	5	7.9	8	4.4
Total	118	100.0	63	100.0	181	100.0

* One student nurse, also, harbored *E. coli* 0126:B16.

TABLE 2.—*Cases and carriers of E.E.C. among hospitalized children—age distribution* (Oahu, 1957-58).

AGE	CASES		CARRIERS		TOTAL	
	No.	%	*No.*	%	*No.*	%
<1 month	5	4.2	.....	.....	5	2.8
1-3 months	20	17.0	1	1.6	21	11.6
3-6 months	30	25.4	3	4.7	33	18.2
6-12 months	40	33.9	7	11.1	47	26.0
1-2 years	16	13.6	12	19.1	28	15.4
2 yrs. & over	7	5.9	40	63.5	47	26.0
All Ages	118	100.0	63	100.0	181	100.0
<1 year	95	80.5	11	17.4		
1 yr. & over	23	19.5	52	82.6		

in a report by Levine and Thomas (1947) who observed that a strain of E. coli, isolated from a case of cystitis, which originally grew in 10 U/ml but not in 50 U/ml of streptomycin, grew luxuriantly in 20,000 U/ml after passage through only five 24-hour test tube generations when exposed to increasing concentrations of this antibiotic.

Jones (1960) reported that, of 30 E.E.C. strains examined, 87 per cent were susceptible to chloramphenicol, 74 per cent to streptomycin, and 70 per cent to tetracyclines; all of 11 strains examined were sensitive to Furadantin and each of only three strains employed was susceptible to neomycin. Wheeler (1956) observed that chloramphenicol (35 mg/kg/day) was an effective therapeutic agent, as the toxicity was ameliorated and the mortality of his patients was reduced to zero, but that the causative E.E.C. strains frequently were not eliminated from the stools and developed resistance to this antibiotic. With neomycin (50 mg/kg/day) cross infections were eliminated and the stools of the treated patients were negative in two days. Cooper, Walter, and Keller (1956-57) in a study of 42 strains of E.E.C. serotype 0127:B8, freshly isolated from cases, observed that polymyxin B, neomycin sulfate, chloramphenicol, Achromycin and Terramycin were bactericidal for all of the strains whereas they were resistant to dihydrostreptomycin. They observed further that neomycin (40 mg/kg/day) administered orally was effective therapeutically, though not bacteriologically, as 12 of 20 patients were found to be excreting the causative organism after cessation of medication. Increasing the dose of this antibiotic to 150 mg/kg/day for two days and 100 mg/kg/day for eight days was effective both therapeutically and bacteriologically.

ANTIBIOTIC SUSCEPTIBILITY OF HAWAIIAN STRAINS

Sensitivity to nine antibiotics was ascertained for 129 E.E.C. strains obtained from cases and carriers by the antibiotic disk procedure. Levine and Thomas (1945) demonstrated that the zone of growth inhibition produced by applications of 4-ml loopsful of varying concentrations of penicillin to agar plates seeded with a highly sensitive strain of Staphylococcus aureus was proportional to the concentrations of penicillin employed. By applying loops of a given concentration of penicillin (e.g., 10 or 5 U/ml) to plates seeded with organisms of varying susceptibilities, the diameter of the zone of growth inhibition was an inverse function of the resistance of the cultures. This was determined by the then standard tube-dilution technique (i.e., the more resistant the culture was by the tube-dilution technique, employing liquid media, the smaller was the zone of growth inhibition by the loop technique employing solid media).

This "loop-inhibition-zone technique" was found to be simple and required considerably less media and equipment than the tube-dilution procedure. The antibiotic-disk procedure, which in principle is similar to the loop-inhibition-zone technique, has come into general use for routine determination of sensitivity to antibiotics, though its reliability has sometimes been questioned. Braude and Dockrill (1952) consider the disk method unsatisfactory with Aureomycin for coliform bacteria and staphylococci, though suitable for other antibiotics —chloramphenicol, Terramycin, and penicillin.

Patrick, Craig, and Bachman (1951) reported favorably on the use of the disk technique with Aureomycin for staphylococci, coliform, and several other Gram negative and positive bacteria. They noted that it correlated well with the tube-dilution procedure. Neter and Shumway (1950), employing Aureomycin and six other antibiotics for determination of susceptibility of enteropathogenic E. coli strains, state that essentially identical results were obtained in tests employing disks and in tests using the tube-dilution technique.

TECHNIQUES OF STUDY

The organisms employed in this study comprised 129 cultures of the following E.E.C. serotypes—0111:B4 (95 strains), 055:B5 (9 strains), 0126:B16 (11 strains), 026:B6 (7 strains), 0127:B8 (6 strains) and 086:B7 (1 strain). The antibiotics employed included Aureomycin, Chloromycetin, penicillin, dihydrostreptomycin, Terramycin, tetracycline, neomycin, Furadantin, and polymyxin B. Disks of two concentrations were employed with each antibiotic—Furadantin (50 and 300 mcg), dihydrostreptomycin (2 and 100 mcg), penicillin (2 and 10 units), and 5 and 30 mcg for each of the other six antibiotics. Development of wide zones (10-25 mm) of growth inhibition around both the low and high concentration disks was considered to indicate that the organism was "very sensitive"; narrow growth-inhibition zones (1-3 mm) around the low and relatively wide zones surrounding the high concentration disk (5-10 mm) was considered as "moderately sensitive"; absence of any evidence of growth-inhibition around the low and a small zone (usually less than 3 mm) surrounding the high concentration disk was recorded as "slightly sensitive"; and the absence of growth-inhibition zones around both disks (or presence of many small colonies within a zone of inhibition) was considered to indicate that the organism was "resistant."

ANALYSIS OF RESULTS

An analysis of the results obtained indicated that only a few of the strains were allocated to the category "slightly sensitive" and, except for dihydrostreptomycin and Terramycin, for which about 35 strains were recorded as "moderately sensitive," the cultures, with rare exceptions, were either "very sensitive" or "resistant" to the various antibiotics.

For practical purposes it was felt that those strains in the categories "very sensitive" and "moderately sensitive" would best be considered as "susceptible" and the others as "resistant." In Table 3 are indicated the results obtained with each of the antibiotics for the various E.E.C. serotypes.

All of the 129 strains were susceptible to neomycin and Furadantin and all but one to polymyxin B, whereas in sharp contrast, all of the cultures were resistant to penicillin. The results obtained with the other five antibiotics seemed to vary with the E.E.C., serotype, as indicated below:

Aureomycin—Each (100%) of the six E. coli 0127:B8, whereas only two (22.9%) of nine strains of E. coli 055:B5 and two (18.2%) of 11 strains of 0126:B16, five (71.5%) of seven strains of E. coli 026:B6 and 63 (66.3%) of 95 strains of E. coli 0111:B4, were susceptible to Aureomycin.

Chloromycetin—Only 25 (26.4%) of the 95 strains of E. coli 0111:B4 but all (100%) of the 34 strains comprising the other five E. coli serotypes examined, were susceptible to Chloromycetin.

Dihydrostreptomycin—Only three (50%) of E. coli 0127:B8, 58 (61.1%) of E. coli 0111:B4 and five (71.5%) of E. coli 026:B6 were susceptible to dihydrostreptomycin whereas all of the nine strains of 055:B5 and 10 (90.9%) of the 11 strains of E. coli 0126:B16, were susceptible to this antibiotic.

Terramycin—About half (five of nine strains) of E. coli 055:B5 and approximately two-thirds (seven of 11 strains) of E. coli 0126:B16 were susceptible to Terramycin whereas all of the seven strains of E. coli 026:B6 and all six strains of 0127:B8, as well as 86 (90.6%) of the 95 E. coli 0111:B4, were susceptible to this agent.

Tetracycline—Variations in susceptibility to tetracycline were less marked than was observed with the above four antibiotics. All of the E. coli 026:B6 and 0127:B8 strains, 86 (90.5%) of E. coli 0111:B4, eight (72.7%) of 0126:B16 and seven (77.7%) of 055:B5 strains were susceptible.

It is unfortunate that a larger number of strains in the serotypes other than 0111:B4 were not available for examination for it would be very significant if the differences observed with the relatively few representatives of these serotypes were found to hold true for more comparable numbers of cultures of the various E. coli serotypes. The results do indicate, however, that an investigator's evaluation of the relative susceptibility of E.E.C. cultures to different antibiotics might be markedly affected by the relative proportions of strains from the different serotypes in the collection of cultures under his observation.

It is apparent from the data presented in Table 3 that of the antibiotics under consideration, neomycin, Furadantin, and polymyxin B were especially and by far the most universally effective. The choice for clinical use might well depend on their relative toxicity and, particularly, retention in the intestinal tract after oral administration. In this connection, it is especially worthy of note that Herwig, Middlecamp, and Thornton (1956) found that nephrotoxicity, which has frequently been associated with parenteral administration, has not been observed after oral administration of neomycin and Metzer and Jenkins (1956) point out that, with neomycin, because of its bactericidal properties and its minimal absorption from the intestinal tract, a potent effect on these enteric pathogens could be expected and that this would therefore be the antibiotic of choice for clinical use.

On the basis of reports in the literature and what

TABLE 3.—*Susceptibility of enteropathogenic E. coli serotypes to various antibiotics.*

	SEROTYPE OF E. COLI					
	0111:B4	055:B5	0126:B16	026:B6	0127:B8	ALL STRAINS
No. of Strains:	95	9	11	7	6	129*
Antibiotic	*Per cent of Strains Susceptible*					
Neomycin	100.0	100.0	100.0	100.0	100.0	100.0
Furadantin	100.0	100.0	100.0	100.0	100.0	100.0
Polymyxin B	98.8	100.0	100.0	100.0	100.0	99.2
Tetracycline	90.6	77.7	72.7	100.0	100.0	89.2
Dihydrostreptomycin	61.1	100.0	90.9	71.5	50.0	66.7
Terramycin	90.6	55.5	63.6	100.0	100.0	66.0
Aureomycin	66.3	22.2	18.2	71.5	100.0	62.1
Chloromycetin	26.4	100.0	100.0	100.0	100.0	45.8
Penicillin	0.0	0.0	0.0	0.0	0.0	0.0

* Includes 1 strain of 086:B7 which was isolated from a carrier. It was resistant to penicillin and susceptible to all of the other antibiotics.

TABLE 4.—*Age distribution of children hospitalized for non-diarrheal diseases who were found to be harboring enteropathogenic E. coli, Salmonella or Shigella** (Oahu, 1957-58).

	E. COLI		SALMONELLA	
Age	*No.*	*%*	*No.*	*%*
<1 yr.	11	17.5	9	16.3
1-2 yrs.	12	19.0	6	10.9
2-5 yrs.	21	33.3	14	25.5
5-10 yrs.	16	25.4	22	40.0
10 yrs. & over	3	4.8	4	7.3
Total	63	100.0	55	100.0

* Of the 5 *Shigella* carriers 3 were in the 2-5 year, and 1 each in the 5-10 and 10 and over, age groups.

information we have on the experiences in Hawaii, neomycin has been successfully employed for the control of diarrheas associated with enteropathogenic E. coli. The fact that only one death occurred among the 118 cases in Hawaii, whereas mortalities of over 40 per cent have been reported in outbreaks before the significance of E.E.C. as etiological agents and their susceptibility to neomycin was appreciated, is indicative of the need and value of facilities for rapid detection of these pathogens. However, considering that coliform strains have frequently been observed to develop resistance to various antibiotics, determination of specific susceptibility of strains associated with an outbreak of diarrheal disease among infants, is imperative.

Incidence of Enteropathogenic E. coli, Salmonella and Shigella Serotypes Among Children Hospitalized for Surgical and Various Nondiarrheal Diseases

In addition to the 63 carriers previously mentioned from whom E.E.C. were isolated, salmonellae were detected in 55 and shigellae in five children who were hospitalized for surgery, upper respiratory infections, and various other nondiarrheal diseases during the period under investigation. For comparison, the age distributions of those harboring salmonellae or E.E.C. are given in Table 4. Shigellae were isolated from five children of whom three were in the two-to-five-year age group, one was seven years and one was 13 years old. Of the 63 E.E.C. carriers, 11 (17.5%) were under one year, 12 (19%) in the one-to-two-year, 21 (33.3%) in the two-to-five year and 19 (30.2%) were five years or older. Of the 55 carriers of salmonellae, nine (16.3%) were under one year, six (10.9%) in the one-to-two-year, 14 (25.5%) in the two-to-five year age group and 26 (47.3%) were five years or older.

In general, children carriers from whom salmonellae were isolated were somewhat more frequently encountered in older age groups than those harboring E.E.C. but the difference is not considered significant. It might be noted, however, that of 11 children under one year who were carriers of E.E.C., three were in the three-to-six-month group and one less than one month old, and that of the nine carriers of salmonellae, six were between three and six months and one less than a month old. Thus, detection of the carrier state in very young children hospitalized for surgery, or various nondiarrheal diseases, may well be a significant factor in the control of institutional outbreaks of diarrheal diseases.

TYPES OF E.E.C. DETECTED

The incidence of various E.E.C. serotypes isolated from children hospitalized for surgery, upper respiratory infections, etc., is indicated in Table 5. Of the 63 carriers detected, 21 (33.3%) had been admitted for surgery (17 were tonsillectomies) and 29 (46.0%) were admitted for upper respiratory infections or pneumonia. Of the remaining 13 carriers, three were admitted for fever and convulsions, two were diagnosed as roseola, and one each for the following causes—anemia, elbow pain, metabolic disease, viral meningitis, burns, nephritis, dwarfism, and mumps.

It is particularly significant, perhaps, from the standpoint of control of hospital outbreaks of E.E.C. diarrheas, to note that 10 children admitted for tonsillectomies and 11 for upper respiratory infections were carriers of the very virulent E. coli 0111:B4 which, as was previously mentioned, has been responsible for mortalities of over

TABLE 5.—*Enteropathogenic E. coli types isolated from children hospitalized for surgical and other non-diarrheal diseases* (Oahu, 1957-58).

ADMITTED FOR: E. COLI TYPE	TONSILLECTOMY	MISC. SURGERY	RESPIRATORY DISEASES*	OTHER NON-DIARRHEAL DISEASES	TOTAL	
			Number of Children Carriers		*No.*	*%*
026:B6	....	....	2	5	7	11.1
055:B5	1	....	4	2	7	11.1
086:B7	....	....	....	1	1	1.6
0111:B4	10	1	11	3	25	39.7
0126:B16	4	3	9	2	18	28.6
0127:B8	2	....	3	....	5	7.9
Total No.	17	4	29	13	63	100.0
%	27.0	6.3	46.0	20.7		100.0

* Upper respiratory and pneumonia.

40 per cent in a number of outbreaks reported from nurseries and maternity homes in Europe and on the U.S. mainland, and which was the primary cause of the cases here in Honolulu in 1957-58.

In view of the high mortalities experienced abroad, it is especially gratifying to note that there was only one death among the local 118 cases and that occurred before the causative organism, E. coli 0111:B4, was detected. The importance of rapid bacteriological detection and identification of E.E.C. as the possible etiological agent in cases of diarrhea, especially in young children, should be stressed and cannot be overemphasized.

SALMONELLA-SHIGELLA TYPES

The incidence of salmonella types isolated from rectal swabs of children hospitalized for surgery and various nondiarrheal diseases is indicated in Table 6. Of the 55 carriers detected, 28 (51.0%) were admitted for surgery (22 tonsillectomies) and 18 (31.7%) were suffering from upper respiratory infections. Of the remaining nine salmonella carriers, such diagnoses as fever and convulsions (2 cases), cellulitis, anemia, swollen leg, abdominal pain, epistaxis, ear infection, and cervical lymphadenitis had been made.

Salmonella panama (from 14 children) and salmonella derby (from 13 children) were by far the most frequently encountered types, accounting for 49.2 per cent of the carriers detected. These salmonella types have "0" antigens in common with Salmonella typhi and Salmonella schottmuellerli (paratyphoid B), respectively. As TAB vaccination is mandatory in Hawaii for all children at three years of age and has been recommended to be carried out at one year of age, many children may therefore be partially immune, not only to the strains constituting the TAB vaccine but to other types in salmonella groups B and D. Thus, they may be more likely to develop the carrier state if exposed to such organisms. Considering the incidence of adult carriers of salmonellae, exposure of children may well be more frequent than ordinarily anticipated.—Levine, Enright, and Ching (1962).

Such children carriers, like those who harbor E.E.C., may therefore constitute a potential hazard when hospitalized, so that their detection is urgent to avoid outbreaks of diarrheal disease in nurseries, maternity homes, etc. The question naturally arises as to whether routine examination of all admissions, especially to infant's wards, nurseries, and maternity homes, for enteric pathogens, would be a feasible and practical control measure.

SUMMARY AND CONCLUSION

Enteropathogenic Escherichia coli serotype 0111:B4 was isolated for the first time in Hawaii, in 1957, from a four-month-old hospitalized infant. Thereafter, stool specimens from children hospitalized for nondiarrheal diseases were submitted to the State Health Department to detect carriers. During the next 22 months, E.E.C. were isolated from 118 children with diarrhea, from 63 children hospitalized for surgery or various nondiarrheal ailments, and from one employee (a student nurse).

Of seven E.E.C. serotypes detected, the highly pathogenic E. coli 0111:B4 was by far the most frequently encountered, accounting for 92 (78%) of the cases and 25 (39.7%) of the carriers.

Of the 118 E.E.C. cases, 95 (80.5%) were children under one year of age. Of the 63 carriers, 52 (82.5%) were in the one-year-and-older age

TABLE 6.—*Salmonella and Shigella* types isolated from children hospitalized for surgical and other non-diarrheal diseases.*

ADMITTED FOR:		TONSILLECTOMY	MISC. SURGERY	RESPIRATORY DISEASES	OTHER NON-DIARRHEAL DISEASES	ALL CAUSES	
SALMONELLA		*Number of Children Harboring Salmonellae*				*No.*	*%*
Group	*Type*						
	bredeney	1	....	....	1	2	3.6
B	*derby*	7	1	3	2	13	23.7
	typhimurium	1	....	2	1	4	7.3
C_1	*oranienburg*	1	1	....	....	2	3.6
	montevideo	....	1	2	....	3	5.4
C_2	*bovis morbificans*	4	....	....	1	5	9.1
D	*enteritidis*	1	....	1	....	2	3.6
	panama	2	2	7	3	14	25.5
E_1	*anatum*	4	1	2	1	8	14.6
E_2	*newington*	....	....	1	....	1	1.8
G	*grumpensis*	1	....	....	....	1	1.8
All Types	No.	22	6	18	9	55	100.0
	%	40.1	10.9	32.7	16.3	100.0	

* *Shigella Sonnei I* was isolated from 4 children—1 "respiratory" and 3 "other non-diarrheal" diseases.
* *Shigella Flexner I* was detected in 1 child—of the group "other non-diarrheal" diseases.

groups. Only seven (5.9%) of the cases, but 40 (63.5%) of the carriers, were two years of age or older.

Susceptibility of 129 E.E.C. strains was determined, employing the disk technique with nine antibiotics. Except for one strain of E. coli 0111:B4, which was resistant to polymyxin B, all of the cultures were sensitive to neomycin, Furadantin, and polymyxin B but resistant to penicillin. The other antibiotics employed were, in the order of decreasing effectiveness, tetracycline (89.2%), dihydrostreptomycin (66.7%), Terramycin (66.0%), Aureomycin (62.1%), and Chloromycetin (45.8%). With Chloromycetin, whereas 70 (73.3%) of the 95 strains of E. coli 0111:B4 were resistant, all (100%) of the 34 strains comprising the other five serotypes were susceptible to this antibiotic.

Although neomycin seems to have been universally reported to be satisfactory, both therapeutically and for control of diarrheas due to E.E.C., the fact that strains of the coliform group have repeatedly developed resistance to various antibiotics indicates that determination of susceptibility to antibiotics of specific coliform strains associated with diarrheal disease, is imperative.

Salmonellae were detected in 55 and shigellae in five children hospitalized for surgery or various nondiarrheal diseases. Salmonella panama and Salmonella derby were by far the most frequently encountered types, accounting together for 27 (49.2%) of the 55 carriers, from whom 11 different salmonella types were isolated. Considering that 50 (79.4%) of the E.E.C. and 46 (82.7%) of the salmonella carriers had been hospitalized for surgery or respiratory infections and, furthermore, that 11 (17.5%) of the E.E.C. and nine (16.3%) of the salmonella carriers were under one year old, examination of all children admitted for surgery or nondiarrheal disease for presence of enteric pathogens may well be a significant factor in the control of institutional outbreaks of diarrheal diseases of young children. ■

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A lepromatous patient is apt to infect a child. The risk of infection by a parent with tuberculoid leprosy is negligible.

A Test of the Infectivity of Tuberculoid Leprosy Patients

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• *Exposure to leprosy in their parents resulted in infection in 11 per cent of 203 children, one of whose parents had lepromatous leprosy, and in only 0.5 per cent of 194 children whose infected parent had tuberculoid leprosy.*

IT HAS BEEN DEMONSTRATED by several investigators that persons living in household contact with lepromatous patients are at considerable risk of subsequently developing leprosy. Lampe and Boenjamin[1] are among those who have done such studies, and their careful work in Indonesia also demonstrated that persons living in contact with patients having the tuberculoid form of leprosy are at much less risk of subsequently developing the disease than are those in contact with lepromatous cases. This sort of observation, plus the scarcity or absence of bacilli in the skin of tuberculoid patients, has led to the current practice in most countries of not isolating tuberculoid patients, but treating them at home, although the safety of this practice has never been conclusively tested, and it remains controversial in some quarters.[2]

The purpose of this paper is to test the infectivity of tuberculoid leprosy patients in Hawaii through examining the history of persons known to have been exposed to leprosy patients under conditions of maximum risk—while as a young child and in household contact with a parent who had clinically recognizable disease. It should be stated that at the beginning of this study neither of the authors knew of any case that appeared to have been secondary to exposure to a tuberculoid case, regardless of age, sex, race, or degree of exposure.

METHODS

It was not until after World War II that the current system of classification (lepromatous, indeterminate, tuberculoid) was developed on the basis of the clinical, bacteriologic, histologic, and immunologic pattern of each case. Cases diagnosed after 1944 can be assigned readily to one of these three modern categories from the data on their records, but cases diagnosed before that often had to be re-classified according to modern terminology based on a review of their records. Before 1935, social and medical data in the records are often quite incomplete, and after 1953, there is too brief a follow-up period to allow development of clinical disease in the children exposed to the index case.

This study was therefore limited to a review of the records of index cases in the Hansen's Disease Branch of the Hawaii State Department of Health, diagnosed during the years 1935 to 1953, inclusive. Very few of these cases were of non-Hawaiian ancestry, and very few were classified as having the indeterminate form of leprosy; so for the sake of a standardized degree of exposure in a standardized

(Report number 6 from the Pacific Biomedical Research Center.)
Acknowledgment is made of the financial support of the Department of Public Health, University of Hawaii, in carrying out this study, and of the cooperation of the Department of Health, State of Hawaii.
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Received for publication December 9, 1963.

TABLE 1.—*Number of Hawaiian and part-Hawaiian index cases of leprosy by classification and* sex.

	LEPROMATOUS	TUBERCULOID	TOTAL
Male	27	24	51
Female	28	30	58
Total	55	54	109

cultural and genetic setting, an index case was defined as a person of Hawaiian or part-Hawaiian ancestry, diagnosed as having tuberculoid or lepromatous leprosy, and who had been living at home with household exposure to at least one son or daughter during the period of time immediately before diagnosis. The case register was then carefully searched through August, 1963, for the appearance of any of the exposed children as cases of leprosy of any sort. Children with any other known exposure to leprosy were excluded from this study.

RESULTS

There were 400 Hawaiian and part-Hawaiian cases of leprosy diagnosed between 1935 and 1953, and of these 109 met the criteria listed above for entry into this study as an index case. A few parents with an indeterminate classification were discovered, and at least one of their children subsequently developed leprosy, but this group is not included in this study because it is too small for satisfactory analysis.

Table 1 shows the distribution of index cases by classification and sex, with a fairly even division of the cases among each category. Table 2 shows the total number of children exposed to these 109 index cases, divided according to the type of exposure. In every category, the children who lived with lepromatous parents were at considerable risk of subsequently developing leprosy themselves, while those children who had been exposed to tuberculoid parents were at virtually no risk.

The only child who developed leprosy after living with a "tuberculoid" parent warrants special comment. She was 13 years old in 1938 when her 47-year-old father was examined because of deep, chronic penetrating ulcers of "two years' duration" on the sole and dorsum of the left foot. The foot and ankle were swollen, hyperpigmented, and slightly anesthetic. There was a mass the size of a baseball in his left groin, and there was "slight weakness" of both hands. No muscular atrophy, enlarged peripheral nerves or other skin lesions were noted. Two tissue juice smears of the margins of the foot ulcers were reported as negative for acid fast bacilli. Neither a biopsy nor a lepromin test was done. He was diagnosed as "neural" leprosy and admitted to the leprosarium for treatment of the ulcers. He died there ten months later with an "epithelioma of the left foot with extensive metastases." His daughter developed unquestionable leprosy in 1943, never having been in known contact with any case other than her father. One wonders whether he had ever had leprosy, or if so, was he a "burned out" old lepromatous case?

There was a tendency for children of the same sex as the lepromatous parent to be at greater risk (significant by chi-square test at the 5 per cent level of confidence for girls, but not significant for boys) of developing subsequent leprosy. The overall risk of children of lepromatous parents was about 11 per cent.

Distributions similar to that shown in Table 2 were made separately for the periods 1935-1944 and 1945-1953. These distributions did not differ significantly from each other, thus indicating that the retrospective classification of the index cases for 1935-1944 was reasonably accurate.

Many workers have demonstrated that young children are more susceptible to being infected by leprosy than are older persons. An attempt was made to test this observation again with the data

TABLE 2.—*Subsequent development of leprosy in children exposed to "index case" parents by type of exposure, sex of child and sex of parent.*

TYPE OF LEPROSY IN PARENT	SEX OF PARENT	MALE CHILDREN			FEMALE CHILDREN			ALL CHILDREN		
		No. of children exposed	*Children who developed leprosy*		*No. of children exposed*	*Children who developed leprosy*		*No. of children exposed*	*Children who developed leprosy*	
			No.	%		No.	%		No.	%
Lepromatous	Male	39	7	18	65	3	5	104	10	10
	Female	48	4	8	51	9	18	99	13	13
	Subtotal							203	23	11
Tuberculoid	Male	39	0	0	52	1	2	91	1	1
	Female	55	0	0	48	0	0	103	0	0
	Subtotal							194	1*	0.5

* Inadequate data for diagnosis of disease in father.

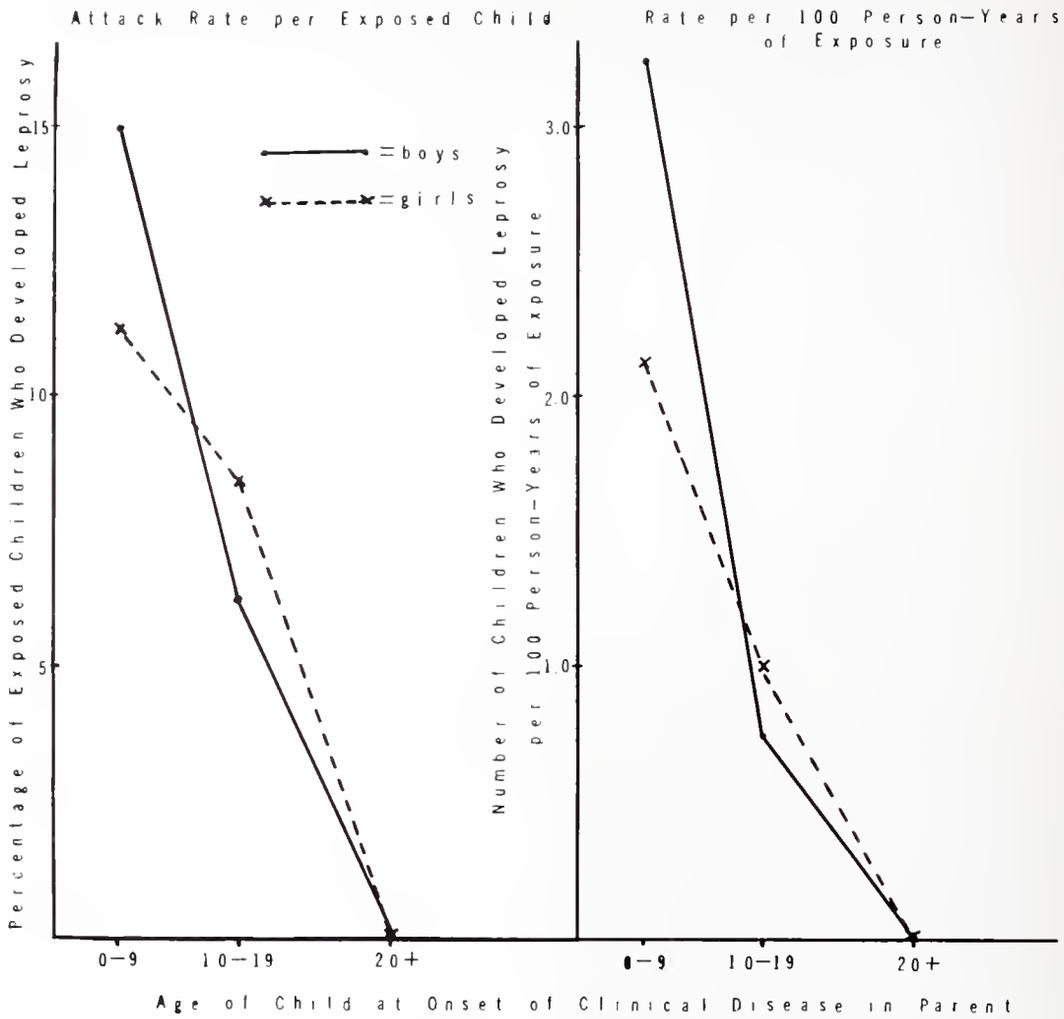

FIG. 1.—*Risk of leprosy in children of lepromatous parents, by age at time of exposure, and sex of child.*

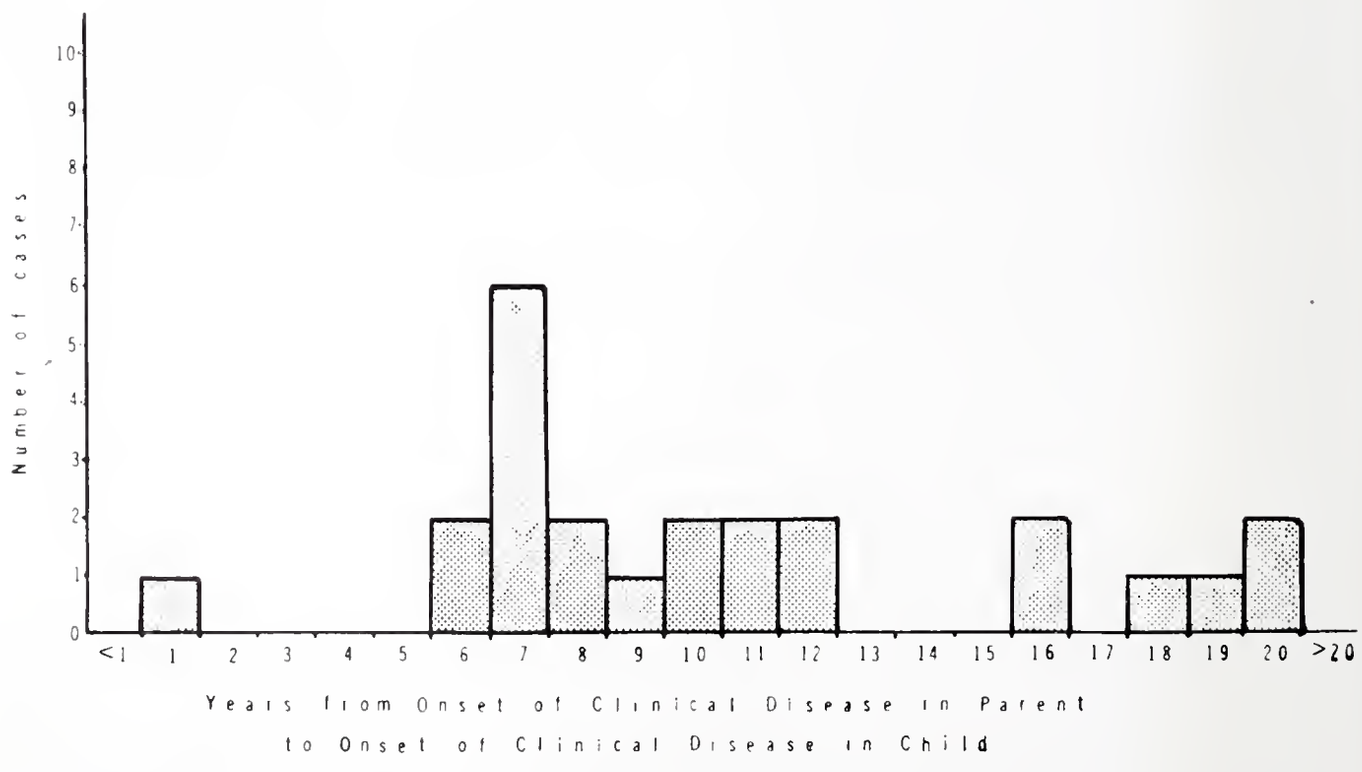

FIG. 2.—*Duration of "Latent Period" in 28 Secondary Cases of Leprosy.*

from this study. These data are presented in Figure 1. So few persons in our study cohort were over the age of 19 at the time of initial exposure that this category is not reliable, but among the boys, the attack rates of those nine years of age or less are significantly higher than those who were 10-19 at the time of initial exposure. There was also a higher attack rate (cases per person exposed) among the girls under ten than among those 10-19, but the difference is not significant at the 5 per cent level of confidence. A similar analysis of risk by age and sex by cases of leprosy per 100 person-years of exposure showed a similar pattern. An attempt was made to break the "0-9" age group in half for analysis at 0-4 and 5-9 years of age at the time of initial exposure, but the numbers then become too small for statistical reliability.

There is no significant sex differential in development of leprosy among the children of lepromatous parents that is independent of the sex of the index parent. This is in agreement with the observations of Lampe and Boenjamin in Indonesia[1] that young children exposed at home were equally at risk regardless of sex, while boys were at much greater risk of exposure outside the home, presumably because the boys were likely to wander out among neighboring people much more freely than the girls.

A distribution of the 24 cases of leprosy that appeared in the cohort of 397 children in this study was made by the duration of the "latent period": the number of years from the onset of clinical symptoms in the index parent to the onset of clinical disease in the child. These data are presented in Figure 2.

The one case with a latent period of only one year very likely had been previously exposed to someone other than the parent, or else the parent was infectious for several years before being diagnosed. The group of six cases with latent periods of 16 to 20 years also may represent exposure due to siblings or other cases not ascertained from the records, although all families with known possible multiple sources of exposure had been excluded from this study.

The group in the middle of Figure 2 (6 to 12 years) may be the only true "secondary" cases in this study. Among these 17 cases there is also no significant sex differential.

Due to the conditions of this study, those children exposed after 1948 have had less than 15 years of observation; some of them might therefore still be expected to develop leprosy in the next few years. In order to estimate how large an error might arise from this source, distributions of the children were made by duration of observation after exposure by type of exposure. Among the children exposed to lepromatous parents, 189 have been observed for 15 years or longer, and the remaining 14 children have been observed from 10 to 14 years. Among the children exposed to tuberculoid parents, 179 have been observed for 15 or more years, and 15 for 10 to 14 years.

Since an overwhelming majority of the children have been observed for more than 15 years, it seems clear that no very large errors have been introduced into this study through too brief observation. The only other major error, of course, is a possible loss of reporting through death, outmigration, or under-diagnosis of the children under study.

A recent study done by one of us (RW) of birth certificate and Selective Service registration data in Hawaii would lead to a firm estimate that losses due to death and outmigration would not be over 10-12 per cent from birth to age 18. Losses through under-diagnosis should also be very small, since the physicians of Hawaii are quite skillful at the diagnosis of leprosy, and their index of suspicion is quite high. They are consistently the major source of casefinding in the leprosy control program in Hawaii.

SUMMARY AND CONCLUSIONS

A search of Health Department leprosy records revealed 109 Hawaiian and part-Hawaiian cases of leprosy (55 lepromatous and 54 tuberculoid) diagnosed from 1935-1953, inclusive, who had children living at home with them at the time of diagnosis. There were 397 such children-at-risk who were not known to have been exposed to any other cases of leprosy. The subsequent history of this cohort of children was traced through the leprosy registry, with a minimum of ten years of observation of each child (95 per cent were followed at least 15 years). A total of 23 cases of leprosy developed among the 203 exposed to lepromatous parents (11 per cent attack rate). The one case (0.5 per cent) arising among the 194 exposed to tuberculoid parents occurred in a girl whose father's classification as tuberculoid leprosy rests on inadequate data. An analysis of these 24 cases of leprosy showed that the risk was greater among children under age ten at the time of exposure, but that there was no significant difference in attack rates by sex. It is concluded that these data support the safety of the "liberal" policy of allowing tuberculoid cases to remain at home in populations with endemic leprosy, a policy that has been practiced in Hawaii during most of the period of this study. ■

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Diabetes mellitus may not be related to Klinefelter's, but here is another case in which they occurred together.

Chromatin-negative Klinefelter's Syndrome Associated with Diabetes Mellitus

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• *Klinefelter's syndrome was first described and the criteria established for diagnosis in 1942. Better understanding of this entity has been achieved by virtue of the numerous cases reported since.*

A Hawaiian man with Klinefelter's syndrome with chromatin-negative buccal smears was found to have diabetes mellitus, polycythemia vera, and hypertensive cardiovascular disease. Spermatogenesis was not totally lacking. Detailed studies are reported.

IN KLINEFELTER'S original description, the syndrome was characterized by gynecomastia, hypogonadism, increased follicle-stimulating hormone excretion, aspermatogenesis, small testes, hyalinization of the seminiferous tubules, abnormalities of the Leydig cells, and eunuchoidism.

Heller and Nelson[2] in 1945 reported several cases of Klinefelter's syndrome without gynecomastia and pointed out the variability of the presence of eunuchoidism in these patients; histologic changes in the testes were similar to those described by Klinefelter. Other reports[3, 4] showed the same findings.

In 1956, after Barr[10, 11] introduced the technique for determination of sex chromatin, these patients were classified as chromatin-positive, that is, genetic females. However, new case reports[4, 5, 6, 7, 8] emphasized that a few patients are chromatin-negative, show hyalinization in local areas only, and have deficient but active spermatogenesis. They can present an XY chromosomal pattern instead of the XXY of the classical chromatin-positive Klinefelter's syndrome, or a mosaic XXY/XY.[12] Both chromatin-positive and chromatin-negative cases may show signs of mental retardation.[7, 13, 14, 15]

More recently,[9] a relationship between Klinefelter's syndrome and diabetes mellitus has been suggested. Vascular disease, early aging, and diabetes mellitus may combine in patients with Klinefelter's syndrome, all factors being genetically determined. The association of diabetes mellitus with hypogonadism has been previously seen by Cooper *et al.*,[16] who reported a 21-year-old man suffering from hereditary myelopathy, optic atrophy, diabetes mellitus, and testicular hypoplasia; the type of hypogonadism was not characterized. Hammel,[17] reviewing the literature for endocrinopathies in Friedreich's ataxia, found 42 cases indicating such an association; 24 of whom suffered from diabetes mellitus and 14 from hypogonadism.

The following is a case of a patient having diabetes mellitus, chromatin-negative Klinefelter's syndrome, polycythemia vera, and hypertensive cardiovascular disease.

CASE REPORT

A 33-year-old Hawaiian man was admitted on September 28, 1961, to St. Francis Hospital, for uncontrolled arterial hypertension and diabetes mellitus. He had been followed in the outpatient department with blood pressure in the range of 230/130 to 190/120 mm Hg. He was obese and had made no attempt to reduce his weight. He had had five previous admissions to St. Francis Hospital for dizziness, headaches, and chest pain, dating back to 1953. A slight hemiplegia, affecting the left arm, and subsiding after three days, had occurred in 1950. During the five hospitalizations, Cushing's syndrome, pheochromocytoma, polycythemia vera, congenital heart disease, and secondary hypertension had been considered. Conclusive diagnoses of hypertensive cardiovascular disease and polycythemia vera were reached.

Diabetes mellitus was first discovered in his fourth admission in May, 1959, when a glucose tolerance test showed a blood sugar of 248 mg/100 ml of blood after three hours. The small size of the external genitalia was also noted and diagnosed as hypogonadism, but no further evaluation was done then. The patient was treated with reserpine, tolbutamide, and diabetic diet.

The presenting complaints on the fifth admission were mild headaches and dizziness. The pa-

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Received for publication March 10, 1964.

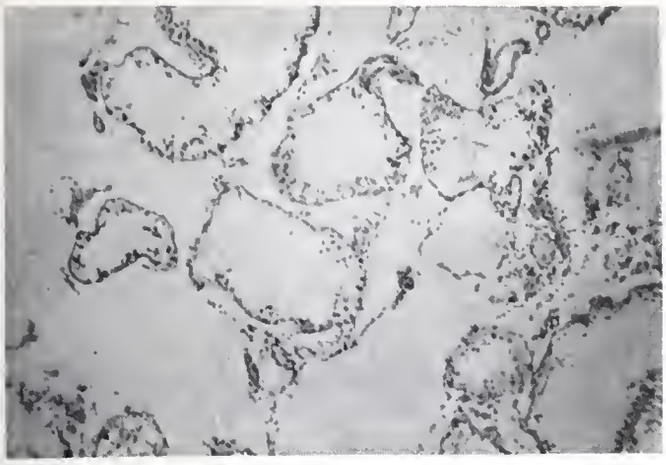

FIG. 1.—*There is atrophy of the germinal epithelium of the tubules, with few primitive spermatogonia and Sertoli cells. Hematoxylin and eosin, X 100.*

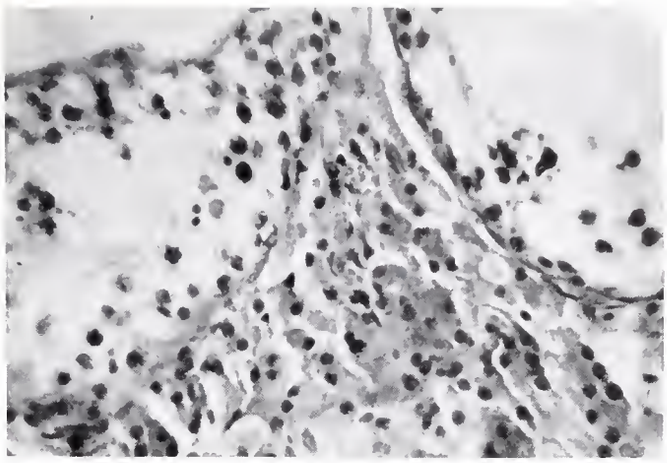

FIG. 2.—*There is proliferation and hyperplasia of the Leydig cells. Hematoxylin and eosin, X 250.*

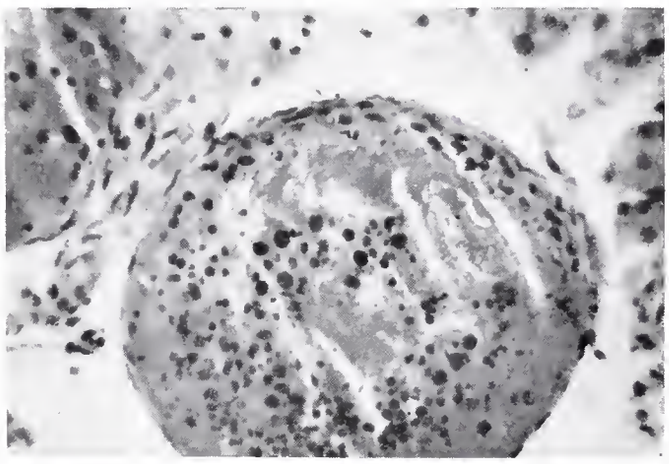

FIG. 3.—*Hyaline thickening of the basement membrane of the tubule with decreased spermatogenic activity. Hematoxylin and eosin, X 150.*

tient also related that for approximately one year before admission he had been progressively losing sexual desire, and over the preceding two months he had been unable to have an erection or ejaculation. He had masturbated intermittently from age 14 to the present illness. He had never married, or even had sexual intercourse.

Patient's formal schooling ended at the third grade; he had difficulties at that level, and did not pursue further education. His history was inconsistent to the various examing physicians and it was felt that his mental acuity was below normal. His father had died of unknown cause at an unknown age; mother was living and in good health.

Examination revealed a medium size, obese man, with trunk obesity and rather thin arms and legs. The blood pressure on admission was 220/130 in both arms; in the legs it was recorded 225/130.

Funduscopic examination showed A/V nicking and increased light reflexes. There were questionable exudates, but no papilledema or microaneurysms.

The neck was supple, with no vein engorgement, masses, or adenopathies; the thyroid was not enlarged.

The cardiac apex was in the sixth intercostal space in the anterior axillary line; no thrills; regular sinus rhythm with a rate of 82/minute. A grade III apical systolic murmur transmitted to the axilla was heard. There was a grade II blowing systolic murmur in the third intercostal space at the left sternal border with no radiation. Pulmonic second sound was louder than aortic second sound, with no splitting.

Lungs were negative. Abdomen was negative. Liver and spleen could not be palpated.

The extremities showed varicosities of the calf of the left leg; no clubbing of the fingers.

The external genitalia revealed suprapubic fat pad with female distribution of the pubic hair. The penis was small and the testes measured 2 x 1 cm. Prostate was normal.

White striae were present over the lateral upper aspects of the abdomen. Dermatitis resembling acanthosis nigricans was present in axillas and groins. Central nervous system was normal. His musculature was normal and his skin was fine and soft. The appearance of his chest suggested gynecomastia.

Hemoglobin was 17.2 gm/100 ml of blood; hematocrit, 54%; WBC, 11.000 per mm^3 with normal differential. Serum proteins 7.5 gm/100 ml, albumin 3.5 gm/100 ml, globulins 4.0 gm/100 ml; serum bilirubin 0.9 mg/100 ml; thymol turbidity was 7.3 units, cephalin flocculation was normal in 24 and 48 hours. Only normal liver tissue was seen on biopsy. Urinalysis: glycosuria 3 plus, albumin 2 plus. Sp G 1.009, few epithelial cells, 2-3 hyaline casts. BUN, 21 mg/100 ml; serum creatinine, 1.9 mg/100 ml; uric acid, 9.0 mg/100 ml. Serum sodium 135 mEq/liter, potassium 3.4 mEq/l, chlorides 98 mEq/l and carbon dioxide 24.9 mEq/l. FBS remained at about 100 mg/100 ml on several determinations during treatment. VDRL, negative. 17-ketosteroids, 6.9 mg in 24

hours urine collection, 17-ketogenic steroids were 19.8 mg in the same urine specimen. ACTH stimulation test was performed on previous admissions with normal response. The 24 hours urinary catecholamines were 27 micrograms (normal 32 to 103).

The patient was put on Tolbutamide 500 mg three times a day, reserpine 0.25 mg three times daily, hydrochlorothiazide 50 mg daily, and a 1,200-calorie diabetic diet. His blood pressure dropped to 140/80; the blood sugar remained unchanged. Four phlebotomies of 600 ml each were performed on October 10, 13, 18 and 23. He felt better, and was discharged on the same therapeutic program.

The electrocardiogram showed a first degree A-V block and a complete right bundle branch block; there was no evidence of right ventricular hypertrophy.

Chest x-rays revealed left ventricular hypertrophy. Intravenous pyelogram was normal.

A radioactive renogram using iodine 131 radiohippuran showed normal accumulation and rate of excretion of hippuran by the two kidneys.

Buccal smear demonstrated male sex pattern, chromatin negative. Breast biopsy showed fatty tissue. Testicular biopsy (Figs. 1-3) showed atrophy of the germinal epithelium and oligospermia, hyalinization of the seminiferous tubules, and hyperplasia of the Leydig cells. FSH determination between 50 and 100 mouse units in a 24-hour urine specimen. Arterial oxygen saturation was 93.7 per cent. Right heart catheterization, performed on a previous admission in June, 1959, showed normal oxygen saturation from the inferior and superior vena cava through the pulmonary artery; there was no systolic pressure gradient across the pulmonary valve or diastolic gradient across the tricuspid valve; there was an elevated wedge pressure indicating either left ventricular failure or mitral valvular disease.

DISCUSSION

The varied pathology of this patient is an interesting nosogenic problem. He is one of the 5 to 10 per cent of patients with Klinefelter's syndrome having a chromatin-negative buccal smear. Another feature of this case is the presence of some spermatogenesis as seen in the testicular biopsy, against the total lack of spermatogenesis shown in the first cases reported. FSH values indicate primary hypogonadism. Unfortunately, we could not complete the chromosomal pattern of this patient. His diabetes was well controlled with oral hypoglycemic agents while in the hospital but it was out of control when followed in the outpatient department. The polycythemia was classified as Gaisbock's syndrome because of the hypertension, enlarged left ventricle, history of stroke, and lack of splenomegaly. Right heart catheterization seems to rule out any left-to-right shunt that could account for a possible secondary polycythemia. The hypertensive work-up done on this patient did not demonstrate any cause of secondary hypertension.

At present there is no knowledge of a genetic association between Klinefelter's syndrome and diabetes mellitus. However, the cases thus far reported would indicate that somehow a link exists. Further evidence is necessary to reach a more precise formulation of the genetic abnormalities in such cases.

SUMMARY

A case of chromatin-negative Klinefelter's syndrome associated with diabetes mellitus, polycythemia vera, and hypertensive cardiovascular disease is presented. Atrophy of the testicular epithelium, partial spermatogenesis, hyalinization of the seminiferous tubules, and hyperplasia of the Leydig cells, and increased excretion of FSH were found. A possible genetic connection between Klinefelter's syndrome and diabetes mellitus is mentioned. ■

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A mosaic variant of Klinefelter's syndrome, XY-XXY, has been identified by chromosome studies at Queen's.

XY-XXY Mosaicism Diagnosed by a Microtechnique of Leukocyte Culture *

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● *A child with ambiguous external genitalia, 65 per cent of whose cells were positive in a buccal smear, was being raised as a boy. At four months of age, he was studied and found to have equal numbers of cells with 46, and 47, chromosomes. The extra chromosome was in the 6 to 12 group, and was presumably an X. The child was therefore considered to be a Klinefelter's mosaic.*

The microtechnique used to prepare the metaphase plates from smears of leukocyte cultures is described.

SEVERAL CASES of XY/XXY mosaicism have been reported, although physical descriptions of the patients have not always been provided and the diagnosis was in doubt in a few instances.[1, 2, 3] Previous reports have been of patients with male genitalia who were suspected of a chromosomal abnormality because of a chromatin-positive buccal smear or the presence of small testes. In this case the diagnostic study was made because the patient presented ambiguous external genitalia.

METHOD

Leukocyte culture was performed by a microtechnique modification of the method of Moorhead *et al.*[4]

1. Use 7.75 x 1 cm sterile tubes containing 1 drop of sodium heparin and 2 ml of 4 parts TC 199 (Difco) with bicarbonate and penicillin-streptomycin, and 1 part calf serum.
2. Add 6 drops whole blood secured by lancet through alcohol-prepared skin.
3. Add 2 drops phytohemagglutinin M and incubate 72 hours.
4. Add 0.04 mg colchicine. Incubate 4 hours.
5. Centrifuge at slowest velocity in trunnion small centrifuge for 5 min.
6. Aspirate supernatant and agitate tube to resuspend cell button.
7. Add 2 ml of 1:4 mixture of Hank's solution with bicarbonate, and distilled water. Mix with Pasteur pipette. Stand 15 min at room temperature.
8. Spin for 5 min at slowest velocity.
9. Aspirate supernatant. Add freshly made fixative of 1 part glacial acetic and 3 parts methyl alcohol. Stand 30 min. Spin, aspirate supernatant, add fresh fixative.
10. Four drops of cell suspension placed on clean slide and flamed with burner.
11. Stain with Wright's stain.

CASE REPORT

The patient was born out of wedlock at 35 weeks gestation to an 18-year-old Puerto Rican primipara whose prenatal course had been complicated by moderately severe pre-eclampsia which responded to diuretics, $MgSO_4$, and reserpine. The birth weight was 1,320 gm, and the child was noted to have a hypospadias and equivocal genitalia. The child was discharged at one month of age to the outpatient clinic, where buccal smear was reported as showing 65 per cent of cells chromatin-positive.

The mother was advised of the implication of the physical and laboratory findings, but she declined to pursue the matter, having decided the child would be raised as a male. At four months of age, clinical physicians prevailed on her to readmit the child for evaluation.

Physical examination at age four months revealed an alert, Caucasian appearing, 11-pound infant, whose positive physical findings were confined to the genitalia. The phallus was only 2 cm long, with a hooded prepuce and a urethral opening in a perineal dimple at the base. The scrotum was deeply divided by a poorly developed raphe. No scrotal or inguinal masses were palpable, although one examiner believed very small nodular masses were present which were easily retractable into the inguinal canals by cremasteric reflex. No prostate gland or internal pelvic organs were palpable on rectal examination.

Laboratory studies included a repeat buccal smear which showed 60 per cent cells chromatin-positive, and peripheral blood smears showed numerous polymorphonuclear drumsticks. Urinary 17-ketosteroids were 0.03 to 0.15 mg per 24 hours and 17-ketogenic steroids were 2.0 to 2.5 mg per 24 hours. Chromosomal analysis was performed

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Received for publication April 7, 1964.

FIG. 1.—*Idiogram from metaphase plate of cultured leucocytes showing 46 chromosomes.*

FIG. 2.—*Idiogram from metaphase plate of cultured leucocytes showing 47 chromosomes. The extra one is in the 6-12 group.*

utilizing the microtechnique described above. Approximately 30 metaphase plates were counted and 14 of these photographed. Metaphase plates showed a nearly equal number of cells containing 46 and 47 chromosomes. (See Figs. 1, 2.) Idiograms revealed the extra chromosome to be in the 6 to 12 group, presumably an X. The child was thus considered a Klinefelter's mosaic.

DISCUSSION

Klinefelter's syndrome has been described as part of a mosaic in numerous instances in combination with both XO and XY.[1] The majority of XY/XXY mosaics have been discovered because the adult male presented with mental deficiency or small gonads, or was discovered to have a chromatin-positive buccal smear.[2, 3] In instances of newborns reviewed by MacLean,[2] two cases were discovered on routine buccal smear, but the genitalia were typically male. Since only 50 per cent of Klinefelter's are chromatin-positive,[5] it would seem possible that routine chromosomal analysis rather than buccal cytology would discover an even higher percentage of the male population to be involved and a higher percentage of mosaics. Granted, this is an expensive and time-consuming method of case discovery.

It may be that the XY component of these mosaics is expressed in some cases in the buccal cells, which would explain why the correlation of chromatin and chromosome is poorer than in Turner's syndrome.

It is difficult to say whether this child will prove mentally deficient. In view of the ambiguous genitalia, it seems quite likely he will be sterile. There may or may not be intra-abdominal gonads present, and if so, their type is presumably testicular. Considering the other features of the external genitalia, it is doubtful if his cryptorchidism is on the basis of prematurity.

A second possibility is that any gonads found will be ovotestes associated with a triple mosaic. Until skin or marrow is cultured, further mosaicism of the XO/XY/XXY type or its variants cannot be ruled out. Such mosaicism would better explain the more female appearance of the genitalia occasionally reported in XO/XY mosaics.[6]

Sporadic reports of leukocyte culture with small volumes of blood have been reported from time to time,[7, 8] but usually the volume exceeds 5 cc and in infants or small children this necessitates jugular or femoral vena puncture. In the small or mentally retarded child obtaining the specimen may be a real chore, thus the usefulness of a drop method. (We recently have diagnosed an XX/XO mosaic in a three-day-old infant where this technique could have been quite useful.) Surprisingly enough, with only aseptic technique and alcohol sponging of the heel, direct collection of blood-drops into a test tube has resulted in no contamination. This is probably due to the inhibitory effects of penicillin and streptomycin, and the relatively short incubation time. A much more precise technique has been necessary with skin culture, due to the longer time necessary before cells are harvested.

SUMMARY

A case of mosaicism in an infant with equivocal external genitalia was diagnosed as XY/XXY, utilizing a microtechnique. ■

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HAWAII MEDICAL JOURNAL

Editorials

Aloha, Dr. Civin!

The JOURNAL *notes with sorrow that Dr. W. Harold Civin, one of Hawaii's most distinguished and valuable physicians, has left Hawaii to accept an appointment as Professor and head of the new Department of Clinical Pathology at the University of Cincinnati Medical School. We have asked Dr. Grant N. Stemmermann, President of the Hawaii Society of Pathologists, and Dr. Joseph E. Strode, who was Chief of Surgery at The Queen's Hospital, and for some years Chief of Staff as well, during nearly all of Dr. Civin's tenure, to express the medical community's sense of loss.*

The physicians of The Queen's Hospital, Honolulu, and Hawaii will long and regretfully remember October, 1964, as the month that Harold Civin left the Islands. His years as Laboratory Director at Queen's established him as a man of great warmth, gentle humor, and profound intellectual depth. He used these qualities to establish himself as an incomparable teacher. He was always available for professional advice and counsel; more important, his advice and counsel were (and are) always worth seeking. His friends are numberless and, incredible as it may seem, he has not one enemy among his professional colleagues.

No pathologist, whatever his national or international reputation, can fill the void created by Harold's leaving. We hope that the hospital to which he goes will offer him the opportunity to "follow knowledge like a sinking star, beyond the bounds of human thought." For this is his way of life.

We must be grateful to the fates for allowing us a little of his valuable time, yet are left to wonder at the incredible opacity of those whose lack of understanding eased his departure to what need not have been more inviting shores.

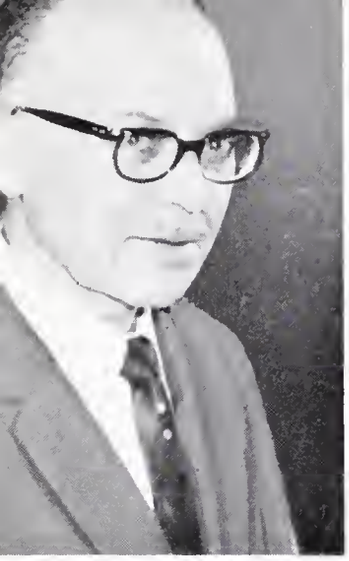
GRANT N. STEMMERMANN, M.D.

I am sure I express the universal feelings of all the doctors in Hawaii who have had any contact with Dr. Harold Civin when I say that his decision to continue his professional career elsewhere is a tremendous loss to our community. During most of the fourteen years when Dr. Civin was in charge of the Pathology Department of The Queen's Hospital, I was Chief of Surgery and, for several years, Chief of Staff. This afforded me opportunity to become quite aware of Dr. Civin's professional qualifications and his status as a scholar and a gentleman. It was a pleasure and a privilege to discuss any medical condition with Dr. Civin because he always seemed to have a personal interest in one's problems, and I always left with the feeling that his opinions were based on the most complete and recent information available.

Aside from his attainments as a pathologist, for whom I know of no one commanding greater respect, I have been impressed with his abilities as a teacher, his sterling qualities as an upright, honest individual, and his compassion towards and interest in all patients about whom he was consulted. Over my nearly fifty years' association with The Queen's Hospital, I have seen many physicians come and go, and leave their imprint on the development of this institution as one of the world's outstanding hospitals, but none in my opinion has contributed more to this development than Dr. Harold Civin. While we greatly regret his departure, we can assuage our loss, to a certain extent, by realizing how fortunate we have been to have had him with us for so many years.

To Dr. Civin and his family we extend all best wishes for happiness in their new environment.

JOSEPH E. STRODE, M.D.



The President's Page

"Stop the World—I Want to Get Off!" is the name of a recent Broadway play. It is also the way many people feel about the world as it is today. But the world isn't going to stop, and most of us wouldn't get off if it did.

Get off the world? Get out of the United States? Get out of Hawaii? Get out of the AMA, the HMA, the County Society, or the Omphalological Association? All of these are imperfect, and perhaps at no time do any of us agree with all their actions or doctrines. But most of us believe in the inherent worth of these institutions even with all their inadequacies, and we should work to make them better.

This does not call for blind faith or subservience. A democratic society demands that we yield to the opinions of the majority. It also requires us to be eternally vigilant and constantly to make up our own minds as to what we believe to be the proper course to be taken, and to work toward those ends. It has been written that a special place is reserved in hell for those who remain neutral on the great moral issues of the times. We cannot remain neutral about our medical affairs; however, our organizations could not function if they waited to act only when there is complete unanimity of opinion. They must act. Yet the dissenters must continue to speak out if our organizations are to remain strong. If everyone merely said "yes," then who really would know the right course to take? Organizations naturally are most happy with support but they must welcome intelligent dissent. As the President of the Carnegie Foundation recently wrote: "We know that from the ranks of the critics come cranks and troublemakers, but from the same ranks come the saviors and innovators." AND WE NEED INNOVATION!

With the increased sophistication of society, many individuals feel that their small voice can be of little use. They will criticize quietly among their friends, dilate loudly on the hospital steps, but when the time comes to stand up and be counted, they are silent. This silence is often rationalized by the defeatist philosophy of "I can't do anything about it," or "Really—what value is my one vote?" "Why trouble to turn out for elections, or why go to medical meetings in which controversial issues are to be discussed?" "The cards are stacked, why speak up?" This is not so. The opinion and vote of every individual is needed. We have seen the recent primary election in Hawaii where the Chairman of the House Judiciary Committee failed of renomination by a handful of votes. Nixon lost the presidency by less than one vote per precinct. The voting at the last AMA meeting was such that our single delegate may have named both the new member of the Board of Trustees and the President-elect. Fantastic? Yes, but true. Each one of us is important. We must not abrogate our own responsibility and we must encourage within our organizations vigorous par-

ticipation, vigorous assent, and equally vigorous constructive dissent. We cannot stand idly by and see little problems become big ones. We must look at old problems and come up with new solutions. And we must look especially to the younger men in our societies for fresh ideas and forceful expression of them.

There are a number of areas where deep thinking and articulate opinion are needed.

What about the organization of our Association? The distribution of responsibility among the officers? The continued assurance of trained and knowledgeable leadership? Our committee structure? Our relationship with the County Societies?

Are both the urban and rural segments of the medical population adequately represented in the Societies and the Association? Is our membership adequately informed about official action? Is the membership's voice clearly heard at the County, State and National levels?

What about free choice of physician? Do we believe in it? If so, what about closed panels, plantation medicine, captive industries, and other areas in which this appears not to exist?

What are we going to do about an inadequate Medical Practice Act?

Our primary role must be that of assuring good medical care and public health to the community, but what is our duty in assuring a healthy state of the profession itself?

Will the "town and gown" schism widen? Or have we the intelligence to work out satisfactory solutions with the proposed medical school and the University health service?

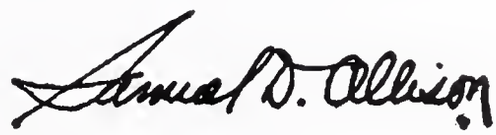
Do we need review as well as "grievance" committees?

Have physicians abrogated their responsibility to the hospitals and left their operation in the hands of laymen? And has the same been done with insurance carriers and voluntary health agencies?

How effective are the voluntary and official health agencies? Are private physicians working harmoniously with them to assure the maximum of public health benefits? Is funding of these agencies adequate to the needs, and are these funds being put to their best use?

What new ideas do we have to solve the continuing problem of providing for those who cannot readily afford drugs, hospitalization, and private medical care?

All of you can think of many other areas of concern to our profession. We cannot solve these problems by sitting on the side lines. We cannot assure a healthy AMA or HMA or county society except by constant watchfulness and forthright action from within. Our organizations, like the State and the Nation, are imperfect. Only by an alert, interested, participating, and vocal membership can we improve.



HAWAII MEDICAL JOURNAL

In Memoriam—Doctors of Hawaii

This is the fifty-second installment of In Memoriam—Doctors of Hawaii.

Albert Thomas Roll

Albert Thomas Roll was born December 15, 1881, at Fredericksburg, Indiana, son of Thomas and Lovisa Frances (Adams) Roll. His father was a farmer.

DR. ROLL

He was educated in the public schools of Washington County, Indiana, and attended Valparaiso University, Valparaiso, Indiana, in 1906; Central Normal College, Danville, Indiana, in 1908; and Zanerian College, Columbus, Ohio, in 1909. Before going into medicine Dr. Roll was in the educational field. He taught in the county schools of Washington County from 1902 to 1909. In 1909 he became Principal of the Warren (Pennsylvania) Business College, the following year he was Principal of the Kane (Pennsylvania) Business College, and in 1911 he went to Mahoney City in the same state as head of McCann's Business College.

Coming to Hawaii as a tourist in 1911, he met and married Miss Elvira Valeri Monteiro Osorio. They were married August 3, 1911, in Hilo. The Rolls became the parents of a son, Carroll Osorio, and a daughter, Eloise Bernice (Mrs. Paul E. Renner).

In the fall of that year he entered the Medical College of the University of Louisville, from which he graduated in 1916. Dr. Roll also took postgraduate work in pediatrics at Harvard Medical School and at Washington University in 1922.

Returning to Hilo in 1916, Dr. Roll engaged in private practice. From 1918 to 1920 he served as physician for the Hawaiian Agricultural Company (Pahala) and the Hutchinson Sugar Company (Naalehu). In 1923 he founded a baby clinic at Hilo, the first of its kind in the Territory. During his 30 years on the Big Island, the doctor delivered more than 7,000 babies. He was also Government Physician for the Kau district of Hawaii. For several years he was President of the medical staff of Hilo Memorial Hospital. In 1917 Dr. Roll organized the first chapter of the Red Cross in Hawaii.

During the first World War Dr. Roll served as a First Lieutenant in the U. S. Army Medical Corps, from 1916 to 1917 he served as an officer in the Hawaii National Guard. In March, 1934, he became a Passed Assistant Surgeon in the Medical Corps of the U. S. Naval Reserve.

From 1942 to 1944 Dr. Roll went to the mainland because of ill health. During this period he served for short intervals as house physician at Broad Street Hospital in Philadelphia, Good Samaritan Hospital in Lexington, Kentucky, and as a rating physician with the Veterans' Administration in Lexington. He also practiced in Winchester, Kentucky. In September, 1944, he returned to Hilo, where he practiced until 1946, when he left the Islands permanently to join the staff of the Veterans' Administration Hospital in Louisville, Kentucky.

Dr. Roll died August 23, 1956, in Louisville, at the age of 75.

He was a member of the American Medical Association, Hawaii Medical Association, Hawaii County Medical Society (President 1938-1939), Kentucky Medical Association, American Cancer Society, National Sojourners, American Legion, High View Improvement Club of Louisville, a Shriner and an Elk. As to politics, he was a Democrat. He enjoyed hunting and target shooting, and collected stamps and firearms.

Takataro Oguri

Takataro Oguri was born in December, 1882, in Sakashita cho, Ena gun, Gifu Prefecture, Japan.

He practiced medicine for several years in Japan prior to his arrival in Hawaii.

Dr. Oguri came to Hawaii in February, 1915, and was licensed to practice by the Territorial Board of Medical Examiners. He was in private practice on Vineyard Street. His special field was gynecology.

In 1930 he returned to Japan and held the position of physician in the Department of Police in Tokyo.

Dr. Oguri was married and had one son, Masazo, and one daughter, Toshiko. His wife's name was Kimiyo.

Dr. Oguri died in 1937 in Japan.

IN DEFENSE OF THE GP SURGICAL ASSISTANT

Times are changing: hospitals grow larger and more numerous at a pace with which medical schools are not able to keep up, insofar as the supply of interns and residents is concerned.

As a result, it is usually the Surgical Committee that promulgates the regulation permitting the surgeon to choose for himself a private assistant, specifically a board certified or board qualified surgeon. Such regulations are usually rubber-stamped by the Medical Executive Committee, and are placed in the bylaws without much consideration or debate by the rest of the staff.

Hardly any physicians in private practice would stand up and deny the surgical resident an opportunity to be an assistant at surgery.; there is no substitute for learning by getting your hands into the anatomy and physiology of living exposed tissues. However, it is a moot question whether an intern should expect to be more than a look-seer and retractor holder. He has privileges, but few rights. A first-year resident can aspire to tying knots, where knots are not crucial to life, and using the suture scissors. A second-year resident and, of course, the chief resident have every right to expect to climb higher on the rungs of this great specialty.

The chief resident in surgery is a rather experienced surgeon in his own right, if the service has been a good one. He would, in the olden days, have been almost wholly responsible (though still under the eye of a preceptor) for the care of the welfare patient under his knife. Nowadays, there are very few "staff" cases, and the neophyte surgeon must depend on obtaining experience from private cases. This automatically takes away a measure of the responsibility that he is expected to shoulder before he can be let out to wield the scalpel on his own. His apprenticeship is prolonged and his learning is restricted perforce.

We sympathize with this young man who might well be frustrated by these circumstances, particularly when he first opens an office for the private practice of surgery. A patient with a common cold will keep starvation away, at least.

We applaud the established senior surgeon who then sees to it that that young and eager aspirant for the boards gets a chance to increase his knowledge and experience by assisting, and also gets a fee.

There is another side to the coin, however, allegorically speaking.

The staff patient on the old surgical service could be humbly thankful for top-notch operative care from a well-supervised resident in training. The patient just knew that the best surgeons of his town kept an eagle eye on every move of the apprentice.

It is a bit different now. The patient undergoing surgery by his private surgeon, or by a surgeon to whom he was referred, is unaware that the old hierarchy, in which confidence could rightly be placed, is no longer in effect at the hospital. Even the intern may be the first assistant! The patient may, or may not, see a series of strange faces; very often he has no recollection afterwards of names or faces.

It would be to the patient's advantage, physically and spiritually, to know that his "family physician" is at the side of the operating table, provided that personal physician is interested in surgery and capable of doing enough to be an assistant of value.

It need hardly be reiterated that, conversely, it is of inestimable value to the family physician to see and feel at firsthand his patient's "innards"—it is a refresher course in anatomy and physiology for him.

Most general practitioners have as much sense of obligation as does the surgeon to encourage the resident in surgery to step in ahead. It is morally wrong, however, to obviate this obligation and courtesy by passing a rule.

Many a generalist cannot afford the time to assist at surgery; or he may not be that interested; or he may have full confidence in the surgeon; or it may be an uncomplicated case. But, it is not always so. The patient may well be of the sort, more numerous in my experience, who really knows *only* his family doctor, trusts him implicitly to choose a *good* surgeon, and doesn't even bother to remember the scalpeleer's name six weeks later.

When surgeons lower the barriers in hospital operating rooms, even of necessity, to bring in hired assistants, it is time for the GP's to step in to claim their rights as surgical assistants. ■

J. I. Frederick Reppun, M.D.
Secretary

HAWAII MEDICAL JOURNAL

Infant Death Study

An 8 lb. 5½ oz. boy died 45 minutes after delivery.

ANTEPARTUM COURSE

An Oriental primigravida in her early thirties was found to be physically normal. Clinical pelvimetry revealed intertrochanteric diameter of 8.5 cm; diagonal conjugate of 12.5 cm; the sacral curvature was described as good. The clinical impression was that the patient had an adequate pelvis.

Laboratory examination on her initial visit revealed: hemoglobin of 11 gm %; Papanicolaou smear negative; chest x-ray negative; STS negative; blood type B, Rh positive. The patient had one antepartal visit during her first trimester, three in the second and five in the third trimester. The patient's total weight gain was 26½ lbs. Her antepartal course was relatively uncomplicated except for mild ankle edema and slight increase in weight, for which she received Diuril, 500 mgm every 6 hours, with good results.

During the 35th week of pregnancy, hematocrit was 36.5% and hemoglobin was 11.3 grams %. The patient was on iron therapy throughout the pregnancy. The patient's blood pressure remained relatively stable throughout her antepartal period; her first blood pressure was 118/62 and her last antepartal blood pressure during the 35th week of pregnancy was 118/70.

DELIVERY

The patient's membranes ruptured spontaneously at 12:30 A.M. ten days prior to her EDC and her contractions began two hours later at 2:30 A.M. The patient was admitted to the hospital at 3:20 A.M. on this day. Examination at this time revealed contractions occurring at intervals of three to four minutes and of good quality. Rectal examination at this time revealed the presenting part to be at minus one station and the cervix was found to be 1 cm dilated. Fetal heart tones were noted in the left lower quadrant and were of good quality. She was seen to be leaking large amount of clear amniotic fluid. Because of the intensity of her contractions the patient was given 100 mgm of Demerol and scopolamine grains 1/150 IM at 3:35 A.M.

The patient was followed closely by the nurses on duty. Progress of labor was determined by frequent rectal examinations. FHT's were normal during each of these examinations. The patient remained in good labor throughout the first and second stages of labor with contractions occurring at intervals of 2-3 minutes and lasting 40-60 seconds. Because of the discomfort the patient was experiencing, she was given 100 mg of Demerol intramuscularly at 7:00 A.M. At 9:45 A.M. the attending physician performed a vaginal examination. The cervix was 8 cm dilated and the presenting part was at plus two station. The fetal position was LOT and fetal heart tones were heard in the left lower quadrant at 140 per minute. At 10:05 A.M. the patient was given morphine, grain ¼, subcutaneously because of pain. At 12:00 M. the attending physician repeated the vaginal examination and the cervix was found to be rim.

The cervix was found to be completely dilated and the presenting part was at plus 2 station by rectal examination at 1:10 P.M. At 1:35 P.M. the caput was visible and FHT's were noted in the left lower quadrant. The patient was taken to the delivery room for further observation at this time. At 1:40 P.M. the patient was given atropine, grains 1/150, intramuscularly. At 2:00 P.M. the pulse was 112, respirations 30, and contractions were occurring at intervals of 2-3 minutes and lasting 30-45 seconds. At 2:15 P.M. the patient was described as being very restless. At 2:30 P.M. the fetal heart tones were checked for the last time and were found to be 152 per minute in the left lower quadrant. The patient was noted to be speaking rather incoherently at times during this period.

The patient was prepared for delivery and at 2:47 P.M. following forceps rotation from LOT to OA under cyclopropane anesthesia an 8 lb. 5½ oz. male infant was delivered. The infant did not breathe, and the Apgar score was one. The pediatrician was called, and he responded immediately. Artificial respiration involving mouth to mouth and a resuscitator were used with no effect. The infant was given caffeine sodium benzoate and epinephrine, but these failed to evoke spontaneous respirations. When cardiac standstill occurred, external cardiac massage was performed and the heart responded with a rate of 60 per minute. However, the infant never established any spontaneous respirations and was pronounced dead 45 minutes after delivery.

The placenta was expelled at 2:49 P.M. and the estimated blood loss was stated to be 150 cc. At 3:00 P.M. the patient was given 100 mg of Demerol and blood pressure at this time was 120/80. The first stage of labor totalled 10 hours 40 minutes, the second stage 1 hour 37 minutes, and the third stage 2 minutes.

POSTPARTUM COURSE

The postpartum course was relatively uncomplicated except for painful hemorrhoids which were treated symptomatically. Temperature elevations of 100° and 101.4° were noted on the first and second postpartum days respectively. No antibiotics were given but the patient's temperature returned to normal on the third postpartum day and remained normal until her discharge on the sixth postpartum day.

AUTOPSY FINDINGS

An autopsy was performed on the infant, and the pathological summary stated: "The most prominent finding at necropsy was subdural and subarachnoid hemorrhage presumed to be due to birth trauma, and petechial and ecchymotic hemorrhage of multiple sites, indicative of hypoxia."

CLASSIFICATION

The Committee unanimously classified this case as being an obstetrical death and preventable from a practical point of view. Factors of preventability were physician error in judgment and technique, and the physician was held responsible for this infant death.

CONCLUSIONS AND RECOMMENDATIONS

After an unrestricted discussion of this case study, the Committee came to the following conclusions and recommendations:

The antepartal management of this case was found to be without fault.

Management of the first stage of labor appeared to be quite good. The members did question the advisability of administering ¼ grain of morphine subcutaneously during the latter part of the first stage of labor when the patient was progressing satisfactorily. It was noted, however, that subse-

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This Is What's New!

• **Experimental concussion** in monkeys has been investigated at the National Institutes of Health. Concussion was produced more readily when the neck was free to move than when it was **immobilized in a collar.** Several angiographies performed within 30 minutes after the blow revealed significant **slowing of circulation.** (*J. Neurosurg.* [Apr.] 1964.)

• The anticancer drug, **5-fluorouracil,** may produce an acute **cerebellar syndrome** with nystagmus, ataxia, slurred speech, and so forth. Four cancer patients treated in California developed such symptoms. The symptoms subsided when the drug was withdrawn. (*Neurology* [Oct.] 1964.)

• The progestational hormone, **Delalutin,** has been used as medical therapy in **prostatic hypertrophy.** Except for one patient who died of pneumonia after six weeks of therapy, nine of the ten patients had **clinical improvement** paralleling **decrease in the size** of the prostate gland as well as histologic changes. **No side effects** of feminization were noted. (*Modern Medicine* [July 6] 1964.)

• Careful analysis of the **phonocardiogram** in **pulmonary stenosis** may give a good picture of the severity of the disease and obviate the need for cardiac catheterization. (*Circulation* [July] 1964.)

• Man has no monopoly on the more exotic diseases. Over the past few years there have been reports of Aleutian minks with glomerulonephritis and vasculitis, New Zealand mice with hemolytic anemia and positive LE phenonema, and white Pekin ducks with amyloidosis. The purpose of the article from the University of Texas was not to report amyloidosis, which occurred in 70 per cent of the Pekin duck strain studies and is well known to amyloidologists, but to report **spontaneous rupture** of the **enlarged amyloid spleen** in **three ducks.** (*Arch. Path.* [July] 1964.)

• The Chairman of the American Medical Association Dermatological Section, after observing, in fact almost lamenting, that the problem of **itch** has been reduced by insect control with various pesticides and sprays, and more effective control of body lice and scabies, concludes that—at least until the doctor arrives—the best emergency treatment of itch is a **properly carried out scratch.** He also notes that Napoleon's characteristic stance, with his hand tucked in his waistcoat, was not the grand pose but rather a mask for a clandestine scratch. (*J.A.M.A.* [Sept. 28] 1964.)

• The **clinical classification of human disease** as a supplement to the conventional **pathological classification** is urged by a physician in Connecticut. This classification system involves the set theory, Venn diagrams, and Boolean algebra of symbolic logic and modern mathematics, but does provide more homogeneous subgrouping of the clinical spectrum of disease. (*Ann. Int. Med.* [Oct.] 1964.)

• The **paraproteinemias,** sometimes referred to as dysprotcinemic syndromes, including such diseases as multiple myeloma, Waldenström's macroglobulinemia, as well as many more benign forms, have added a new member of the group, **heavy chain disease.** A serum gamma globulin disorder, it is termed H for heavy, $H_{\gamma 2}$ chain disease. Principal features consist of plasmacytic and **reticulum cell proliferation** associated with the clinical patterns of malignant **lymphoma,** decrease in synthesis of normal gamma globulins, and excessive production of polypeptides. (*Am. J. Med.* [Sept.] 1964.)

• Two recent articles cover the problem of **skin, retinal, and visceral pigmentation** associated with prolonged **chlorpromazine** therapy. Deposits of pigment with all the physical and chemical properties of melanin are found in macrophages of the dermis and throughout the reticuloendothelial system. Two forms of treatment have been used: (1) **blocking melanin synthesis** with the chelating agent, D-penicillamine, and (2) **stimulating melatonin production** by the pineal gland by keeping the patient in darkness for four weeks. Both methods resulted in improvement of patients treated, but fortunately, of the two patients treated in darkness for four weeks, one improved markedly but the other only slightly, making this mode of treatment unlikely as the treatment of choice for melanosis secondary to chlorpromazine. (*Canad. Med. Assoc. J.* [Sept. 19] 1964.)

• A few unrelated articles from the same periodical: **Gamma globulin** has been found to be **ineffective against rubella.** — An effective **vaccine** has apparently been developed against **herpes simplex.** — **Bacterial flora** are necessary for **normal growth.** (*Med. World News* [June 19] 1964.)

F. I. Gilbert, Jr., M.D.

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New Members

Bernard J. Winter, M.D.
The Queen's Hospital
Honolulu, Hawaii 96813
PATHOLOGY
University of Rochester, 1952
Internship—V.A. Hospital,
Long Beach, California
Residency—V.A. Hospital,
Long Beach, California

Millard S. L. Seto, M.D.
205 South Vineyard Street
Honolulu, Hawaii 96813
OBSTETRICS-GYNECOLOGY
Hahnemann Medical College, 1957
Internship—Highland Park General
Hospital, Michigan
Residency—William Beaumont
Hospital, Royal Oak, Michigan
Wayne State University
School of Medicine

Yasuo Takenaka, M.D., Ph.D.
Children's and Wahiawa Hospitals
Grace New Haven Hospital
Yale Medical School
ANATOMIC & CLINICAL
PATHOLOGY
Stanford Medical School, 1959
Internship—Grace New Haven
Hospital, Yale Medical School
Residency—Medical Center,
Stanford Medical School, Palo Alto

Robert D. Bright, M.D.
Hamakua Mill Company
Paauilo, Hawaii 96776
GENERAL PRACTICE
University of California—
School of Medicine, 1955
Internship—The Queen's Hospital,
Honolulu
Residency—The Queen's Hospital

William Philip Jones, M.D.
888 South King Street
Honolulu, Hawaii 96813
ANESTHESIOLOGY
University of Sheffield, 1953
Internship—United Sheffield Hospitals,
England
Residency—Cleveland Clinic

Harold Gene Lawson, M.D.
444 Uluniu Street
Kailua, Hawaii 96734
GENERAL PRACTICE
Loma Linda University, 1948
Internship—U. S. Marine Hospital,
Seattle
Residency—Merced County General
Hospital, California

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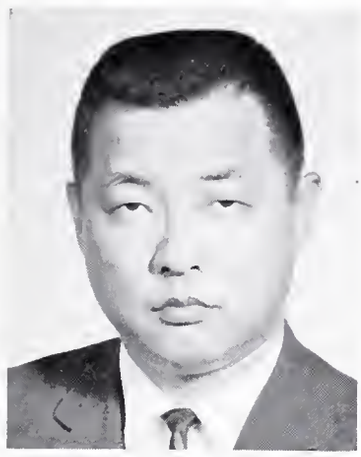
County Society News



Frederick S. F. Lee, M.D.
1282 Queen Emma Street, Room 203
Honolulu, Hawaii 96813
OBSTETRICS-GYNECOLOGY
Creighton University, 1960
Internship—Queen of Angels Hospital, Los Angeles
Residency—Queen of Angels Hospital

Kauai

No reports have been received from Kauai for their June, July, August, and September meetings.

* * *

Seven guests were present at the October 6 meetings—Drs. O. K. Eichman, R. Emrick, R. Hale, A. Hammat, R. Warner, Samuel D. Allison, and O. D. Pinkerton.

Reports included one from Dr. Boyden on Careers Day. Dr. Bernstein's letter enclosed a Special Report from the Surgeon General on oral poliomyelitis vaccine, which was reviewed along with the special HMA Polio Bulletin. Dr. Allison commented on the HMA's committee actions and it was voted to table further action pending additional information from Dr. Bernstein. Dr. Kim reported on the forthcoming Diabetes Detection Drive and it was voted to give him permission to solicit funds from pharmaceutical companies to carry on the project. Dr. Kim also reported on the cancer cytology program which had been outlined to him by Dr. Payne of the Department of Health. It was voted to defer action until more information is available on the proposed survey. Dr. Wade reported that the HMSA had completed the schedule and had presented it to the HMA for its approval.

Under old business it was reported that a letter had been received from the hospital which is involved with a problem relating to one of the physicians on the staff. It was voted to table the matter until after the return of the President. Dr. Allison commented on the status of the Medical Practice Act but action was deferred until after the members have had an opportunity to review the proposed revision.

Under new business a letter was read from Drs. Oishi and Bassett which announced the visiting professor schedule for 1964-65. It was voted to invite Dr. John Vaughan to address a breakfast meeting on either November 1 or November 8. Dr. Allison reported to the Society on HMA affairs and the meeting concluded with a paper on Keratoplasy which was presented by Dr. Pinkerton.

Honolulu

About 80 members attended a special meeting on September 17 to discuss the subject of fish poisoning. Dr. Richard Ho moderated a panel consisting of Albert H. Banner, Professor of Zoology; Kwan-Ming Li, Assistant Marine Biologist; and Drs. Andrew Ivy and Michael Okihiro plus two interns.

* * *

The October 6 meeting started with a film, "The Fable of the Foiled Physician," which was followed by a panel discussion on politics and the news. Participants were Buck Buchwach of the *Advertiser*, Bud Smyser of the *Star-Bulletin*, and Dan Tuttle from the University of Hawaii. Moderator was Dr. Paul Tamura.

The business meeting consisted of an announcement that the Nominating Committee's slate had been circulated by mail, and additional nominations from the floor would be accepted at the November 10 meeting. The Society offered to supply speakers to the various schools during Community Health Week. Dr. Andrew Ivy reported on the HMA Public Relations Committee activities. Mr. Thorson asked the doctors to return their Community Chest pledge cards as soon as possible. Dr. Richardson welcomed the following new members: William P. Jones, Millard S. L. Seto, and Yasuo Takenaka.

HAWAII MEDICAL JOURNAL

Book Reviews

★Early Treatment of Facial Injuries, 1st Ed.

By Thomas John Zaydon, 258 pp., $15.00, Lea & Febiger, 1964.

THIS IS A CLEAR, concise, well-written monograph on the treatment of facial injuries. The first two chapters deal with general care and soft tissue injuries, while the remaining four chapters deal with bony injuries of the facial skeleton.

Excellent points on surgical technique in treating soft-tissue injuries are described which can be readily applied to treatment of similar wounds elsewhere in the body. Adequate hemostasis, gentle handling of tissues, proper suturing, and correct replacement of displaced tissues with key sutures are all emphasized for optimal results in treating facial wounds.

Profuse illustrations by patient photographs, x-rays, and drawings of surgical technique are all included to help present this material in a clear and concise manner.

For the practitioner dealing with facial injuries, this is an excellent source of reference material. It is also a practical clinical guide to proper therapy and treatment for facial injuries.

VERNON K. S. JIM, M.D.

The Liver and Portal Hypertension

By Charles G. Child, III, 231 pp., $8.50, W. B. Saunders Company, 1964.

THIS IS THE FIRST in the series on major problems in surgery. It is a good review which discusses well the current thoughts on the management of bleeding esophageal varices and the various methods for portal decompression by surgical shunts. However, the sections on pre-operative management, transesophageal ligation, esophagogastrectomy, and historical aspects of treatment are somewhat brief.

Chapters two and three on hepatic failure and on hepatic encephalopathy are also good. The latter chapter, especially on clinical management, provides a quick review of ideas and approaches that are current.

This volume is recommended for those interested in the problems of upper gastrointestinal bleeding, on alcoholism, and on liver diseases. The monograph is not so complete or detailed as was expected but, all in all, it is interesting and beneficial reading.

WALTER Y. M. CHANG, M.D.

A Nurses Guide to Anesthetics, Resuscitation Aud Intensive Care, 1st Ed.

By W. Norris, 116 pp., $5.25, Williams & Wilkins Co., 1964.

THE AUTHORS ATTEMPTED to cover too broad a field within a small text. However, they managed to focus on the more important aspects of caring for the postoperative patient and those in respiratory and circulatory crises. The chapters on recovery room and intensive care units are especially informative. The text contains enough photographs and diagrams to clarify and guide with much brevity and effectiveness. I believe this easy and quick reading material well worth the short time it takes to read and would recommend it as a guide for nurses charged with the care of patients in critical condition.

IDA A. VETTER, C.R.N.A.

★ means highly recommended.

The Zymogram in Clinical Medicine

By S. H. Lawrence, M.D., 100 pp., $5.75, Charles C. Thomas, 1964.

THIS SMALL VOLUME is a brief review of the electrophoretic separation of enzymatic activity. The lack of consistency in the designations of isozymes is described. A short historical review is presented. Individual groups of enzymes are described, discussed, and illustrated by case histories. Among others, hydrolytic enzymes, dehydrogenases, and oxidases are presented. Molecular structure of enzymes, genetics, and the future of the zymogram are discussed.

The appendix discusses methods of electrophoretic development of the zymogram.

The book oversimplifies the picture, although diagrammatic representations are quite helpful, and is perhaps somewhat overenthusiastic regarding the value of such studies in clinical medicine. Nevertheless it is a reasonable introduction into a new, vast, and growing field in medicine.

W. HAROLD CIVIN, M.D.

★Geriatric Institutional Management

Edited by Morton Leeds, and Herbert Shore, 445 pp., $8.50, G. P. Putnam's Sons, 1964.

THIS VOLUME belongs in the office of the administrators of the nursing home. A very idealistic book, it is probably valuable enough to be required reading for directors of nursing homes. It can only elevate the level of services to the aged and make operators unhappy with their present standards.

R. FREDERICK SHEPARD, M.D.

Ocular and Adnexal Tumors, 1st Ed.

Edited by Milton Boniuk, 511 pp., $25.00, C. V. Mosby Co., 1964.

A SYMPOSIUM on various lesions of ocular and adnexal tumors by several ophthalmologists and radiologists has been presented in a systematic form and discussed by the various members as to pathology and treatment. Each type of tumor is described and commented on by the panel, and the members' own experiences as to diagnosis, treatment, and management. All agree that the precise nature of each lesion must be determined by his ophthalmological study, and that treatment for each type differs. This book is recommended to physicians who wish to review some of the types of tumors described, especially those chapters on retinoblastomas and melanomas.

ROBERT C. LEE, M.D.

Also Received

Symposium on Foods: Proteins and Their Reactions

Edited by H. W. Schultz, Ph.D., Associate Editor A. F. Anglemier, Ph.D., 472 pp., $3.00, The Avi Publishing Company, Inc., 1964.

A BASIC SCIENCE symposium of food proteins sponsored by Oregon State University.

HAWAII MEDICAL JOURNAL

Notes and News

Professional Moves

The OB GYN boys, from experience, must regard the ninth month as a good omen, because there were three separate announcements in September: **E. Gordon Dickie** opening his office in the Waikiki Medical Bldg., **Frederick S. F. Lee** opening at the Gaspar Bldg., and **Bunzo Nakagawa** relocating to A. Y. Wong Bldg. Otolaryngologist **Hideo Oshiro** will practice in the Medical Arts Bldg. and General Practitioner **Harold G. Lawson** in Kailua. **Walter Quisenberry** will be acting State Director of Health in the absence of **Leo Bernstein,** who left for a series of meetings and a vacation in Europe. **George Oakley** leaves the Dickson-Bell Medical Center December 1 to establish practice with **Keith Nesting** and **Raymond Eklund** in Kamuela.

Elected, Appointed, and Honored

Grover Batten, Philip Tong Chu, William Gulledge and **Jun-Chu'an Wang** attended the three-day meeting of the Fifth National Cancer Conference in Philadelphia.

Harry Arnold, Jr., was named Chairman of the Executive Committee, and **William Daug,** Secretary, Oahu Cancer Society. **Philip Arthur, Cora Lee Au,** and **Edward Jim** were among the 15 new board members elected. **A. Leslie Vasconcellos** returned to the Board after a leave of absence.

Visiting Physicians

The Hawaii Academy of General Practice featured six mainland psychiatrists in a symposium on emotional disorders: **Thomas Detre,** from the Yale Medical Center; **Paul E. Feldman,** from the Topeka State Hospital, Kansas; **Burton Cahn,** from the University of Pennsylvania Medical School; **Gilbert Roberts,** University of California; **Howard Ticktin,** George Washington University Medical Division; and **Martin Kissen,** St. Luke's Hospital, Philadelphia.

Ophthalmologist **Kitetsu Imaizumi,** professor at the Iwate Medical College in Morioka City, Japan, was hosted by **Harold Kimata** and **Perry Sumida** during his three-day stay here, which included a Kuakini Hospital luncheon lecture on a new corneal transplant technique.

Ernest Jokl, Professor of Physiology at the University of Kentucky, spoke to Honolulu doctors at a 6:30 breakfast meeting at Nuuanu YMCA regarding "Fitness and Fatness." **Sau Ki Woug** and **Philip Lee,** staunch Y members, roused the attending physicians out of bed.

Marwali Harahap, supervisor of the Leprosy Hospital in Pulan Sitjanang, Indonesia, conferred with **Ira Hirsehy, Erida Reichert,** and **Claude Caver** at Hale Mohalu.

Sportsmen

Fish Stories: **Richard Sakimoto** boasts of two marlin he caught this year. **Frank Hatlelid's** 49-pound ono was

continued page 146

FRANK CURTIS SPENCER, M.D.
1899-1964

Frank Curtis Spencer was born in Elgin, Oregon, on May 27, 1899, and died after a protracted illness of chronic mixed myelomonocytic leukemia in Honolulu on May 3, 1964, at the age of 64.

Frank received his A.B. at the University of Washington and his M.D. at Rush Medical College in 1929. From 1929 to 1930, he interned at Henry Ford Hospital, Detroit, Michigan.

On the completion of his internship, Dr. Spencer returned to Honolulu where he became associated with Dr. Milnor in obstetrics and gynecology, in "The" (Straub) Clinic. After some five years of this practice, Frank left to open his own office, and entered general practice in the Honolulu area. In 1946, he returned for special training at the New York Postgraduate Medical School and at the Margaret Hague Maternity Center. He also studied anesthesia with Dr. R. A. Hingson at the University of Tennessee.

Returning to Honolulu in 1947, Frank began and maintained his practice in the specialty of Obstetrics and Gynecology. He served in the capacity of Chief of Staff of the Kapiolani Maternity and Gynecological Hospital and was civilian consultant in Obstetrics and Gynecology at Tripler Army Hospital for fourteen years. Frank invented a tracheolotome, which he often described as an inside-out pencil sharpener. He was one of those chiefly responsible for the establishment of a cytological laboratory in connection with the Hawaii Division of the American Cancer Society. For the twelve years that this laboratory was in operation Dr. Spencer gave his services voluntarily and was one of its main supporters. In 1962, the Hawaii Division of the American Cancer Society presented Dr. Spencer a special award for this work.

Frank was elected to life Fellowship in the Pacific Coast Obstetrical and Gynecological Society in 1963. He was a member of the American College of Obstetricians and Gynecologists.

Always popular with the house staff for his interest in their welfare, both medical and personal, they often found "Uncle Frank" one on whom they could rely on for their problems. His droll humor was well known and oft appreciated.

For some 15 years, Frank gave out the golf prizes at the annual Territorial, later State, Medical Association meetings. In 1952, he created the annual award of the Fractured Cane to the incoming president of the Association, now a more or less hallowed tradition.

A devoted husband and father, Frank was very proud of his family. His wife, Jann, predeceased him in 1963. He is survived by their two daughters, Mrs. Suzanne Goldsmith and Mrs. Kathryn Onstott.

We who knew Frank and worked with him will feel a deep sense of personal loss but will retain the fond remembrance of a very warm and human personality.

C. C. McCorriston, M.D.

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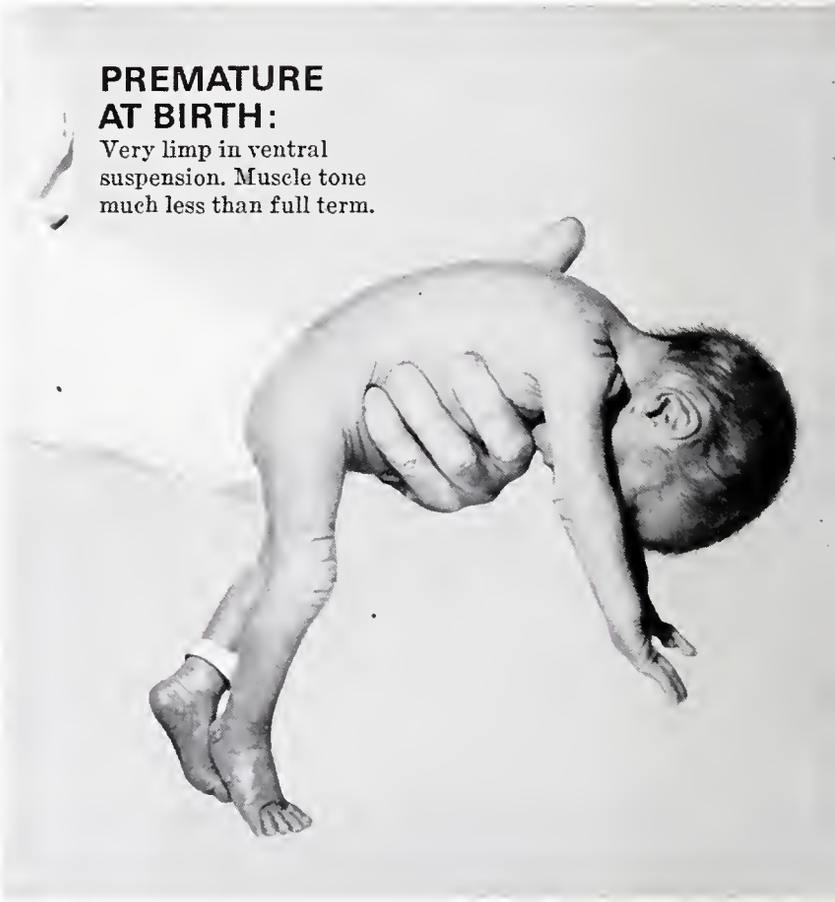

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1. Adapted from Illingworth, R.S.: Development of the Infant and Young Child, Edinburgh, E. & S. Livingstone, Ltd., 1960. 2. McLoughlin, P.T.: Arch. Pediat. *79*:208, 1962. 3. The Composition of Milks, Washington, D.C., National Academy of Sciences—National Research Council, Publication 254, Revised 1953. 4. Brown, G.W.; Tuholski, J.M., Sauer, I.W., Minsk, L.D., and Rosenstern, I.: J. Pediat. *56*:391, 1960.

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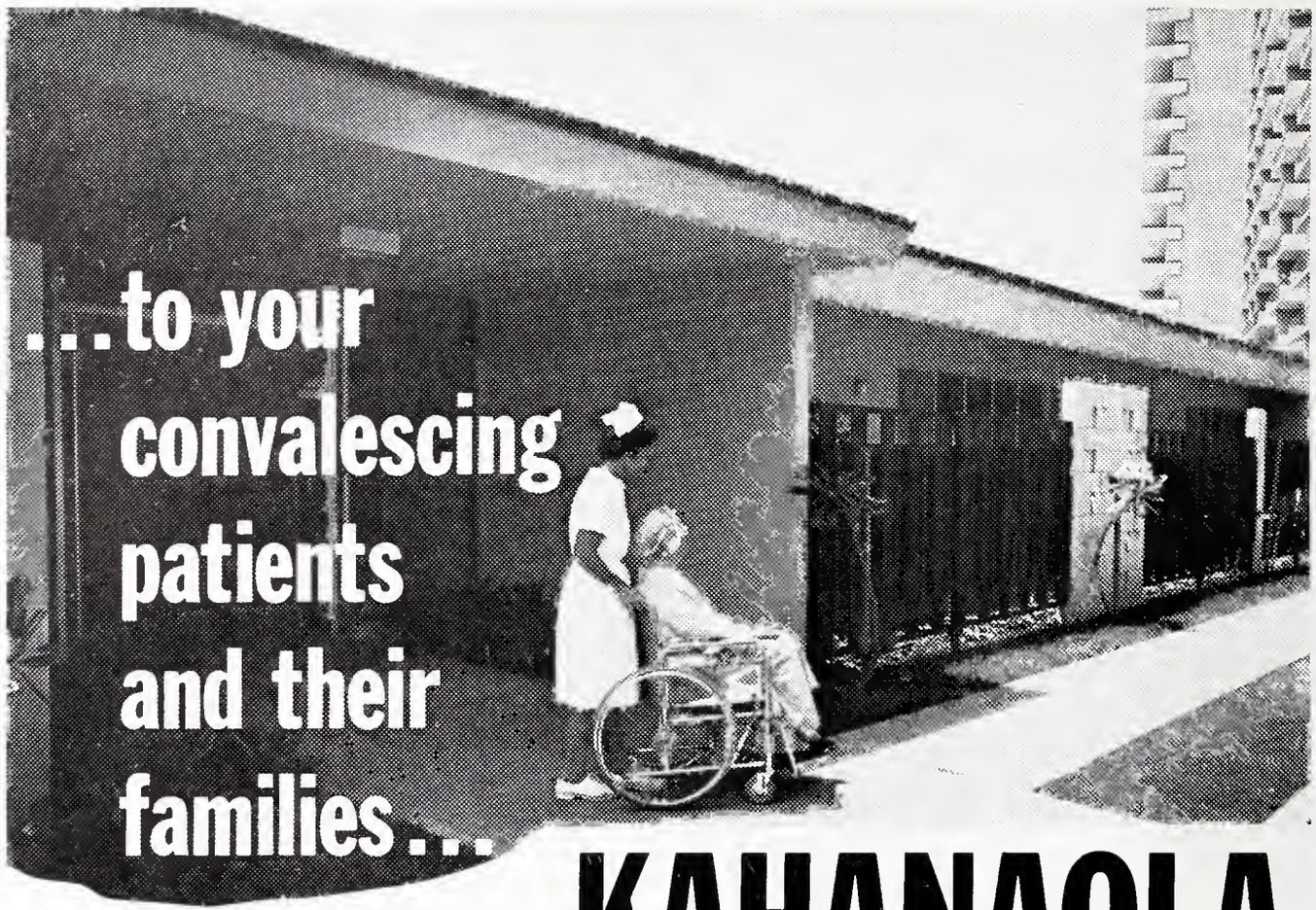

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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: JAMES YANO, Kaiser Foundation Hospital

Christmas Message

Through the ages many great astronomers have sought an explanation of the Star of Bethlehem. Was it a nova, a star bursting into new brightness thousands of times more luminous than the sun, or was it a concurrence of the planets Jupiter and Saturn, or was it both phenomena occurring simultaneously? We do not know the exact cause of the beautiful Star of Bethlehem; however, we cannot deny the fact that it highlighted the greatest event in history—the Birth of Our Lord Jesus Christ! The coming of the Messiah as prophesied through the many centuries by Samuel to Elisha, from Amos to Malachi, from Isaiah to Abraham, was finally fulfilled—our First Advent season was here!

During this era of world-wide tension, fear, and uncertainty brought about by the evils of materialism, power, and de-Christianized forces, the renewed glad tidings of Christ's birth always bring much needed love, joy, hope, and peace to many forlorn souls. What a heavenly blessing it would be if this warm feeling of brotherhood of men we practice so well at Christmas time could be continued through each day of every year. We should all, therefore, pray and strive for personal sanctification and soul searching in the hope that this will multiply in the formation of a better world of peace, love, and happiness.

With this joyous and happy season of Christmas, we should ponder awhile to offer our thanks to our Saviour for giving us not only Life but the golden opportunity to serve Him through his fellow men with our knowledge and practice of medical technology. We should all strive for perfection in not only our chosen profession but also our entire being. Share the joys and excitement of our profession with other medical technologists, exchange ideas and thoughts to improve ourselves or our laboratories, and play an active role in our Society. Offer your careful and meticulous analyses as forms of prayers to Him so that through our works of mercy which are necessary for the diagnosis of diseases, we may gain graces to further strengthen us towards greater heights of love and perfection.

As St. Francis of Assisi so wisely said: "O Lord, make me an instrument of Thy peace. Where there is hatred, let me sow love; where there is injury, pardon; where there is doubt, faith; where there is despair, hope; where there is darkness, light; and where there is sadness, joy. O Divine Master, grant that I may not so much seek to be consoled as to console; to be understood as to understand; to be loved as to love; for it is giving that we receive, it is in pardoning that we are pardoned and it is in dying that we are born to eternal life."

A very Merry Christmas and a most Blessed New Year to you and yours!

Abstract

Peripheral Blood Histiocytosis is Endocarditis Key—Mortimer S. Greenberg, M.D.; Antibiotic News: Vol. 1, No. 7, September 2, 1964.

The presence of histiocytes in the first drop of blood obtained from earlobe puncture may be an aid in making the diagnosis of subacute bacterial endocarditis, or in confirming that diagnosis when blood cultures are negative, Dr. Mortimer S. Greenberg of Lemuel Shattuck Hospital and Tufts University School of Medicine, Boston, has reported.

In an interview with *Antibiotic News,* Dr. Greenberg emphasized that while the absence of histiocytes could not preclude the diagnosis, their appearance strongly suggests subacute bacterial endocarditis, and further offers a helpful sign by which to judge response to treatment.

He pointed out that even when histiocytes may be obtained from other peripheral blood, the percentage of these abnormal cells in the ear blood may be as much as 30 times higher than that found in heel, toe, nose or finger blood. The localization of histiocytes in the earlobe is probably explained, Dr. Greenberg said, by the greater selective filtering capacity of the capillary vascular bed of the lobe as compared to these other dependent areas. He underscored the need, in the search of histio-

cytes, for examining the first or second drop of blood after puncture. After these there may be a rapid decrease in histiocytes, presumably because the early blood drawn is of capillary origin and the latter blood is essentially venous.

Although the origin of histiocytes is far from proven, analogy with other infections in which these cells are observed suggests that histiocytes seen in subacute bacterial endocarditis represent a generalized hyperactive response of the reticuloendothelial tissues. Histiocytosis has been observed in typhoid fever, chronic meningococcemia, parasitic diseases, transfusion reactions, erythroblastosis fetalis, overwhelming infections, sickle cell anemia, acquired hemolytic anemia, and pernicious anemia.

If these conditions as well as leukemia are excluded, then the presence of large numbers of histiocytes are highly suggestive of endocarditis, Dr. Greenberg believes. The cells are characterized by their large size (some reaching a diameter of 80 microns), by their irregular nuclei, by evidence of phagocytosis and by ameboid structure and movements. They may be induced easily and consistently in experimental inflammatory reactions.

In a recent issue of the *Annals of Internal Medicine,* Dr. Greenberg discussed a patient with a presumptive case of bacterial endocarditis, in whom blood cultures were sterile. A striking difference was observed in this patient between venous and earlobe blood drawn at the same time. The initial white count on venous blood showed the following: white cells, 3,275/cu mm; 38% polymorphonuclear neutrophils; 4% band forms; 42% lymphocytes; 2% large lymphocytes; 10% monocytes; 1% eosinophils; 1% plasma cells and 2% histiocytes. By contrast, the white count of the first drop of blood obtained by earlobe puncture was 24,500/cu mm; the differential count revealed: 9% polymorphonuclear neutrophils; 1% band forms; 7% lymphocytes; 2% large lymphocytes and 81% histiocytes. A total of 19 blood cultures on this patient were sterile. A paracolon bacillus was grown from the urine. Bacterial endocarditis was diagnosed on the basis of a number of clinical findings in addition to the histiocytes. Penicillin therapy was initiated on the third hospital day. The initial dosage of 2,400,000 units (IM) per day was increased to 8,000,000 on the ninth day because of the persistence of night sweats, petechiae and histiocytes. Streptomycin (2 gm daily) was added on the 20th day.

Under the combined drug therapy there was remission of symptoms with a gradual decline in both total white count and histiocyte count. Values from earlobe blood approximated those of venous blood around the 37th day. Similar observations have been made following treatment with chloramphenicol and sulfasoxazole in patients with (1) pyelonephritis and septicemia and (2) Waldenström's macroglobulinemia and pyelonephritis. In these cases, histiocytes persisted in the peripheral blood for only a few days after antibiotic therapy was started.

Dr. Greenberg's clinical experience appears to confirm many of the painstaking hematologic observations in bacterial endocarditis made by a pioneer worker in the field, Miss Geneva Daland, whose investigations were conducted at the Thorndike Memorial Laboratory, Boston City Hospital.

Survey

A recent survey of the four major private hospitals in Hawaii has shown that from a total of 75 medical technologists employed, 20 are from out of the State of Hawaii.

Eleven of the medical technologists from out of State come from the Midwest and the South: Ohio, 4; Texas, 3; Wisconsin, 2; Nebraska, 1; Georgia, 1. Other states represented in the working force of medical technologists in Hawaii were Massachusetts, 2; Maine, 1; Pennsylvania, 1; and South Dakota, 1. Our good Canadian neighbor is represented by two medical technologists and we have one technologist from Sweden and one from the Philippines.

Technologists to Viet Nam and Laos

Mrs. Rachael West, formerly of the Waikiki Medical Laboratory, recently left Hawaii for Viet Nam as a medical technologist with the U. S. Public Health Service. She is from North Carolina, was educated in New York City, and did some graduate work at Columbia University. Back in 1955-57, while her husband was on a Fulbright scholarship for literature, they were in Viet Nam. During this period, she observed that military aid and war materiel were increasing, but there was no medical aid for the civilian population. Mrs. West wanted to return to Viet Nam to administer professional medical service to the civilian population and perhaps better the public image of our foreign aid program.

The Hawaii Society of Medical Technologist extends our sincere congratulations to Mrs. West on her new position and assignment and the best of luck and success to her future endeavors.

Miss Phyllis Morita of Honolulu left for Laos in July, 1964, to offer her services as a medical technologist to the Dr. Dooley Foundation. She was formerly employed at St. Francis Hospital. ■

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Infant Death Study *continued from 130*

quent to the administration of morphine sufficient time had elapsed to render its effect on the infant's respiration of negligible importance.

The fetal heart tones were last checked on this infant at 2:30 P.M., which was 17 minutes prior to delivery. At that time they were normal. Because there were no other recorded fetal heart tones the Committee assumed that the fetal heart tones were either normal or not checked prior to the delivery. If this assumption is correct, the obstetrician who performed the forceps rotation and delivery must be held accountable for the subarachnoid and subdural hemorrhage that occurred in this infant.

Even though forceps rotation was employed during the delivery of this infant, the delivery is coded out as being low forceps. The obstetrician members of the Committee and a visiting professor of obstetrics and gynecology who was present at this meeting could not agree with this classification. Any time forceps rotation is employed, the rotation automatically places the forceps procedure as being either mid or low-mid forceps. All authorities on the use of forceps agree that this is so.

The obstetricians present pointed out that an 8 lb. 5½ oz. infant is an excessively large baby for an Oriental. For this reason, the forceps rotation may have been more difficult than noted in the chart. The obstetricians present at the meeting pointed out that a transverse arrest of Oriental patients is more serious than among other racial groups. For this reason x-ray pelvimetry prior to the use of forceps delivery may have been of immeasurable value in correctly assessing the pelvis of this patient.

MATERNAL & PERINATAL MORTALITY
STUDY COMMITTEE

Notes and News *continued from 136*

the largest fish of the Waialua Boat Club tournament over the Labor Day weekend. **Burt Wade** of Maui accounted for a 150-pound marlin which was donated to the Waimea Veterans Memorial Hospital. **Harold Sexton,** HBGFC (Hawaii Big Game Fishing Club) prexy, had ill luck with only three mahimahi, three kawakawa, and an ulua caught off Molokai. Poor fish. . . .

Golfers: The **Marquis Stevenses** scored 74 points to lead in team aggregate play in OCC August "Hit and Giggle" stableford tournament. In September, Marquis' 76-10-66 was only good for third place in medal tournament. **Masato Mitsuda** in A flight and **Takeo Fujii** in B flight shared first place honors in the WGC individual stableford tournament, each scoring 42 points. **Takeo** and **Richard Chun** also won with their partners in a match vs. par golf tournament at the Waialae CC in September. In October, **Richard Chun, Gilbert Freeman,**
continued page 148

Notes and News *continued from 146*

and **Al Ishii** won their respective matches for the month. At Ala Wai, **Ed Emura** will present the Presidential Trophy for the Thursday Club to new member **Frank Fukunaga. Ike Nadamoto** did not win this year. May all their handicaps be chopped. . . .

Happy Hunters: **Ted Tseu** bagged a deer on Lanai in September, but then **Robert Simpson** bagged two deer in October. **Roy Kaye,** not to be outdone, bagged a deer on Lanai and several goats on Molokai. **Roy** and **H. R. Egli** spent 21 harrowing hours on a sailboat getting to Molokai to shoot the goats. Poor goats. . . .

Sportsmen: **Sam Yee** was elected to the Board of Directors of Sportsmen Hawaii. **Richard You,** who manages Johnny Santos, the promising young welter, and Gaspar Ortega, another promising welter, was quoted as saying, "Gaspar was beaten by Stan (the Harrington) the last time and is determined to turn the tables on him." And so be it. . . .

Masato Hasegawa, riding for Sunset Ranch in the No. 1 position, even elicited the help of a pony to kick in their seventh goal, but Sunset still lost to Ewa Beach by two goals. Bloody good try, though. . . .

A recent *JAMA* article about the psychiatric morbidity of physicians brings to mind a few who play tennis at 6:30 Sunday mornings. Witnesses report that **Tom Oshiro, Sau Ki Wong, Ben Tom, Denis Fu, Hiro Tottori, George Kimata, Max Bottiecelli, Charley Judd, Ghim Yeoh,** and **Richard Dang** have been observed at dawn's early light swatting bleary eyed at elusive tennis balls. Epitaph of an Athenian physician, 2 A.D.: "These are the duties of a physician: First . . . to heal his mind and to give help to himself before giving it to anyone else."

Hors de Combat

Richard Chang has been concealing a forearm cast for

continued page 150

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Side Effects typical of tetracyclines which may occur: glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis, dermatitis, overgrowth of nonsusceptible organisms. Also: photodynamic reaction (making avoidance of direct sunlight advisable) and, very rarely, anaphylactoid reaction. Reduce dosage in impaired renal function. The possibility of tooth discoloration during development should be considered in administering any tetracycline in the last trimester of pregnancy, in the neonatal period, and in early childhood. *Capsules,* 150 mg. and 75 mg. of demethylchlortetracycline HCl. *Average Adult Daily Dosage:* 150 mg. q.i.d. or 300 mg. b.i.d. 1. Kunin, C. M.; Dornbush, A. C., and Finland, M.: Distribution and Excretion of Four Tetracycline Analogues in Normal Young Men. *J. Clin. Invest.* 38:1950 (Nov.) 1959.

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Lederle

Notes and News *continued from 148*

many weeks. He is noncommittal about the cause of injury, but denies having tried out a skateboard. . . .

Don Poulson is under the care of a fellow orthopod for, of all things, a low back strain.

Community Notes

Yonemichi Miyashiro and **William Goodhue** are members of Kauai's Steering Committee for Mental Health Task Forces which will gather data on mental illness, school mental health, juvenile delinquency, drug addiction, alcoholism, etc.

Milton Howell of Hana, Maui, will operate the new quarter-million-dollar Hana Medical Center which was dedicated in September.

Seven of the ten member schools in the Rural Oahu Interscholastic Assn. now have a doctor standing by at athletic events. Only Waipahu and Campbell High schools have been unable to find doctors who would attend the home games. Concern was expressed when injuries occurred at a Waipahu–Castle High School game in October. Any volunteers?

George Mills, President of the State Association of Hawaiian Civic Clubs, announced that there will be an annual song convention on January 29, 1965, at Baldwin High School, Wailuku, Maui.

The Filipino Scholarship Foundation elected **Mario Bautista** President and **Cora Manayan** Secretary-Treasurer. The Foundation plans a film festival late this year or early next. It recently awarded its first scholarships to four girls at the University of Hawaii.

Political Notes

Three doctors' wives were successful in the recent primary election. **Dorothy Devereux** ran for the State House of Representatives from the 15th District (Manoa-Waikiki). **Janet Wyatt** won outright re-election to the

continued page 152

Notes and News *continued from 150*

Oahu School Advisory Council in the 4th District. **Gwendolyn Buist** ran successfully for the Council from the 5th District.

James F. Fleming of Maui led the Republican ticket in his first bid for a State Senate seat. Jim was in the Maui County School Council race two years ago and won outright in the Primary with 7,961 votes. He will not have to resign from the Council until he finds himself holding two elective offices.

George Goto gathered a group of doctors to meet Sparky Matsunaga at his home in Waialae. Sparky pledged to support legislation providing Federal tax relief for contributions up to $500 to political parties and individual candidates.

Travellers and Social News

Tokyo Bound: The **B. Allen Richardsons,** parents of Punahou swim star Allen Richardson, attended the Tokyo Olympics. Mrs. Richardson is Hawaii representative of the magazine "Swimming World." **Milton Trager,** former professional fighter, professional dancer, and acrobat, who at 56 still swims a daily mile between Halekulani and the Hawaiian Village, also left for Tokyo and the Olympics as a participant in the International Conference of Sports Sciences, which meets every four years to discuss sport injuries, diets, and doping of athletes. **Ted Tomita** and the **Rodney T. Wests** planned vacations in the Orient when the Olympics were in progress.

Other Travellers: The **George Garises** left for a 10-week diet of internal medicine courses, dog shows, and opera from the West to the East coast. Good appetite.... **Richard Lee,** Director of Public Health and Medical Activities, University of Hawaii, attended the 15th meeting of the World Health Organization Regional Committee for the Western Pacific where he served as the chairman of technical discussions and presented a paper,

continued page 154

WHY IS IT IMPORTANT FOR DOCTORS TO VERIFY ADDRESSES?

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Notes and News *continued from 152*

"Collection and Utilization of Vital and Health Statistics in Hawaii." Imagine!!!! The **Burt Wades** of Waimea returned from a two-month mainland trip.

Socialites: The **Unoji Gotos** and the **Herman Kramers** were at the September 13 champagne-flowing opening of the Concert Hall. The **Morton Berks** attended the concert three days later sans speeches and sans free champagne. The first of the subscription concerts found the same familiar faces: the **Kikuo Kuramotos**, the **Sam Yees**, the **Herbert Chinns**, the **Nobu Nakasones**, the **Bernard Yims**, the **Frank Fukunagas**, the **Francis Odas**, the **Robert Nordykes**, the **Roy Ohtanis**, the **Winfred Lees**, the **Philip Lees**, the **Duke Choys** and the **George Tyaus**. (Apologies to those we missed.) Isaac Stern's feverish violin only succeeded in lulling **Phil Lee** and a few others to sleep. Alas, the lot of tired doctors with music-loving wives. . . . The **Denis Fus** and the **Philip Choeks** celebrated the Moon Festival with their families; the traditional menu included rice soup, raw fish salad, and moon cakes.

Names in the News

Jim Marnie reported the theft of three credit cards taken from his convertible parked in his garage.

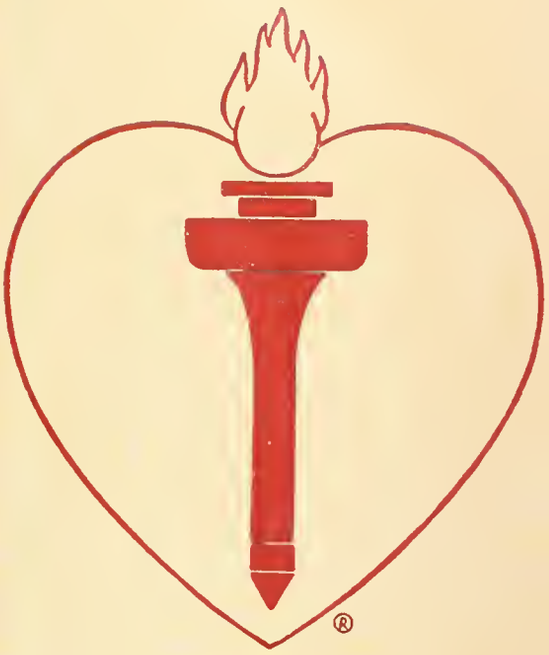
"**Forrest J. Pinkerton**, M.D., Honolulu Medical Leader" is the title of the leading quote (on blood banks) in the November 2 issue of *Washington Report on the Medical Sciences*. Other quotes are from Perrin Long, Paul Dudley White, Russel V. Lee, etc.

Erratum

On page 52 of the September-October issue of the JOURNAL there was an error. **Dr. James B. H. Young**, urologist, not Dr. Kong, moved from the Young Bldg. to 181 No. Kukui St., Room 205.

January-February, 1965

HAWAII MEDICAL JOURNAL



In this issue

VOLUME 24 • NUMBER 3

epilepsy may limit opportunity...

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This agent "...has brought new hope to an entire generation of seizure patients....With judicious use, it may be said that it alone is responsible for the prevention of more seizures than any other drug."*

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*Roseman, E.: *Neurology* 11:912, 1961. 33664

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SUPPLEMENT TO HAWAII MEDICAL JOURNAL
JANUARY-FEBRUARY 1965

DOCTOR: For a constant reminder of medical meetings in the year 1965, place this where you and your secretary can see it.

HOSPITALS

Children's

Monday—12:30 p.m.—Weekly—Case Reports
Thursday—8:30 a.m.—Grand Rounds
Friday—12:30 p.m.—4th of each quarter beginning in January —Staff Luncheon and Meeting

Kapiolani

Tuesday—12:30 p.m.—Weekly—Didactic Program and Luncheon
Wednesday—12:30 p.m.—2d of each month—Medical Executive Committee Meeting and Luncheon
Thursday—12:30 p.m.—3d of each month—General Staff Meeting and Luncheon
Friday—9:30 a.m.—Last—Infant Mortality Conference

Kuakini

Everyday but Wednesday—8:30 a.m.—Medical Rounds
Monday—1:00 p.m.—1st & 3d—Radiology Seminar
Monday—1:00 p.m.—4th—Integrated Clinical Pathological Conference
Monday—8:00 a.m.—Weekly—Admission Rounds
Tuesday—1:00 p.m.—2d—Medical Conference
Tuesday—1:00 p.m.—1st—Medical Surgical GI Conference
Tuesday—1:00 p.m.—3d—Medical Statistics & Departmental Meeting
Wednesday—4:00 p.m.—Weekly—Surgical Rounds
Wednesday—8:30 a.m.—Weekly—Department Chief Rounds
Wednesday—1:00 p.m.—3d Gyn Seminar
Thursday—1:00 p.m.—1st & 3d—Journal Club
Thursday—1:00 p.m.—4th—Gyn Seminar
Thursday—1:00 p.m.—4th—Gyn Statistics
Friday—8:00 a.m.—Weekly—Medical Follow-up Rounds
Friday—1:00 p.m.—Weekly—Surgical Conference
Friday—6:00 p.m.—2d—General Staff Meeting

Queen's

Monday—12:30 p.m.—Weekly—Ob-Gyn Staff Conference
Monday—4:15 p.m.—2d & 4th—Tumor Conference
Tuesday—12:30 p.m.—Weekly—Orthopedic Conference
Tuesday—4:15 p.m.—Weekly—Surgical Staff Conference
Tuesday—4:15 p.m.—Last—EENT Staff Conference
Thursday—8:00 a.m.—2d & 4th—Psychiatric Staff Conference
Thursday—12:30 p.m.—First—Pediatric Staff Conference
Thursday—3:30 p.m.—Last—Anesthesiology Staff Conference
Friday—8:00 a.m.—Weekly—Medical Staff Conference
Friday—12:30 p.m.—Last—Quarterly Staff Meeting (March, June, September, December)

St. Francis

Monday—4:00 p.m.—Weekly—Surgical Lectures
Monday—12:30 p.m.—4th—Combined CPC (with Queen's and Kuakini Hospitals)
Tuesday—1:00 p.m.—1st, 2d, 3d—Medical Conference
Tuesday—1:00 p.m.—4th—Medical Mortality Conference
Thursday—4:00 p.m.—Weekly—Surgical Anatomy Conference
Friday—7:15 a.m.—1st & 3d—Surgical Conference
Friday—7:15 a.m.—2d Friday—Tumor Conference
Friday—7:15 a.m.—4th or 5th—Surgical Statistical Conference
Friday—12:30 p.m.—1st, 2d, 3d—Ob-Gyn Meeting
Friday—12:30 p.m.—4th—Ob-Gyn Statistical Meeting
Friday—8:30-10:00 a.m.—Ob-Gyn Meeting when Visiting Professor scheduled
Friday—3:00 p.m.—1st & 3d—X-ray Conference
Saturday—8:30 a.m.—4th—Medical Journal Club

SPECIALTY SOCIETIES

Am. Col. Chest Physicians, Hawaii Chapter

Meets as announced
Regent—Dr. F. L. Giles Governor—Dr. M. I. Brodsky

Am. Col. Physicians, Hawaii Chapter

Meets as announced
Governor—Dr. Morton E. Berk

Am. Col. Surgeons, Hawaii Chapter

Meets as announced
Pres.—Dr. Shoyei Yamauchi Sec.-Treas.—Dr. Carl B. Mason

Hawaii Academy of General Practice

Meets as announced
Pres.—Dr. Walter M. Ozawa Sec.-Treas.—Dr. J. I. F. Reppun

Hawaii Dermatological Society

Meets 2d Wednesday of each month at 8:00 a.m. at Tripler
Pres.—Dr. Wilfred H. Kurashige Sec.-Treas.—Dr. Edw. Emura

Hawaii Eye, Ear, Nose & Throat Society

Meets 3d Thursday of each month at 6:30 p.m.
Pres.—Dr. F. J. Pinkerton Sec.—Dr. John R. Watson

Hawaii Society of Anesthesiologists

Meets as announced
Pres.—Dr. Luke Tajima Sec.-Treas.—Dr. Kenneth Chinn

Hawaii Society of Internal Medicine

Meets as announced
Pres.—Dr. Charles S. Brown Sec.-Treas.—Dr. Frank J. Bruce

Hawaii Society of Pathologists

Meets as announced
Pres.—Dr. Clifford F. Moran Sec.-Treas.—Dr. Ann B. Catts

Hawaii Thoracic Society

Meets as announced
Pres.—Dr. Maurice I. Brodsky Sec.-Treas.—Dr. Robert Marks

Hawaii Urological Society

Meets 3d Monday of even months
Pres.—Dr. Walter S. Strode Sec.-Treas.—Dr. Masaru Koike

Hawaiian Surgical Association

Meets bi-monthly—2d Tuesday
Pres.—Dr. Edward W. Boone Sec.—Dr. Benjamin C. K. Tom

Honolulu General Surgical Society

Meets as announced
Pres.—Dr. Wallace W. B. Loui Sec.-Treas.—Dr. James W. Cherry

Honolulu Obstetrical & Gynecological Society

Meets 3d Monday of each month at 7:30 p.m.
Pres.—Dr. Robert G. Hunter Sec.-Treas.—Dr. Samuel J. Buist

Honolulu Pediatric Society

Meets 3d Thursday of each month (meeting closed)
Pres.—Dr. L. T. Chun Sec.-Treas.—Dr. Frances Nakamura

Psychiatric Society of Hawaii

Meets as announced
Pres.—Dr. Edw. F. Furukawa Sec.-Treas.—Dr. Roberto Moulon

Radiological Society of Hawaii

Meets 3d Monday of each month (place as announced)
Pres.—Dr. Edgar Childs Sec.-Treas.—Col. Russell E. Graf

Western Orthopedic Assn., Hawaii Chapter

Meets 4th or last Thursday of each month at 7:30 p.m.
Pres.—Dr. Wm. H. Gulledge Sec.-Treas.—Dr. Ivar J. Larsen

MEETINGS

Hawaii Medical Association Annual Meeting

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JANUARY

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HAWAII MEDICAL JOURNAL

Contents

Volume 24, Number 3, January-February, 1965

Articles

Editorials

Features

Hawaii Technologists' Bulletin

IN CHILDREN WITH COLDS— HELP TO PREVENT OTITIS MEDIA WITH PROPHYLACTIC "INNER SPACE"

Gentle, non-stinging Neo-Synephrine hydrochloride solution acts in seconds—stops the boggy feeling of colds for hours without harming the child's delicate respiratory tissues. Turbinates shrink, ostia open, ventilation and drainage begin. Neo-Synephrine ¼ per cent solution also helps to keep the eustachian tubes open and aids in preventing the development of otitis media.

Neo-Synephrine solution provides "inner space" without interfering with the natural defenses of the respiratory tract. Repeated applications do not lower its effectiveness, and post-therapeutic turgescence is minimal.

Soss[1] states that Neo-Synephrine nose drops are of definite benefit in middle ear problems. Budetti and Seydell[2] consider Neo-Synephrine solution a *basic* and *standard* medication in patients with catarrhal otitis media.

How Supplied: *0.25 per cent (¼ per cent)* Isotonic Solution—bottles of 1, 4 and 16 oz.

0.25 per cent (¼ per cent) Pediatric Nasal Spray, containing Zephiran® chloride 1:5000—20 cc. plastic squeeze bottles for infants and for children.

References: **1.** Soss, T. L., in Collect. Letters, Internat. Cor. Soc., Ophthalmologists & Otolaryngologists 3:177, Dec. 15, 1958. **2.** Budetti, J. A., and Seydell, E. M.: *J. Kansas M. Soc.* 57:59, Feb., 1956.

Correspondence

More on Football Injuries

To the Editor:

A sudden epidemic of traffic accidents in Los Angeles should not serve as a condemnation of motorists in some other section of the country. Similarly, the report of injuries in two high schools during a single season should not serve to condemn football throughout the nation.

The recent article in the Hawaii Medical Journal entitled "High School Football: Valuable Sport or Sado-Masochistic Excess?" deserves critical analysis before attempting to reach a valid conclusion.

Perhaps the author is unaware of the many school systems that have, through the years, kept accurate records of their injuries. The Atlanta Public Schools have maintained injury records for all high schools for over 15 years, and for the past five years, the mechanism of injury, the type equipment, playing conditions and many other items have been included with each injury report. Over 3,000 football players are included in this program and over the years the injuries have been much lower than those reported by Dr. Tabrah. In 1960 there were 604 injuries serious enough to require the services of a physician.

In 1962 there were only 540 injuries among the 3,000 football players. Whereas the author referred to 7,530 man hours of practice, the Atlanta study includes over 300,000 man days of exposure.

The benefits to be derived from competitive contact sports, such as football, are numerous and have been noted many times in previous publications. Laurence Morehouse has stated that "The favorable responses an athlete obtains from a period of intense athletic conditioning are immediately and easily detectable and thus satisfying. The individual who has experienced the vigor and euphoria due to superb functioning of his entire organism preserves in his being a pattern upon which he can draw with benefit all of his life." Competitive athletics bring out the best in the individual.

A far fairer evaluation between the severity rate of athletic injuries and industrial injuries would be to determine how many athletes were unable to fully compete in athletics three to six months following injury, compared with the industrial accidents three to six months later who were still not back at work. The comparison would not even be close.

The major item of interest, however, is that the author states that the intent of the report was not to analyze the causative factors of the high rate of trauma. Anytime an activity results in the injury to over 100% of the participants, then that activity should be carefully and critically analyzed in order that the injuries might be reduced. As stated previously the injury rates are not in-line with other previously published reports.

In conclusion, competitive contact sports, such as football, provide definite benefits and liabilities. The benefits are many; the liabilities few. Every effort must be made to prevent injuries whenever possible, to treat promptly, and properly when they occur, and to fully rehabilitate following injury.

If athletics are maintained in their proper perspective, and if training and conditioning are required prior to participation, if supervision is competent, if screening of candidates is thorough, protective equipment is provided and fitted, and the rules of playing the game are maintained then injuries will be minimized and the benefits will be abundant.

Please find enclosed a reprint from the Proceedings of the Fifth National Conference on the Medical Aspects of Sports.

Fred L. Allman, Jr., M.D.
340 Boulevard N.E.
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December 14, 1964

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..nothing, that is, except the

sedative-antispasmodic action of DONNATAL®

Functional disturbances of gastrointestinal tone and motility present the physician with an all too common reaction to the stressful dilemmas and frustrations of modern living.[3,6]

For their dependable control, no better spasmolytic has ever been discovered than the *natural* belladonna alkaloids in combination with phenobarbital, as in DONNATAL.

Phenobarbital, as a mild sedative, has the benefit of long use and a reassuring record of freedom from unexpected and untoward reactions. In allaying subjective tension, it helps to prevent emotional stimuli from provoking or intensifying visceral spasm.

The *natural* belladonna alkaloids in DONNATAL—conforming to the classic formulation by Vollmer[5]—selectively include only the therapeutically desired alkaloids in precisely and optimally balanced ratio. The clinical uncertainties of the variable tincture and extract of belladonna are thus avoided.

Further, a recent pharmacological study has confirmed that the antispasmodic effectiveness of the belladonna alkaloids in DONNATAL is measurably potentiated by the presence of phenobarbital [8]

Over the years, the professional consensus has reflected broad clinical confidence in the marked benefits to be achieved by DONNATAL in a wide range of visceral disorders...in peptic ulcer,[1,6] functional bowel distress,[1] gastrointestinal spasm and discomfort,[2] and other functional disturbances of visceral smooth muscle.

CONTRAINDICATIONS: Glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.

PRECAUTIONS: Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy.

SIDE EFFECTS: Blurring of vision, dry mouth, difficult urination or flushing and dryness of the skin may occur at higher dosage levels, rarely at the usual dose.

*This one at Oak Creek, Castle Rock, Arizona

References: 1. Hock, C. W.: Clin. Med. 8:1932, 1961. 2. Marks, L.: Am. J. Gastroenterol. 27:180, 1957. 3. Palmer, W. L., and Kirsner, J. B.: Therapeutics in Internal Medicine, 2nd ed., F. A. Kyser, Ed., Hoeber, New York, 1953, p. 368. 4. Ryan, J. P., Jenkins, H. J. and Robinson, S. M.: J. Pharmaceut. Sciences 53(9):1084, 1964. 5. Vollmer, H.: Arch. Neurol. & Psychiat. 43:1057, 1940. Abst. J.A.M.A. 115:333, 1940. 6. Wharton, G. K., Balfour, D. C., Jr., and Osman, K. I.: Postgrad Med. 21:406, 1957.

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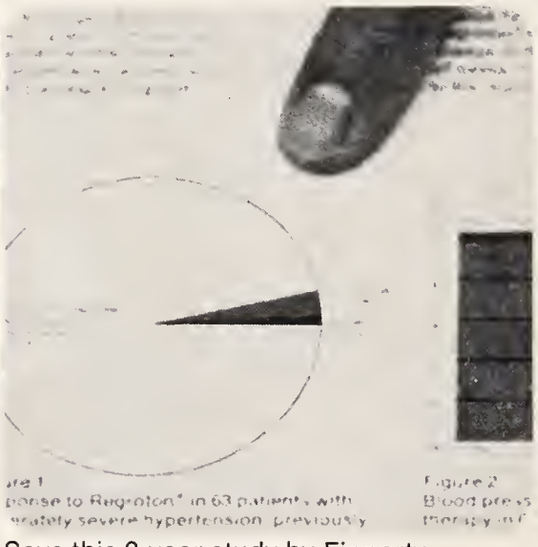

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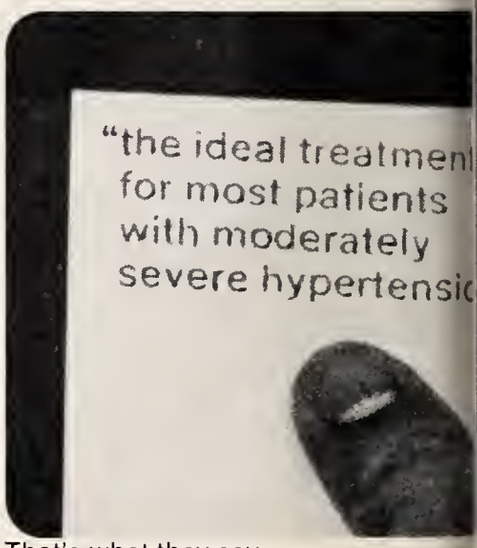

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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montre June 14–19, 1964.

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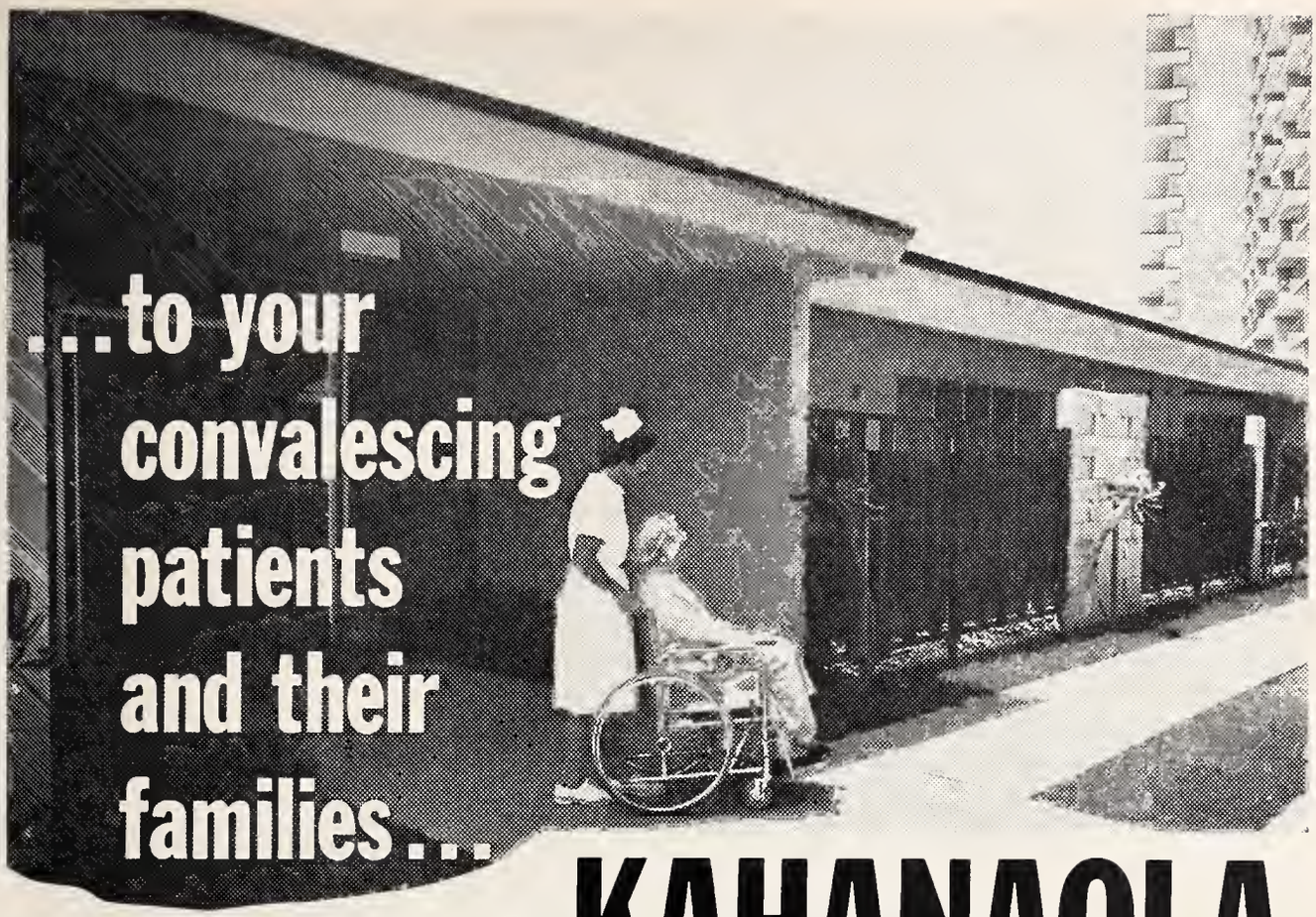

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• • •

Walther and Platt, in St. Louis, report (*Missouri Med.*, Aug. 1964) that a single 10-mg oral dose of Provera (medroxyprogesterone) diagnoses pregnancy by the fourth or fifth week about as accurately as a Friedman test.

• • •

Donald Rochlin & Co. report in *Surgery* (118:991, 196b) that Atabrine (quinacrine hydrochloride, Winthrop) makes it possible to tap patients with malignant pleural and peritoneal effusions much less frequently.

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Special Report

Outline of a Proposed Program for Development of a Medical Center for Kapiolani Maternity & Gynecological Hospital, Kauikeolani Children's Hospital, and The Queen's Hospital, Honolulu*

JOSEPH STOKES, JR., M.D., *Philadelphia*

THIS REPORT concerns the possible coordination and partial integration of certain hospital facilities in Honolulu. It is not alone the result of a few days of study of such facilities on site, but is also based on successive reviews of the health facilities of the city over a period of several years by a variety of experts in the field of health, with a number of whom the prospect for the possible coordination mentioned above has been discussed. It can be stated at the outset that all of the studies, both present and past, with which the author is familiar, are in general agreement that the formation of a hospital complex of certain autonomous units with maintenance of autonomy, but with integration of specific facilities—these being Kapiolani, Kauikeolani Children's Hospital, and Queen's Hospital—would provide outstanding advantages to the people of Honolulu.

The present recommendations are being made irrespective of any possible future establishment of a four-year school of medicine at the University of Hawaii. Thus it is believed the present recommendations fully stand on their own merits for patient care in the community without regard to the University. They are also being made with the endorsement in principle of the Executive Committee of the Health Facilities Planning Council.

BACKGROUND

The following items by no means cover the significant hospital background of Honolulu, but by virtue of their importance point towards the later recommendations.

The population of Oahu, a little over 600,000 in number, is now increasing at an approximate rate of four to five per cent per annum, a rate that would probably double the population in two or three decades. The growth of population is somewhat greater to the west than to the east. Although Children's† and Kapiolani hospitals have had a relatively low occupancy for 1963, 48 and 65 per cent respectively, the occupancy at Kuakini of 98 per cent, The Queen's 80 per cent, and at St. Francis 73 per cent, indicates an active demand for adult beds in general medicine and surgery.

Since these five hospitals necessarily are in vari-

* The terms Medical Center and Hospital Complex are used interchangeably in this report.
The present proposed program is restricted to certain key points in background information that bear directly on the purposes of this Report. Less pertinent data related to the variety of health facilities of the city are readily obtainable through the Health Facilities Planning Council.

† Approximate number of beds: Children's, 80; Kapiolani, 107; Kuakini, 183; Queen's, 438; St. Francis, 251.

ous stages of planning for rehabilitation and building—some far advanced—the requirement for adequate perspective in planning for the City, County, and State is clearly urgent. The rather recent creation (two years old) of the Health Facilities Planning Council has emphasized and clarified this need.

The astonishing rise in hospital per diem cost emphasized to and by the public has been permitted to overshadow the far slower rise of hospital costs per unit of population. Actually the extraordinary advances in prevention of disease in children and their rapidly decreasing length of stay in hospitals have kept their hospital costs closely in line with the national consumer price index when one properly relates costs to the total population. Even in adults under 55 to 60, the hospital costs as related to total population are not far out of line with the increase in the consumer price index. It is above this age that the number of days in the hospital per person begins to increase rapidly the hospital costs to the public. Also the cost advantages with respect to children can be readily nullified when the occupancy is low, as is well illustrated in Honolulu.

This low occupancy of the Children's Hospital (less than 50 per cent in 80 beds) and of the pediatric department of The Queen's Hospital (also about 64 per cent in 49 beds, a 14 per cent decrease from 1963) clearly points toward possible savings by coordination and partial integration. In addition, the occupancy of the Kuakini Hospital's 17 pediatric beds is placed at about 30 per cent, because of which it is planning to eliminate these beds within approximately two years.

Even at the Kapiolani Hospital (107 beds) which delivered about a third of the infants in Honolulu in 1963, there is but an approximate 65 per cent occupancy—a figure above those of the obstetrical departments of Queen's and St. Francis Hospitals (Kuakini Hospital abandoned its obstetrical department in April, 1964). Also the per diem cost is $60 at the Kapiolani Hospital.

THE RATIONALE FOR COORDINATION AND PARTIAL INTEGRATION IN A NEW HOSPITAL COMPLEX

There are many general reasons for coordinating smaller special hospitals with larger general hospitals—reasons that are cogent ones both for the general hospitals and for the special hospitals. There are particular reasons for recommending such action in Honolulu.

The general reasons will be considered first, as follows:

The costs can be permanently reduced and patient care improved by the following means:

1. Maintaining a single unit for heat, light, and power.
2. A single laundry (it may be best to contract for laundry service outside of the hospital complex).
3. The same library.
4. The same nursing quarters.
5. The same nursing education area.
6. The same intern and resident quarters.
7. A single dining room and kitchen with one purchasing department.
8. A single adequate auditorium.
9. The same building for parking.
10. The same business office with equipment for automation.
11. The same central supply room.
12. One pathological laboratory for all tissue work, autopsies, culture media, and routine specimens (special laboratories for microdeterminations *et al* and research microbiologic work or other research studies should be available to the special areas of patient care).
13. One radiologic laboratory with a pediatric radiologist attached for special pediatric studies.
14. A common outpatient and emergency service.
15. Common social work, occupational therapy, physiotherapy, public health nursing, and homemaker departments.

The particular reasons applying to Honolulu are:

1. The relatively low occupancy of the two special hospitals, Children's and Kapiolani, together with the present downswing of hospital bed requirements for children and of the number of births.
2. With the greater relative increase in population in the western end of the city, the need for medical care of Kuakini and St. Francis Hospitals, as general hospitals in that area is clear.
3. With the increasing population at the eastern end of the city, a better distribution of general hospitals would indicate the importance of one such hospital or hospital complex farther east than Queen's, as it is presently located somewhat west of the city's center.
4. The twelve and one-half acres of Queen's Hospital, as now existing, even with the addition of such limited additional areas as may be available could not well accommodate the medical services even now existing in the two smaller hospitals, Children's (3½ acres) and Kapiolani (4½ acres) despite the degree of coordination and integration suggested above. A larger hospital complex with possibilities of expansion for the three hospitals when joined in a center with a degree of separateness appropriate to each, would require an area of

greater flexibility and size for development than that now available at the present site of Queen's. In addition it has been estimated that the present requirements for renovation of the heterogeneous complex of buildings at The Queen's Hospital, including new ambulatory care facilities, would entail expenditures approaching ten to fifteen million dollars. If one adds to this figure the amount of the present drive for funds of the Kapiolani Hospital, 1½ million, and the amount considered necessary for outpatient department and other planned renovation at the Children's Hospital, the total would approach a considerable portion of the funds required for building a complex including the three hospitals.

5. The above considerations, as they appear at this time to the two smaller hospitals, suggest that a new site should be chosen for a new hospital complex. Kapiolani's apparently irrevocable decision not to move to Queen's site, coupled with Children's Hospital's concern over adequacy of space for future expansion at Queen's site, supports this reasoning.

MAJOR RECOMMENDATIONS

It is recommended:

- That the three hospitals (Queen's, Children's and Kapiolani) jointly develop a hospital complex with both suitable autonomy and suitable integration for each at a new site—preferably, although not necessarily, close to the University of Hawaii.‡
- That autonomy of each of the three member hospitals be maintained with its individual Board of Directors—a necessity arising from the legal requirements related to name, gifts, endowment, *et al.*
- That for effective development of the new complex, particularly as related to the above fifteen reasons for permanent reduction of costs and improvement of patient care, an Executive Committee composed of members of the three Boards of Directors (and Trustees) be established, as follows:

Queen's	5 members
Children's	3 members
Kapiolani	3 members

who would be responsible for establishing policies of the new medical center.

- That an over-all coordinating administrator be appointed by nomination from the Executive Committee with final approval of the three respective Boards of Directors and that he meet ex officio with the Executive Committee.
- That Administrators, assistant to the over-all Coordinating Administrator, be appointed for each of the three hospitals and that they meet ex officio with their own Boards of Directors with whom the over-all Coordinating Administrator would also meet at the same time ex officio.
- That the Children's unit should care for all pediatric patients, both inpatient and outpatient, and that the Kapiolani Hospital unit should care for all obstetric and gynecologic cases, both inpatient and outpatient.
- That the five chiefs of the five major services —medicine, obstetrics and gynecology, pediatrics, psychiatry, and surgery—be appointed as strictly full-time chiefs with their salaries shared by the three hospitals and based on an equitable formula (e.g., the number of bed days in each hospital for the prior year).
- That the present part-time staffs of each hospital retain their staff positions under the leadership of the five chiefs and that the present services in neurology, orthopedics, otolaryngology, ophthalmology, and other existing special areas continue as presently constituted.
- That in view of the increasing importance of, and reduction in expense resulting from, ambulatory care, the outpatient department of the three hospitals be joined in a single outpatient department with a full-time chief of clinics in charge, with adequate facilities for the respective hospitals, and with a salary of the chief of clinics paid by the three hospitals on the basis of a suitable formula such as that mentioned above.

MASTER PLANNING COMMITTEE

The above skeleton recommendations, if their general acceptance *in principle* is possible, [*They have already been unanimously approved in principle by the Boards of Directors of Children's and The Queen's Hospitals, meeting jointly.*—ED.] would require the appointment at the earliest possible moment from the three hospitals of a Master Planning Committee to review specific requirements for all areas related to patient care in the proposed hospital complex. This Master Planning Committee should include in its membership the executives of the State Health Department, of the Health Facilities Planning Council, and of the University of Hawaii Medical Education program, and should be useful not only for the hospital complex itself but for its relation to other similar services in the community.

The creation and building of the new hospital complex is sufficiently urgent to warrant establishing a definite time goal for its accomplishment. This is particularly important in view of imminent construction and renovation plans of several hos-

‡ Since the word Oahu means "gathering place," and since the three hospitals are named after members of the Hawaiian royal family, it may be appropriate to consider the possible name of the new complex as the Oahu Medical Center with each hospital retaining its royal name as a part of the complex.

pitals as well as the currently developing plans for the governmental civic center. It is recommended that a time goal for completion of the complex buildings be placed at a maximum of between eight and ten years. In the interim period, this will allow more orderly development of temporary measures to meet immediate needs of individual hospitals, as well as to properly phase longer-range building and renovation planning.

Discussions with the Presidents of the State and County Medical Societies, as well as similar discussions with the Chairman of the Legislative Committee of these two Societies, have indicated their general approval of the establishment of such a hospital complex.

Similar discussions with the Director of the State Health Department and his staff elicited strong approval of such a hospital complex.

It would be possible in such a complex to offer the other community health service groups or agencies space for rental, closely related to the outpatient department. Discussions have been held with a number of these agencies, representing such a broad interest in a variety of health areas.

In discussions with University personnel, it has been stated that it would be "helpful and most desirable" to have the new hospital complex close to the University, from which departments, professional skills, and technical equipment could be made readily available to the medical complex. Data processing equipment and services for accounting and medical statistical functions, as well as those resources of psychology, biology, and other skills, are but some examples.

The Shriners' Hospital as well as the Rehabilitation Center related to Children's Hospital should be offered the opportunity of relating their important facilities and functions more closely to such a complex. In addition, programs and services related to preventive medicine and public health should be incorporated in the new hospital complex, as well as services, both inpatient and outpatient, related to mental health and an evaluation clinic for mental retardation. These functions, as in the case of the Kapiolani and Children's Hospitals themselves, should be part of total patient and family care within the medical center, and not separate entities.

In the entire area of health planning, the large urban centers that have had the most extensive experience in hospital planning have been clear in their requirement that all building plans or long-range hospital plans be submitted to Hospital Survey Committees or Hospital Regional Planning Councils for review and approval prior to fund raising for, and building of, hospital units or complexes.

Although having but two years of experience in its present work, the Health Facilities Planning Council has attained a stature of knowledge and performance in Hawaii such that it is strongly urged that all hospital plans and hospital fund raising for alterations and buildings receive prior approval by the Council. It is only in this manner that Hawaii would be able to develop adequate patient care and medical education at reasonable cost.

CONCLUSION

There is an unparalleled opportunity for the three hospitals, Children's, Kapiolani, and Queen's, to assume leadership in meeting the immediate and long-range medical care needs of Honolulu and the State by jointly developing a new hospital complex.

The relatively small and inappropriate additional areas available at The Queen's Hospital site, as discussed with the Civic Center Master Plan Study Policy Committee, with the Executive Committee of the Health Facilities Planning Council, and with the three hospital Boards of Directors, do not provide sufficient flexibility for the unification of the facilities which should be used in common by the three hospitals, nor are the two smaller hospitals willing to face the jeopardy to their development represented by the somewhat contracted and awkward land area available at Queen's for such unification. [*The Boards of Directors of Children's and The Queen's Hospitals, meeting jointly, have already unanimously agreed "to look for available land with the assistance of the Health Facilities Planning Council."*—ED.]

A coordinated and partially integrated hospital complex unified into a medical center with the essential degree of autonomy outlined above and in close proximity to the University of Hawaii would provide intimate educational opportunities for the medical staffs, for the interns and residents, and in the field of nursing education. It would also provide increased opportunity for biomedical research by the hospital personnel, as well as assistance from the University Data Processing Center, and from its engineering, physics, and other departments, to the administrative and technological support of the three hospitals.

The three hospitals should prepare as soon as possible to explore thoroughly the advantages of coordination and integration along the general lines outlined above with appointment of the suggested Executive Committee of the Boards of Directors of the three hospitals and of the suggested Master Planning Committee. ■

Henry Phipps Institute, 4219 Chester Ave., Philadelphia, Pa. 19104.

Hospital planning can prevent a lot of problems from developing if we can all become mature enough to learn to depend on it.

Planning for Hospital and Related Health Facilities and Services

EDWARD W. COLBY, M.D., M.P.H.,* *Honolulu*

• *The need for hospital and related health facilities in any community is influenced most by three factors: the physician, the facilities, and the community's health services. The physician determines the amount and directs the distribution of utilization of facilities. Hospitals should try to coordinate their facilities and services with one another, not independently (and often extravagantly) as at present. Community facilities may serve as partial substitutes for inpatient beds, or may serve to shorten inpatient stays. How planning can help to evaluate, guide, and coordinate these factors in the community's interest is discussed in this presentation.*

IN JUNE of 1963, the Health Facilities Planning Council of Hawaii was established to help coordinate the planning and development of hospitals and related health facilities. The Council, as a voluntary organization composed of civic-minded individuals representing industry, commerce, the legislature, the press, education, labor, religion, hospitals, and medicine, is without definitive authority other than that of public opinion.

The objective of health facility planning is to promote the establishment and coordination of a sensible pattern of efficient, economical community health services, adequate in both number and quality. The Council fully recognizes that in seeking this objective, its functions are confined to developing a basic area plan for health facilities; for promoting coordination among hospitals and related health facilities; and for stimulating public knowledge and understanding of the plans and need for these facilities. The responsibility for development of the necessary physical plant, the raising of funds for them, and the provision of services in them must be that of the individual facility and is not within the Council's area of responsibility.

"Medicine's interest in community hospital planning is natural and inevitable. The doctor is confronted daily with two basic problems—to secure better health facilities for his patients and to provide patients with health care at the lowest cost compatible with excellence."†

There are three elements essential to high quality health care:

1. The practicing physician
2. The hospital together (with related health facilities)
3. Community health services

THE PHYSICIAN

It is the physician who directs the treatment and supporting services rendered to the individual patient. It is he who determines the extent to which hospitals and related health facilities and other services are utilized in providing his patient with the best of medical care. These services may be provided in a private office, in an ambulatory service unit, in an "inpatient" setting for acute or long-term care, or through varying combinations of all of these.

Physicians can "positively" or "negatively" influence health facility utilization, since it is they

* Executive Director, Health Facilities Planning Council of Hawaii.

† Waldo O. Mills, M.D., Past President, King County (Washington) Medical Society.

who determine who is hospitalized, and where, and for how long. Physicians therefore—to a considerable degree—determine "over" or "under" use of facilities.

Further influencing factors in utilization are:

1. Acceding to "patient demand" which "forces" physicians to admit patients to a hospital or other specialized treatment facility when such inpatient care is not essential. (For example: home conditions, limited living quarters, or inability or unwillingness of family members to give home nursing care.
2. The use of a highly specialized type of facility when a less specialized one would serve the patient's needs. (For example: unwillingness of family to accept, or physician to recommend, nursing home care in lieu of hospital care; or the unavailability in the area of adequate facilities providing less intensive type of care.)
3. Prepayment health insurance plans, which exclude certain conditions, or benefits: diagnostic studies, nursing home care, etc.
4. Unavailability or inadequacy of ancillary *community health* services; non-acceptance of or failure of understanding of purpose or function of such services either by patient or physician (for example—public health nursing services, homemaker services, medical-social work services).

Patient care has become increasingly hospital-centered, and there is every evidence this tendency will develop to an even greater degree in the future. Progress in medical technology has made both the physician and the patient more dependent upon supportive skills of other personnel.

The vastly increased knowledge and complexities of present day medical care are placing increasing dependence upon the team concept among professional and technical skills making use of complex, expensive equipment provided in hospital as well as in out-of-hospital settings. Intensifying this teamwork function is the growing acceptance of the concept of *progressive patient care*, in which the patient's medical care is adapted to the degree of care required, in terms of acute intensive care, intermediate care, self care, long-term care, organized home care, and ambulatory care.

Physicians could help greatly by guiding patients to appropriate types of facilities, commensurate with their medical care requirements, and by sharing various facilities with their colleagues on an equitable basis, in order to assure that community facilities will be utilized effectively and efficiently before more facilities or competing services are added.

HOSPITALS

A hospital's primary function is to provide a setting in which the care of the sick and injured can be more effectively rendered by physicians through the use of assembled resources of specialized equipment and skilled ancillary personnel.

Although the dependence upon "equipment," ancillary "skills," and convenient facilities is acknowledged, service to patients should be the fundamental concern and the common goal of both hospital and physician. Whether the degree of illness, or need for required care, calls for acute short-term care, convalescent care, long-term care, diagnostic studies, or organized home care services, and whether these are specific services in the same facility or special services in separate facilities, they *must* be coordinated, one with another, in the area.

Certainly there is glamour and "status" in open heart surgery, in cobalt bombs, and in electron accelerators, costing thousands to millions; but can the public bear the cost of having one of each in several closely located hospitals? Must these space age developments take place at the expense of less glamorous but extremely beneficial (if well organized) preventive-diagnostic services—for example, well-child services, adolescent clinics, child guidance clinics, handicapped evaluation services, well-oldster clinics, and similar services—which can function effectively on an ambulatory care basis?

In retrospect, individual hospitals have had a singular tendency to develop as independent facilities rather than as an integral part of a total community-related service network. Factors which have influenced this have been many and diverse, including religious motivation, philanthropic causes, physician incentive, ethnic concerns, special disease entities, industrial convenience, and governmental expediency. While the passage of time has seen the elimination of many hospitals, with a simultaneous reduction in multiplicity of sponsorship, even in these current days of enlightenment there remains much vying for prestige among the several hospitals.

The public nature of hospitals must be recognized, since all are extensively supported in part by contributions or by the tax dollar or both. Hospitals, regardless of ownership, are community service institutions built, owned, and operated for community purposes. Hospital governing boards and administrators have a duty not only to provide adequate facilities, but to see that they are shared among physicians on an equitable basis, *and* that they are utilized efficiently and effectively in the total community service before more facilities are added. Governing boards and physicians *must plan* together, *must* be willing to modify services in consultation with each other and *must effectuate* plans together—mindful that the major interests of each are protected—in the public interest.

In the best interests of both the community and the individual hospitals, it is essential that there be mutual exchange of plans for building and of proposed service program changes. In addition, the

development of administrative and collaborative service arrangements would help secure the most effective utilization of equipment, special professional skills and patient beds and services, without the unnecessary duplication of service.

In general, hospitals may be identified either as (1) providing primarily community medical service or (2) functioning as a combined medical service–teaching facility.

Although teaching and research are valuable components of good patient care and must be considered in community health facilities planning, not every hospital need provide the full spectrum of these activities. There is an obligation for some hospitals to assume responsibility for intern and resident training as well as for other professional education activities. It is equally important that other hospitals refrain from so doing.

COMMUNITY HEALTH SERVICES

This collective term indicates both governmental- and voluntary-sponsored services rendering patient care, primarily in other than "inpatient" settings, in support of patient care provided by privately practicing physicians, or rendered in hospitals or related health facilities. Some examples of such health services include public health nursing services, coordinated home care services, social service, occupational and physical therapy, nutritional guidance, equipment and appliance loan services, vocational education and counseling, and centralized referral services. These services may be rendered in the home, in outpatient clinics, in public health centers, in institutions, in industry, or various combinations of these.

Always under the guidance or direction of physicians and others of the health professions, these "community centered" services may, if properly developed, be utilized as partial substitutes for inpatient services and hence to lessen the need, or to shorten the time required, for inpatient stay. If well organized and coordinated, these community services can simplify the transition of patients among facilities developed to provide graduated levels of care and to provide continuation of medical supervisory services.

Increasing participation is developing, with official health agencies (state, county, and local health departments) and voluntary health agencies joining with hospitals and members of the health care professions in endeavoring to meet problems of health care in the community, and these joint endeavors must be encouraged.

While "education" has beneficially stimulated the public to seek more medical care, it has also resulted in unwarranted demands and increasing costs for service. In the clamor for the "best and latest equipment in every hospital," "a hospital in each community," little attention is paid to the resultant financial outlays—until the hospital rates go up again!

Increasing concern is expressed over the mounting costs of medical care services. Growing numbers are covered by prepayment health insurance plans. Yet, paradoxically, "health insurance" has led to excessive utilization of some acute-care facilities when such are not essential to the patient's immediate needs. Sometimes this is because the particular type of long-term care facility required is not available in the locality, sometimes because the insurance benefits allowed do not cover certain types of service (for example, diagnostic services) when these are rendered outside a hospital.

ONE ANSWER: PLANNING

What then is the answer to this entanglement of problems? How can all the elements essential to good medical care be brought into concert? How can a balance be struck so that "wants and demands" may be balanced with "practical economic attainment"?

Effective planning can provide much of the answer. Planning, to be effective, must coordinate the services of all types of facilities through which patient care is provided. Planning must be the primary responsibility of *each* of the essential elements in health care (physicians, hospitals and related health facilities, and community health services), but implemented in terms of a shared responsibility of all of these and in terms of total community needs. Each agency may be providing the highest standards of service, yet without insuring that comprehensive health care is available to the people. There is needed a coordinating mechanism which can, with objectivity, appropriately interrelate the services and functions of the many health care resources and agencies.

To keep pace with advances in medical science, an expanding economy and a growing population; to see that there is provided a proper balance of good-quality preventive, diagnostic, treatment, and rehabilitative facilities; and to provide the physician's patients with high-grade health care at the "lowest cost compatible with excellence," the HFPC has set forth the following principles which are basic to effective planning:

1. An orderly pattern of expansion, improvement, and modernization of all types of hospitals (and related health facilities) is essential, to assure properly located accommodations and readily available services in efficient, adequately staffed patient care facilities which are developed to meet not only present but projected future needs.
2. Health facility planning for Hawaii requires greater

emphasis upon adaptation of *existing* facilities and services to present and future predictable requirements, than upon new independent facility construction

3. The assurance of continuity of patient care requires a balance of preventive, diagnostic, treatment, and rehabilitation services readily available to both acute and long-term care facilities.
4. The several types of hospitals and related health facilities (voluntary, governmental, and proprietary) *must* develop mutual working arrangements in order to minimize the need for additional facilities or services; to discourage unnecessary duplication of specialized, expensive, infrequently utilized equipment; and to most effectively utilize special professional skills.
5. Active physician participation in health facilities planning is essential.
6. Personnel training, continuing education, and research are essential to good patient care and must be given consideration in community health facility planning.
7. Although health facility planning must be a primary responsibility of *each hospital* board and medical staff, the Health Facilities Planning Council, in order to fulfill its coordinating function, must have an early opportunity to review proposals for renovation, construction or service program modifications in each facility and to assess these in terms of over-all community needs.

Council planning is not concerned simply with *facilities* but rather with the coordination of facilities for efficient health care *services* to people. The Council should serve as a catalyst in the development of actual working relationships and cooperative arrangements between and among health facilities, for total community benefit. In so doing, the Council works closely with individual hospitals and other groups having planning interests or responsibility, particularly the State Health Department's Division of Hospital and Medical Facilities.

Planning is a process, not a document. To be effective it must: (1) Be flexible. (2) Be continuous. (3) Be practical and realistic.

What are the economic advantages to planning? Conversely, what are likely to be the consequences of *not* planning?

- Fragmented, inadequate medical care services in the community.
- Patient dissatisfaction.
- Waste of professional time and talent.
- Reduplicated costly equipment.
- Improper location and distribution of various types of facilities.
- Excessive costs to individual, to third party payor, and to community. Bear in mind that every two and one-half to three years the operating costs of a hospital equal, or exceed, the initial construction costs!
- Unfilled beds and unused beds.
- Every empty hospital bed costs a hospital two-thirds as much to maintain as it does one with a patient in it.
- Beds built and not needed cost the community unnecessarily. New general hospital beds cost approximately $25,000 each to build. New nursing home beds cost approximately $10,000.

Is there any valid reason why six closely neighboring hospitals must construct and operate six laundries? Can there be no economic advantages realized in the operation of a central purchasing service? Will not a catered food service to hospitals realize savings through savings in storage, in personnel services, and in convenience? Cannot extremely costly equipment be jointly utilized by several hospitals?

"The haphazard development of hospital service of the past must not be extended to the future. If the professions and the public fail to take full advantage of their opportunity to realign hospital care to match needs and demands of the public, they will contribute to the bankruptcy of voluntary effort in the hospital field. Intelligent planning now will provide hospitals with an opportunity for growth—growth in effectiveness, in service, and in public appreciation." (1947 U. S. Commission on Hospital Care.)

If areawide planning is going to be effective, it must become an "attitude," and of necessity will have to transform competition into cooperation and coordination. ■

1441 Kapiolani Blvd.

Institute on the Care of Premature Infants*

Introduction to the Institute

JOSEPH PALMA, M.D.,† *Honolulu*

IT IS a privilege to have been invited to make a few introductory remarks at this Institute on Premature Care. You are here to improve your knowledge and skills in this highly specialized field. As a clinician and long-time advocate of improved patient care in all phases of medicine, I am gratified to note that this is the central theme of your meeting. If as a result of these four days of lectures and discussions, one infant entrusted to your care survives who might otherwise have perished, then this expenditure of energy, time, and money will have been worth while. Important as improved premature care is in the salvaging of fetal life with consequent reduction in mortality rates, there will not be a breakthrough toward the irreducible minimum until further research solves the problem of the many causes of prematurity.

Admittedly, this is a difficult task, embracing as it does such subjects as:

The socioeconomic factors
The health of the parents before conception occurs
Placental dysfunction
Defects in the male contribution
Incidence of prematurity in different population and racial groups
Possible genetic inborn timing of the length of the gestation period
Dangers to the mother and child caused by unbalanced diet
Fatigue
Smoking
Infection, obvious as well as the nonspecific genitourinary
Age of the mother
Birth order and multiple pregnancies
Illegitimacy
Low conception ability
Location of the placenta in utero
Premature separation of the placenta

This by no means exhausts the list but emphasizes the fact that even four days devoted to the care of the premature is only a prelude to the long years of study and research that lie ahead.

I have had a rewarding, stimulating, and exciting lifetime in my 43 years in pediatrics—39 of

* Presented at the Mabel Smyth Auditorium, April 29–May 3, 1963.
† Dr. Palma died August 4, 1963.

them continuously in Honolulu—and I am sure a comparable future lifetime will see as many and more discoveries in this field, as yet not even dreamed of. When you realize that it was not until the turn of the century that prematurity as an entity was recognized and described, my 43 years constitute a pretty full lifetime.

Forty years ago and for some years thereafter, the only premature center in the then Territory of Hawaii was located in the old Kapiolani Maternity Home, now the Kapiolani Maternity and Gynecological Hospital, and consisted of a Miss Styles and myself. I would like to digress a moment to pay public tribute to this remarkable Scotswoman who made it her personal project to salvage as many of these prematures as was humanly possible with the meager tools available at the time. She breathed life into these small organisms by sheer force of will and determination that the faint flickering flame of life would not be extinguished. My role was that of a policeman. I merely stood at the door and prevented the numerous attending physicians from entering the premature nursery and pawing over the infant. You see, our main problem at that time was pyogenic skin infections.

We made our own oxygen tents, more like a quonset hut, out of old x-ray film, and although the preemies may not have been greatly benefited, at least there was no retrolental fibroplasia in the ones that survived. Vitamins had not been discovered, so there was no name for the substances known to be in cod liver oil that gave us healthier babies and prevented rickets. We had no knowledge of iso-immunization or the proper use of transfusions. There were no specific drugs or any of the other paraphernalia that are accepted as a routine matter of fact in modern nurseries. Yet we did pretty well, and I could narrate to you many an interesting tale concerning those preemies who are now healthy, happy parents, and who now bring their children to me for well-baby care.

The smallest surviving infant that I remember was a 1 pound 2 ounce child and the second smallest was a 1 pound 8 ounce child. I suspect there were others. It is discouraging to record that the tiniest infant survived, only to be killed in a motorcycle accident about five years ago. The most interesting one, weight of 3 pounds 4 ounces, was taken from the mother by low section because of threatened eclampsia. The child did not seem viable, and as the mother promptly had a convulsion on the delivery table, all hands were concerned with her problem. An hour later, much to the supervising nurse's astonishment, this tiny child was breathing and protesting vigorously over its harsh fate of being deposited in the wastebasket with the soiled linen. She has now for 32 years borne up under the nickname of "Sute-go," pronounced "Shtaygo," which is Japanese for "throw away," and is now the mother of two healthy children. But time is short.

As I look at this large assemblage of dedicated people gathered together as a result of hours of hard work of a planning committee of 12 individuals, a program that marshals the best of our local talent and is loaded with the prestige and importation of a distinguished pediatrician and researcher in the field of prematurity, and contrast this with the pedestrian and often unglamorous beginnings of the many years ago, I am rendered speechless!

Thank you. ■

Four or five of every 20 premature infants will suffer from RDS and nearly half will succumb to it. How can you help?

Respiratory Distress Syndrome of the Newborn

A Retrospective Study of 100 Cases

MICHAEL SCHWARTZ, M.D., and
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• *The respiratory distress syndrome may be defined clinically according to the diagnostic signs listed by Usher.*[15] *These are "chest retraction, expiratory grunting, and decreased air entry on auscultation, present during and persisting beyond the first three hours of life, in the absence of coexisting disease."*

The purpose of the study herein reported was to compile retrospective figures on incidence, survival rate, etc., of the respiratory distress syndrome of the newborn and to compare them to like figures in the literature. For the sake of completeness, treatment and theories of etiology will be mentioned at the close of this paper. Its primary aim is to describe a retrospective study and not to provide an authoritative discussion of treatment or etiology, however.

AT The New York Hospital during the period November 17, 1960 through March 10, 1962, 360 cases of premature birth were reviewed. Of these, 100 cases with the diagnosis "respiratory distress syndrome" were singled out for further study. Infants of diabetic mothers were excluded. Thus, the apparent incidence of the respiratory distress syndrome (RDS) is 100/360 or 27.8 per cent of premature births to nondiabetic mothers. This is a much higher figure than that of 14 per cent suggested by Usher.[15] The subtraction of six cases of RDS which lacked both positive chest x-ray and autopsy findings (see below) may reduce the incidence from 27.8 to 26.1 per cent; nevertheless this figure still is higher than Usher's. It would seem fair to estimate the incidence of RDS at 20 to 25 per cent of premature births.

TABLE 1.—*Religion (in 85 of 100 cases).*

CATHOLIC	PROTESTANT	JEWISH
51.8%	36.5%	9.4%

The cases were studied according to religion, race, sex, those given or not given a glucose-bicarbonate solution (Usher's solution), birth weight, positive chest x-ray findings, correlation of x-ray findings with those at autopsy, correlation of mortality with time of discovery of the condition, the presence or absence of significant EKG changes, and the administration of digitalis derivatives.

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This study was conducted in the Premature Infant Nursery of the Department of Pediatrics at The New York Hospital. The data were presented at an Institute on the Care of Premature Infants given April 29–May 3, 1963, in Honolulu, Hawaii.

TABLE 2.—*Approximate ratio of religions of inpatients at The New York Hospital.*

	CATHOLIC	PROTESTANT	JEWISH
Wards	60-65%	15-20%	15%
Private Floors	15%	60%	25%

While the ratio of the races at The New York Hospital is unknown to me, it is my impression that there are fewer colored than white patients.

TABLE 3.—*Race (in 85 of 100 cases).*

NEGRO	WHITE	ORIENTAL
17.6%	80.2%	1.2% (1 case)

SEX

While the difference in incidence between the races may or may not be significant, it is interesting to note that within each race the sex ratio is fairly constant.

TABLE 4.—*Sex of cases.*

NEGRO males/females	WHITE males/females	TOTAL CASES males/females
60/40 = 1.5:1	63.6/36.4 = 1.75:1	61/39 = 1.56:1

The incidence of the RDS seems to be 1.5 to 2 times as great in males as in females. In a smaller series of 20 cases of RDS, Butterfield *et al.*[4] found only three of the patients to be female—a ratio of male/female of 6 to 1.

MORTALITY

It has been reported by Usher[15] that not only is the incidence higher in males than females, but that the prognosis is worse in the former. This assumption is based upon his finding that 11 per cent of males and four per cent of female premature infants died of RDS. However, this could simply be a reflection of the greater incidence in one or another sex and not of what happens once the syndrome develops in either sex. In support of this last statement was my finding that once the disease occurred, the mortality was the same regardless of sex: 48.9 $\pm$ 0.3 per cent.

Strang[14] reports the total mortality to exceed 50 per cent.

BIRTH WEIGHT

Sixty-one per cent of the patients weighed 1,500 grams and over. Of these, 65.5 per cent lived and 34.5 per cent died. Of the 39 per cent who weighed 1,499 grams or less, 25.6 per cent lived and 74.4 per cent died.

The incidence of the RDS seems greater in babies of birth weight above 1,500 grams. However, because more babies are born weighing over 1,500 grams, the chances of a higher incidence are greater in this group. The prognosis in those weighing under 1,500 grams is more than twice as bad as it is in the heavier infants. Similarly, Usher[15] found the death rate to be 66 per cent (74.4 per cent in this series) for those under 1,500 grams and 31 per cent (34.5 per cent in this series) for those above 1,500 grams. He states that the incidence is ten times as great in 1,200-gram babies as in 2,400-gram babies.

POSITIVE CHEST X-RAY

When the RDS is due to pulmonary hyaline membranes, there is a typical x-ray picture which has been described by Usher,[15] Donald,[8] and Steiner[13]: a generalized reticulogranular pattern of the lung fields, an "air bronchogram," and a widened superior mediastinum with slight cardiac enlargement. Of those diagnosed as RDS, 32 per cent had chest x-rays indicative of hyaline membrane disease. Donald's[8] figure of 26 out of 89 cases or 29.2 per cent of x-rays compatible with hyaline membranes is in good agreement with mine.

These data raise some doubt about the diagnosis of hyaline membrane disease. Perhaps the diagnosis is being made too quickly by people not familiar with the disease; or respiratory distress from any cause cannot be well differentiated from the so-called "idiopathic respiratory distress syndrome;" or hyaline membrane disease (HMD) is not the RDS seen clinically, and the two terms should not be used interchangeably; or HMD may be one of many causes of the RDS. Each of these alternatives probably has an element of truth; the choice of the most truthful statement could be the subject of another study.

Of the 32 per cent of cases with positive x-rays, 37.5 per cent lived and 62.5 per cent died. Thus a positive chest x-ray for HMD indicates an unfavorable prognosis. Donald[8] reported 53.8 per cent deaths in his cases with positive chest x-rays.

AUTOPSY FINDINGS

The total number of autopsies was 45. The following is the correlation between positive findings for hyaline membranes at autopsy and during life on x-ray:

CHEST X-RAY POSITIVE		CHEST X-RAY NEGATIVE	NO X-RAY TAKEN
Autopsy Pos	Autopsy Neg	Autopsy Pos	Autopsy Pos
37.8%	2.2%	17.7%	17.7%

A positive chest x-ray is a fairly good indication of HMD. Of the remaining 24.6 per cent not included in the above chart, there were 13.3 per cent in which both x-ray and autopsy were negative for HMD and 11.3 per cent in which chest x-rays but not autopsies were done. One wonders if the cases with no HMD on x-ray or autopsy were misdiagnosed.

TABLE 5.—*X-ray and autopsy findings in six cases.*

CASE NUMBER	X-RAY FINDINGS	AUTOPSY FINDINGS
886 772	Atelectasis	Pulmonary atelectasis and capillary engorgement of lungs Left ventricular dilatation of the heart Splenomegaly
885 450	Normal chest x-ray	Multiple congenital anomalies of the limbs Pulmonary atelectasis Subarachnoid hemorrhage
907 438	Bilateral pneumothorax	Pulmonary atelectasis and hemorrhage Emphysema
872 594	Possible HMD	Pulmonary atelectasis
896 750	Questionable HMD	Intraventricular hemorrhage Subarachnoid hemorrhage Few scattered hyaline membranes (hardly a cause of death)
(could not relocate chart for history no.)	No definite evidence of HMD	Bronchopneumonia Occasional hyaline membranes

Of the 45 autopsies performed, 83.6 per cent were positive for hyaline membranes. Butterfield *et al.*[4] reported positive findings in nine out of eleven autopsies, or 81.8 per cent.

TIME OF DIAGNOSIS AFTER BIRTH

At the first physical examination, RDS was diagnosed in 77 per cent of the cases. Of these 57.2 per cent died and 42.8 per cent lived. The proportion diagnosed subsequent to the first physical examination was 23 per cent; 78.3 per cent of these died and 21.7 per cent lived.

Why are some cases of the syndrome diagnosed almost immediately, while others are discovered only after a waiting period? Is this an indication that more than one disease process is occurring; or, that the same disease process is operative in both situations but seemingly at different times, depending on the acuity of the observers? It is clear that when diagnosis is delayed, the syndrome has an unfavorable prognosis. It is because at this point the infant is in a later stage of his disease and thus is less apt to respond to therapy?

MISCELLANEOUS FINDINGS

On 27 of the cases under study, electrocardiograms were performed; 29.6 per cent of these were abnormal. Of the cases with abnormal recordings, 75 per cent survived. Unfortunately, the abnormal changes were not quantitated as to type and severity. Usher[15] notes the following EKG changes:

(a) Impaired myocardial activity between 12 and 60 hours of age.
(b) QRS and P-R interval prolonged.
(c) 2:1 heart block and other signs of impaired atrioventricular conduction.
(d) Flattened or prolonged P waves.
(e) Prolonged Q-T interval.
(f) Low QRS voltage in standard leads.
(g) Left axis deviation.
(h) Left ventricular preponderance.
(i) Occasional peaked T waves.

Usher relates the EKG changes and possible heart failure to hyperkalemia. This will be discussed in the sections dealing with etiology and treatment.

Digoxin was given to 61 per cent of the cases under study, with a survival of 44.3 per cent. These uncontrolled figures are of little value for anything more than just their statement. When a relation between the presence of the syndrome and blood chemistries was sought, it was found that only 14 per cent of all the cases had blood drawn for any determination!

ETIOLOGY AND TREATMENT

Various etiologies of the RDS have been proposed at one time or another. A partial list follows:[3]

I. Exogenous:
  Aspiration of gastric or amniotic contents
  Aspiration and also transudate
  Oxygen administration
II. Endogenous:
  Immaturity of lung
  Absence or malfunction of alveolar surface-active protein (surfactin)
  Absent lung plasminogen activator
  Primary left heart failure
  Capillary transudation of unknown cause
  Chemical: uncompensated acidosis, hypoglycemic "shock"
  "Vasomotor instability"
  Parasympathetic hypofunction
  Unopposed sympathetic outflow
  Involvement of respiratory endothelium or basement membrane
  "Toxin" causing both premature birth and membrane

Thus, the varied theories of etiology cover many areas and seem to be unrelated. In an attempt at simplification, Figure 1 was drawn to show the relationship between the etiologies. Each etiology is accompanied by a reference in which a more detailed discussion may be found.[13]

A surface-activating phospholipid (predominantly dipalmitoyl lecithin) is secreted by the endothelial mitochondria of the human lung in the fifth to seventh month of gestation. Its absence before this time may explain the high incidence of

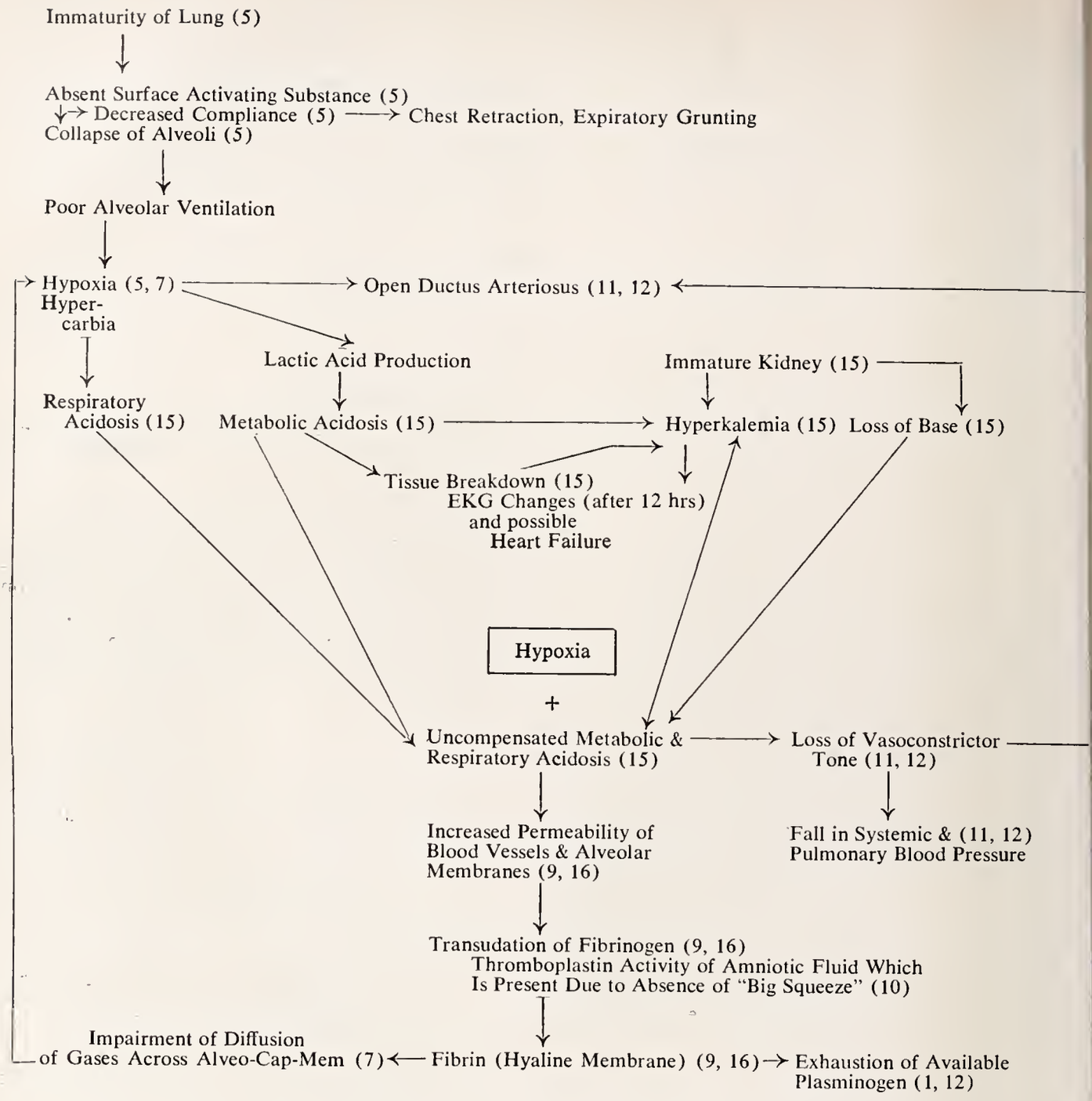

FIG. 1.—*The sequence of events in respiratory distress syndrome according to some current theories.*

the RDS in premature infants. This surfactant is necessary to equalize the surface tension (as would a detergent) in the alveoli as they expand and contract, to bring about an even distribution between larger and smaller alveoli and to reduce the muscular effort required for respiration by decreasing the overall pressure.

Absence of surfactant[5] leads to decreased lung compliance, alveolar collapse, and hypercarbia and hypoxia with all their sequelae (Figure 1). Hypercarbia leads to respiratory acidosis which is associated with a hypoxia-caused metabolic acidosis.[15] The immaturity of the kidney leads to loss of base, thus causing an uncompensated respiratory and metabolic acidosis.[15] Potassium retention by the immature kidney and acidosis-induced potassium release from intracellular sources cause a hyperkalemia.[15]

Usher[15] has made his therapeutic attack upon the acidosis and hyperkalemia with the use of bicarbonate and glucose solutions. He theorizes that the bicarbonate will correct acidosis and hyperkalemia, and that glucose will aid in increasing cellular metabolism thus facilitating return of potassium to the cell. Usher claims significant decreases in mortality, from 45 to 25 per cent in all cases, and from 95 to 60 per cent in those babies weighing less than 1,000 grams.

In the present study, Usher's solution was given to 74 per cent of the cases; 43.3 per cent lived and 56.7 per cent died. The 26 per cent not given Usher's solution had a survival of 75 per cent. However, this was entirely uncontrolled; Usher's solution was probably given to those babies with the worst prognosis. It is therefore impossible to come to any conclusion concerning the Usher regimen as employed in this study. Usher himself states that 50 per cent of cases will survive on conservative management.

Uncompensated metabolic and respiratory acidosis cause loss of vasoconstrictor tone and may explain the fall in systemic and pulmonary blood pressure and increased left to right shunt in a widely open ductus demonstrated by Rudolph *et al.*[11] and Smith.[12]

Hypoxia and acidosis are known to cause increased membrane and blood vessel permeability.[9, 16] The finding, by Gitlin and Craig,[9] that hyaline membranes are chiefly fibrin, leads one to postulate that fibrinogen crosses the alveolar-capillary membrane into the alveoli.[16] Amniotic fluid with its high thromboplastin content is present here.

Higher concentrations of amniotic fluid are present when the infant's thorax has not been compressed by passage through the birth canal, as is the case in cesarean section.[10] (Of the cases under study, 10 per cent were delivered abdominally.) Fibrinogen is converted to fibrin.

The great amount of fibrin may exhaust the available sources of plasminogen, thus explaining the markedly diminished amounts of this enzyme found in premature infants with the RDS.[1] These membranes may obstruct air flow to distal alveoli,[7] or possibly cause an alveolar-capillary block. Hypoxia will result, thus completing medicine's ubiquitous vicious circle (see Figure 1).

This discussion of etiology is meant to be only theoretical, for the cause of the RDS is still unknown. Therefore, management of the condition rests upon (1) recognition of the physiologic disturbances present in the individual cases, and (2) correction of these disturbances. The use of intravenous antiacidosis solutions must be individually adjusted according to the pCO_2, pH, and bicarbonate of the arterial blood. This was done by Usher in his study mentioned above, but not in the present study when the Usher regimen was used. At the time of the present study, the Department of Pediatrics was unable to obtain a pH meter.

In addition to the correction of the biochemical abnormalities, other supportive measures are in use:[17] high oxygen concentrations up to 90 per cent, humidification, and sternal traction.

SUMMARY

One hundred cases of respiratory distress syndrome were studied retrospectively:

The incidence of the RDS is 20 to 25 per cent of premature births.

Data are insufficient to make any statement with reference to religion or race. However, there may be a lower incidence in Negroes.

Irrespective of race, the RDS is 1.5-2 times more common in females than in males.

Once the RDS develops in an individual patient, the prognosis is unrelated to sex.

Of the 61 per cent of patients weighing 1,500 grams or more, 65.5 per cent lived and 34.5 per cent died. Of the 39 per cent of patients weighing under 1,499 grams, 25.6 per cent lived and 74.4 per cent died.

Thirty-two per cent of the patients had positive chest x-rays for hyaline membrane disease. Of these, 37.5 per cent lived and 62.5 per cent died. Thus, a positive chest x-ray suggests a guarded prognosis.

RDS was diagnosed on first physical examination in 77 per cent. Of these, 57.2 per cent died and 42.8 per cent lived. Of the 23 per cent diagnosed subsequent to the first examination, 78.3 per cent died and 21.7 per cent lived.

Abnormal EKG tracings were found in 29.6 per cent of 27 per cent of the cases. (Only this latter per cent had tracings performed.) ■

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Infections acquired by the newborn before, during, or just after delivery present a variety of special problems, sometimes requiring special treatment.

Infections in the Newborn

CALVIN C. J. SIA, M.D., *Honolulu*

• *Congenital infections may be acquired either transplacentally or directly by the "ascending" route; toxoplasmosis and certain viral infections are the most important ones here. During delivery, bacterial or viral infections of the eyes or vaginal tract are most common. In the postnatal period a wide variety of systemic infections, most often bacterial, may be encountered. A long labor predisposes to infection. Early suspicion and diagnosis, and early antibiotic treatment, are important.*

IN DISCUSSING the infectious conditions in the newborn period, I would like to break this down into three periods relating to the occurrence and routes of infections: 1, before birth; 2, during delivery; 3, in the neonatal period.

CONGENITAL INFECTIONS

Infections acquired before birth are considered transplacental or primary congenital illness. The transmission of infection occurs through the placenta and the maternal circulation. This group includes most of the viruses and a few rarer diseases.

Toxoplasmosis is a protozoan disease, widespread in the animal kingdom. Human beings acquire the disease by contamination of food from rodents. The illness may be similar to infectious mononucleosis. A pregnant mother may transmit this disease transplacentally to her newborn infant. In the infant, one may find the classic triad of micro- or macrocephaly, chorioretinitis, and calcification of the skull. The infant may also have jaundice. The diagnosis is made by the Sabin-Feldman dye test, a specific serological test, or by the isolation of the organism. Treatment has been with Daraprim (pyrimethamine) and sulfadiazine. Although this condition is rare in Hawaii, one must be aware of this if any of the signs or symptoms are noted.

SALIVARY GLAND DISEASE

Another transplacental infection is cytomegalic inclusion disease due to a salivary gland virus. The symptoms in the newborn period may be jaundice, hepatosplenomegaly, petechiae, bleeding during the first week of life. The diagnosis is made by virus isolation in the areas where this is possible, usually taking about five days, or by seeking the abnormal cells in the urine. The positive findings in the urine require a freshly voided specimen examination. There is no serological test for this virus as yet. Treatment is symptomatic.

Coxsackie B virus is one of the more difficult viruses in the nursery. There are six types, the most severe being the encephalomyocarditis type. This virus may spread rapidly in a nursery, bringing about sudden deaths. To halt the epidemic spread requires complete closure of the nursery and strict isolation techniques.

The herpes simplex virus may be of the visceral type with liver involvement or of the encephalomeningitis type, the rapidly fatal one. Again, early recognition, isolation and closure of nursery may be necessary to control a possible epidemic.

Other transplacental infections are malaria, typhoid, polio, insect-borne encephalitides, and sometimes, although rarely, syphilis. Hepatitis, the "giant cell" type, is also thought possibly to be transmitted through the maternal circulation.

ASCENDING INFECTIONS

Infections acquired before birth may also be of the ascending type. This is related to transmission through the placental membranes, commonly known as the amniotic fluid syndrome. This is usually due to premature rupture of the membranes or prolonged labor, usually beyond twelve hours. It is important to consider the length of labor and duration of rupture of membranes, and its effect on the infant. The routes of transmission to the infant may be due to aspiration of infected amniotic fluid with the subsequent development of congenital pneumonia, or the invasion of circulation of the infant, or sepsis. The common organisms are usually the bacterial type as the gram positive cocci, streptococcus or staphyloeoccus, gram negative rods, or pathogenic E. coli.

DURING DELIVERY

The second period in which infections are transmitted to the fetus is during delivery. The common problems are those of eye or vaginal infections. The eye infections present the old problem of ophthalmia neonatorum, with gonococcus and pneumococcus the common organisms. This usually occurs in the first three days of life. With the advent of silver nitrate or antibiotic ointment application to the eyes following birth, the incidence has dropped.

Viral conjunctivitis or inclusion blenorrhea usually occurs after the first week of life. Copious discharge occurs in the eyes. The diagnosis is usually made by scraping the lids and staining the scrapings. Cells are seen in confirming the diagnosis. According to most authorities, treatment with penicillin and tetracycline for ten days, with irrigation of the eye, is effective.

Vaginitis due to gonococcus or other miscellaneous bacteria is the other type of infection acquired during delivery. Systemic treatment is indicated here.

POSTNATAL INFECTIONS

The third period for transmission of infections to the newborn is postnatally. One emphasizes suspicion and overtreatment in this area. The symptoms may vary with the infant.

The infant with an infection may be jaundiced or lethargic, or may show weight loss, or hemorrhagic manifestations, or other such signs. Diagnosis must usually be confirmed by blood cultures, cord cultures, urine cultures, or lumbar puncture studies. Each system may be involved independently or collectively.

Respiratory infections may be manifested by acute pharyngitis or pneumonias due to some localized infection. One must again decide on the etiology of the respiratory infection in regard to treatment. Antibiotics are indicated as observed by cultures.

Gastrointestinal infections may occur rapidly in the newborn. One must differentiate these from the results of overfeeding or overuse of antibiotics. Antimicrobial therapy may often lead to proteus or staphyloeoccus gastroenteritis.

One of the more serious problems is gastroenteritis due to pathogenic E. coli in the newborn.

Epidemics in the nursery are apparently usually due to airborne spread. Prophylactic antimicrobials are indicated with such epidemics. The nursery must be emptied and cleaned before admitting new infants. The specific treatment may be with neomycin or with novobiocin in resistant cases, according to Dr. Hans Eichenwald.

Urinary tract infections are common and require urine culture and routine urinalysis for verification.

Skin and mucous membranes are the other common areas for infections postnatally. Thrush is usually transmitted from mother, not from infant, to infant. The treatment may be with mycostatin-amphotericin, or 1% gentian violet 1 hour after feeding.

OMPHALITIS

Omphalitis is another important concern postnatally. One usually obtains a history of difficulty at delivery with excess handling of the cord. The danger lies in the development of sepsis with portal thrombosis. Beta-hemolytic streptococcus is the common organism, and the course may be rapid, with death ensuing.

Impetigo or pustules of the skin are usually due to streptococcus or now, more commonly, staphylococcus. Emphasis here is on control, to prevent an epidemic, and to determination of phage type and identification of the specific strain. Penicillin is an effective antibiotic for streptococcus; local treatment is common for staphylococcal impetigo without cellulitis. The use of antibiotics is indicated for widespread impetigo with cellulitis.

The choice of antibiotics for specific bacterial infections remains a problem based on changing bacterial resistance. Dr. Eichenwald has given the

following as bactericidal antibiotics: 1. Penicillin G (there is no need for procaine penicillin, because of the possible side effect of too much potassium) 50,000 u/kg every 12 hours IM for gram positive organisms. 2. Kanamycin, 7.5 mg/kg every 12 hours IM for gram negative organisms. Dr. Eichenwald has found that this drug is relatively harmless in infants as regards 8th nerve damage in a 4½ year study. 3. Bacitracin is recommended for severe staphylococcus infections. This is also relatively innocuous in the infant. The dosage is 1,000 u/kg/day with one-half the dose given every 12 hours IM for 10 to 12 days.

Other drugs suggested are novobiocin for neomycin-resistant E. coli, erythromycin for mild staph infection, Staphcillin for staph infection, perhaps not so effective as bacitracin in severe staph infections and also more toxic. Tetracycline is not used by the Cornell group because of poor predictability. After intramuscular injection, this drug is absorbed very erratically and may be toxic in infants more than older children. Chloramphenicol and streptomycin have been used, but one must be very careful about the dosage because of the complications with Gray syndrome and nerve deafness respectively.

SUMMARY

One must recognize the importance of early suspicion of infection in the fetus and newborn. Close collaboration between obstetrician, pediatrician, and nurse in arriving at the diagnosis is mandatory. The obstetrical history is important in relationship to the length of labor, duration of rupture of membranes, and the maternal history of recent acute infections. The nurse and physician caring for the baby must be constantly aware of the signs of early acute infections; i.e. jaundice, lethargy, poor feeding, poor weight gain, and so forth. One must recognize early the possible spread of infection in the nursery, such as the staph and E. coli epidemics or Coxsackie virus epidemics, and attempt to control the infectious spread. Lastly, one must establish early and effective antibiotic treatment of the infection as indicated by suspicion and cultures. ■

1350 So. King St.

The premature infant presents special problems in feeding which have not been completely solved even today.

Nutrition of the Premature Infnat

LT. COL. EDWARD J. TOMSOVIC, MC, U. S. Army,* *Moanalua*

• *Small premature babies are too weak to be breast fed and the costly provision of breast milk for artificial feeding is not necessary. Modified cow's milk formulas with supplemental vitamins and iron and a low content of fat are usually quite satisfactory, though the optimal nutritional program is still being sought.*

NUTRITION of the normal newborn is a difficult subject—not yet completely explored. Nutrition of the premature is even more complicated and less well understood. This presentation deals with today's understanding of the problems. We can expect modifications with further study.

To keep the presentation simple, a single system of approach is offered. It should be understood that there are many other successful approaches. Nothing will be said about feeding techniques. This is covered elsewhere.

The larger premature may be successfully breast fed. The smaller prematurc does not have the strength to suckle. It does not tolerate exposure well. Therefore, it cannot breast feed.

Dr. Hess, who established the first Premature Unit at Michael Reese Hospital, Chicago, used breast milk to feed his prematures. Today there are still a few breast milk banks where human milk is collected, processed, and frozen. This is costly in time and effort. Experience proves it is not necessary. Newer knowledge of nutrition of the premature suggests it is not even desirable.

Prior to birth, the fetus is not nourished with breast milk. It is nourished across the placenta with what must amount to a transudate fluid, the composition of which may be similar to blood plasma.

Today almost all premature infants, large and small, are fed formulas of modified cow's milk. The larger prematures accept well and thrive on the same formulas offered term newborns. Smaller prematures are offered formulas which differ importantly.

Dr. Grover Powers, long Professor of Pediatrics at Yale, visited Italy early in this century. There he saw premature infants being successfully fed on asses' milk. This is a low-fat milk. Unfortunately, it is also low in calories. His observations in Italy stimulated investigations on milk modifications.

Some of the important work which guides us today was thus accomplished a generation ago by Drs. Harry H. Gordon and Samuel Z. Levine. The work still continues and new information is being developed. We cannot say that a completely appropriate formula for the small premature infant, which takes advantage of all that is presently known, is available. The best we can offer is a rough approximation.

It became evident 20 years ago that if various feedings were to be evaluated, there had to be more precise information on how premature infants grow. In 1948 Dancis, O'Connell, and Holt[1] published a graph for recording weight observations on premature infants (Figure 1). The curves indicate average expected weight changes for premature infants of different birth weights.

Other studies have assessed serum protein, carbohydrate and fat levels, fecal carbohydrate, fat and protein losses, vitamin and mineral absorption, turnover and requirements, water and caloric requirements. Without detailing these studies, some of the information developed will be summarized.

WATER REQUIREMENT

The premature infant is succulent at birth, having a high body water content. He loses much of this water in the first days of life. He regularly loses

Presented before the Institute on Care of Premature Infants, April 30, 1963, Honolulu, Hawaii.

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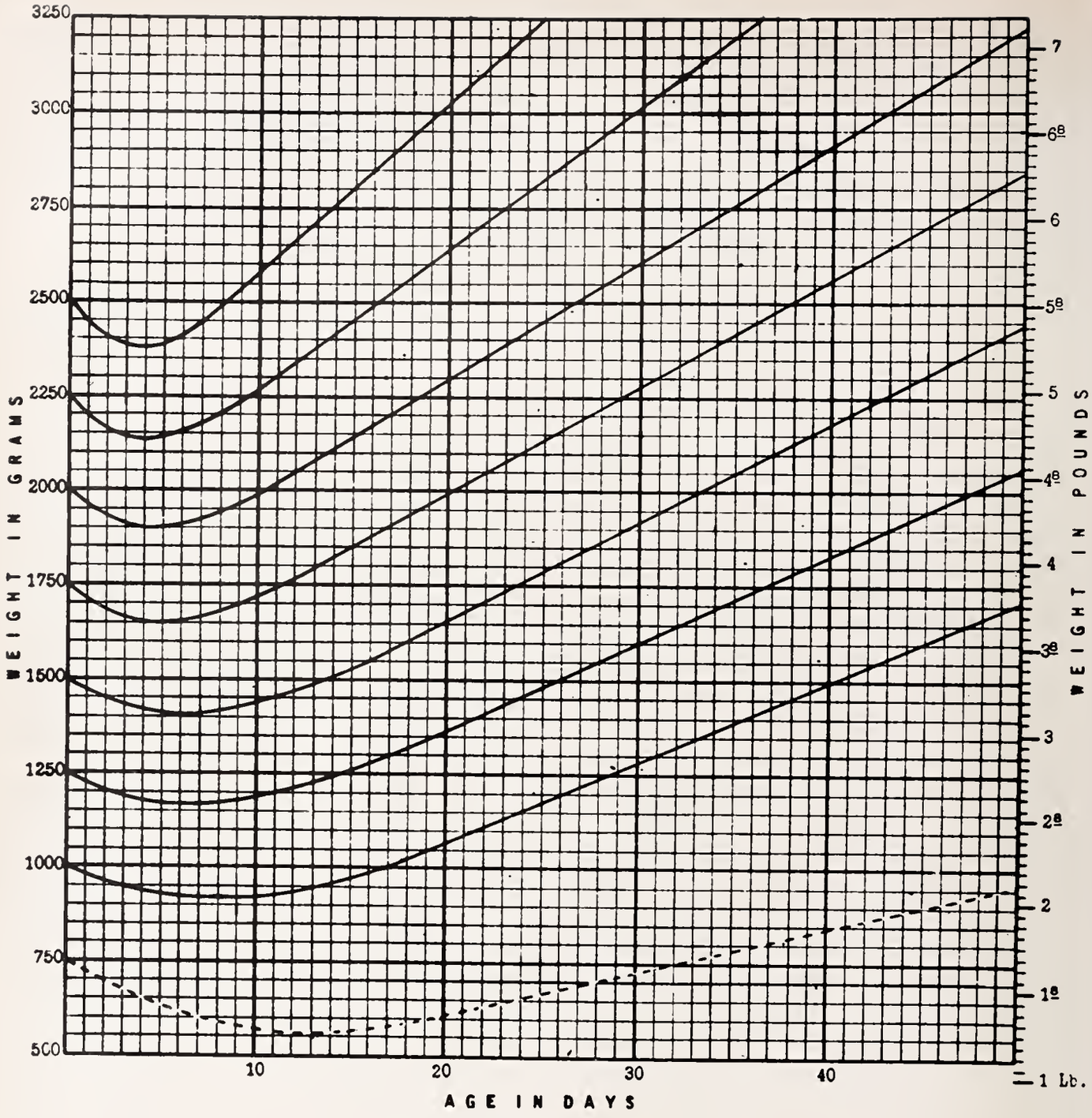

Fig. 1.

FIG. 1.—*A graph for recording weight observations no premature infants. The curves indicate average expected weight changes for premature infants of different birth weights. Reproduced from J. Pea 33:570-572, Nov. '48.*

more water in his urine than a term infant since he cannot concentrate urine very well. Table 1 indicates that more than 124 ml of water per kilogram body weight per day are necessary to keep the premature in positive water balance. A total of 150 ml per kilogram per day permits what appears to be optimal water balance.

TABLE 1.—*Daily Water Requirement*

75 ml/kg—Negative balance
> 124 ml/kg—Positive balance
Excess excreted
150 ml/kg—65% retained

Limited capacity of the premature to take and retain volumes of fluid often prevents achieving optimal water intake until after the first week of life.

CALORIC REQUIREMENT

Table 2 shows the premature infant's caloric requirements.

TABLE 2.—*Daily Caloric Requirement*

Basal	60 Cal/Kg
SDA	10
Fecal Loss	20
Weight Gain	30
	120 Cal/Kg

Sixty calories per kilogram body weight per day are required to meet basal metabolic needs. Ten calories per kilogram per day are expended for the

specific dynamic action of proteins and 20 more are lost in the stools. Thus 90 cal/kg/day will sustain the premature, but 30 more, a total of 120, are required if the infant is to grow.

Again there is a limiting factor, volume intake. It is often not possible to introduce a sufficient volume of standard concentration formula to meet caloric needs. We can concentrate the premature's formula slightly, but we encounter intolerance beyond a certain concentration. This situation can delay the baby's weight gain.

PROTEIN REQUIREMENT

A premature infant can digest protein well. Trypsin activity in the intestine is normal, as intubation studies have shown.

Preliminary studies suggested that somewhere in the range of two to nine gm of protein intake per kilogram body weight per day an infant is in positive nitrogen balance. Table 3 indicates that prematures fed 3 or 4 gm/kg/day of protein gain weight better than if fed only 2 gm/kg/day.

TABLE 3.—*Protein Intake vs. Weight Gain*

Protein Intake	Weight Gain
4 Gm/Kg/day	Good
3 Gm/Kg/day	Good
2 Gm/Kg/day	Poor

Table 4 demonstrates that serum protein levels of premature infants fed four grams of protein per kilogram per day are normal upon discharge while the serum protein levels are lower in infants given diets lower in protein.

TABLE 4.—*Protein Intake vs. Serum Proteins*

Protein Intake	Serum Protein
4 Gm/Kg/day	7 Gm%
3 Gm/Kg/day	less than 7 Gm%
2 Gm/Kg/day	less than 7 Gm%

Present thinking is that 6 grams/kg/day is probably not necessary, that 4 grams/kg/day is possibly satisfactory. The recommendation errs on the high side, 5 to 6 grams/kg/day. This is two to three times the protein requirement of a term infant. It is one of the principal reasons why the small premature is fed a different formula than the term infant.

RENAL LIMITS

The more protein that is fed, the more water the kidney requires to excrete wastes. Ash or mineral residue in formula is bound to protein, especially casein. It has been suggested that in order to spare the kidney and avoid development of edema, premature formulas should be diluted or have reduced protein and reduced electrolyte content.

This has been tested by Wallace and others. Premature infants were fed high protein–low electrolyte, high protein–high electrolyte, low protein–low electrolyte, and low protein–high electrolyte formulas. These were isocaloric and had the same water content.

The results were that better weight gains were related to the higher protein content of the formula. Electrolyte content made no recognizable difference. It may be concluded that the "premie" needs protein in order to grow and that the electrolyte content of the formula does not play a significant role.

FAT REQUIREMENT (TOLERANCE)

It was early recognized that 10 per cent of the premature's fat intake is lost in the stool. This fat is the butterfat in milk. If the infant is fed more butterfat, the fecal fat loss increases and the infant gains less weight. It has also been found that vegetable oils are better absorbed by the premature than fats of animal origin. This difference is most marked in small prematures, very small in larger prematures.

It is hard to get enough calories into a small volume formula unless one uses some fat. The general practice has been to use partially skimmed milks (Alacta®, Dryco®) or to use "wholly" skimmed milk with vegetable oil substituted for butterfat (Olac®). A requirement of 2 grams of fat per kilogram body weight per day has been suggested.

One other item of note concerning dietary fat is the requirement for linoleic acid. Combes and coworkers have shown a lower caloric consumption for each gram gain in body weight when the formula contains linoleic acid. Hansen and his group demonstrated development of dryness of the skin, desquamation, thickening, and later intertrigo, if no linoleic acid was in the infant's diet. It appears that the term infant requires 1.3-7.3% of his dietary calories as linoleic acid. This is provided in the usual formulas fed premature and term infants.

CARBOHYDRATE

There is no specific requirement for carbohydrate. The premie can tolerate carbohydrate very well. It is added to the diet as required to meet caloric needs.

AVERAGE DAILY NEEDS OF PREMATURE

Table 5 summarizes the foregoing information on the average daily needs of the premature.

TABLE 5.—*Daily Nutritional Requirements*

Water	150 ml/Kg
Calories	120 Cal/Kg
Protein	5 Gm/Kg
Carbohydrate	18 Gm/Kg
Fat	2 Gm/Kg

How does one provide these nutritional needs of the premature? At the outset one does not try. After an initial brief period of nothing by mouth, trial feedings are begun with water, saline, or glucose. These are small amounts of clear fluid and serve to test the infant's capacity to nurse, swallow, and retain. Then formula is introduced in like quantity. It may be full strength from the outset. A high protein, high caloric–low butterfat formula is preferred by the author. Feedings are increased 2-3 ml per feeding per day as tolerated. The 120 cal. and 150 ml H_2O/Kg requirement are approached over seven to nine days. The smaller infant may be moved ahead even more slowly. (See Table 6.)

TABLE 6.—*Initial Feeding Program*

NPO	12 hours
10 ml 5% D/W	q 3 hours–2x
10 ml Formula	q 3 hours

High protein, low butterfat
Concentration....0.8 Cal/ml
Increase 2-3 ml/feeding/day.
Approach requirements over 7-9 days.

A larger premature, weighing over 2000 grams, may be fed regular formulas like term infants.

Pediatricians at one time used hypodermoclysis to make up deficits in the premature's water intake. This is seldom done now. It seems no longer to be necessary, probably because (1) humidity is kept higher in the infant's environment, reducing insensible water loss; and (2) prematures are now brought along faster on feeding.

VITAMIN REQUIREMENTS

The need for vitamin K in the newborn and premature is being reassessed. Intraventricular hemorrhage is not prevented by the use of vitamin K. Most of these hemorrhages are probably of asphyxial origin.

Large doses of menadione have been associated with a higher incidence of kernicterus in hyperbilirubinemic infants. If it is to be used at all, one dose of 1 mgm is ample. Vitamin K_1 oxide is faster in its action and free of the hazard of promoting kernicterus. It is preferred.

Vitamins A, D, and C are important. They should be started early, before the end of the first week of life. The infant's needs for vitamins of the B complex are not completely known. They seem to be amply supplied in the ordinary formula. There is no objection at present to a supplement containing them. Vitamin E is being evaluated. Hemorrhagic diathesis may be related to a lack of this vitamin, but this is not proven.

It is recommended to start a triple vitamin preparation before the end of the first week of life: 0.6 ml per day of a liquid containing vitamins A, D, and C may be given. The dose is kept the same throughout the first year. If the formula supplies vitamins *in the required amount,* no supplement need be given. Remember that the vitamin content of formulas is usually quoted for the reconstituted quart. Most small prematures are a long time in arriving at a daily intake of one quart.

Table 7 gives the current status of understanding on vitamin requirements for the premature.

TABLE 7.—*Daily Vitamin Requirements*

A	3,000 IU
D	400 IU
C	50 mg
B Complex	?
E	?

Vit K_1 Oxide—Single dose—1 mg.

MINERAL REQUIREMENTS

Requirements for calcium and phosphorus have been established for infants. They are: calcium 160 mg/kg/day, phosphorus 130 mg/kg/day. These amounts are easily provided in the usual milk formula.

An adequate intake of iron for the premature is probably 0.5 mg/kg/day. A probable maximum dose beyond which intolerance will be encountered is 1.25 mg/kg/day. Early administration of an iron supplement will not prevent the early drop in hemoglobin seen in the premature. But the result of the sustained iron administration will become evident after three to four months, when the baby will have a higher hemoglobin.

It is recommended to give supplemental iron to premies at four to six weeks of age or upon discharge from the premature nursery. Keep this up for at least six months after starting, or until the infant is eight to nine months of age. Ferrous sulfate solution is the most effective drug form. Iron-containing formulas also are quite effective.

SUMMARY

A brief review of the nutritional requirements of the premature with some suggestions on how they may be met has been presented. Everything detailed is being diligently restudied by investigators. It would be an error to believe that this is the final word. We are still in search of the optimal nutritional program for the premature. ■

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The President's Page

"Toiling,—rejoicing,—sorrowing,
Onward through life he goes;
Each morning sees some task begin,
Each evening sees it close;
Something attempted, something done,
Has earned a night's repose."*

To find out whether we have earned our "night's repose," Bill Dodge of our staff was asked to review the actions and recommendations of the past several sessions of the House of Delegates. Ultimately these will be catalogued, but in the meantime—

We have toiled. We have attempted and done quite a number of things and may have earned our right to sleep soundly. Actions which we have supported or brought about through our Association are numerous.

- We are "rejoicing" over the confidentiality (Goto) Act. This law makes it possible for our Maternal & Perinatal Mortality Study Committee to evaluate infant and maternal deaths without concern about our committee records' being brought into court. Hopefully, we will see similar legislation to protect the hearings and actions of the "grievance" committees.

- The Department of Health's radium supply is now handled by a radiologist, Dr. Jun-ch'uan Wang. But what has happened to the proposed evaluation of x-ray units?

- A full-time physician, Dr. Dean Walker, is now employed as Medical Director by the Bureau of Workmen's Compensation.

- A Cancer Commission and a Tumor Registry exist in cooperation with the Cancer Committee and the Department of Health.

- The Clinitron continues to be used.

- Endorsement was given the Honolulu Foundation for Medical Care.

- A Publications Committee was appointed for the HAWAII MEDICAL JOURNAL.

- A permanent Commission on Aging has been formed and physicians have been urged by the Association to work closely with it. And for our own aged and needy, a Physicians Benevolent Fund has been established and is being built up through five annual assessments. Hopefully, none of us will need to tap this fund.

- We have continued to oppose attempts by the Federal Government to introduce legislation to socialize medicine.

- I believe our Public Relations program is outstanding. Press relations seem good, with regular and special releases . . . long-standing weekly television and radio

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* *The Village Blacksmith*, H. W. Longfellow. (If you've forgotten from your youth.)

programs, Operation Pacific, and the Message of the Month. We should be very proud of this program and the men so effectively carrying it out.

These and other similar actions augur well for the health of the community and the profession. BUT . . .

■ What are we doing about smoking, which we have repeatedly condemned? What is *your* daily combustion? As a memorial to our colleagues who have died of lung cancer, how about trying to act on our resolutions and set a good example for the community to see?

■ We have resolved against the sirens, speeding, and ignoring of traffic regulations by ambulances, but the sirens blow on and the ambulances continue to speed through traffic to the hazard of their occupants and the entire public. (When I mentioned this to a leading official he posed the question as to whether physicians should be privileged to break the traffic laws. Do you—except in rare emergencies that could be fully justified to "Grievance" Committees?) There is much for all of us to do toward traffic safety. Incidentally, every doctor, every Hawaii Medical Association employee, and their families, were urged to get seat belts. Have you?

■ It was resolved that a "Research and Reference Committee" be formed to investigate prior to legislative sessions, the sociological and economic factors of pending State legislation regarding public health, medical practice, and government medical insurance plans. While this was not done this year, a special meeting was held with our committee chairmen and representatives of the Departments of Health, Education, and Social Services, and the University of Hawaii with the view to work out possible differences and to assure mutual support prior to the legislative session.

■ A special session of the House of Delegates reviewed many legislative matters that may arise, and determined our stand on a number of potential legislative subjects. For example, we are still encouraging the health insurance carriers to provide adequate coverage for those over 65 and legislation to permit the cooperation of agencies to provide this. We continue to support adequate appropriations to provide a good Medical Assistance to the Aged program. This seems imperative.

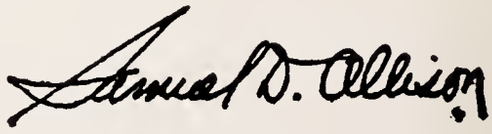
■ It has been a generation since fluoridation of water was shown to reduce dental decay in children. We have supported it (most of us) as individuals, and supported it, as an Association, again and again. A generation of teeth have rotted since we first supported fluoridation. One Legislature authorized it and a Governor vetoed it. At least 71 million people drink artificially fluoridated water. The United States has over 2,500 "fluoride communities." Everyone in Hong Kong and Puerto Rico drinks it. Why not us? Let's get on with it!

■ Previously, the House urged that we take steps to prevent fractionation of health services away from agencies concerned with health matters, by placing State and local programs in the field of health and medical care in the administration of medically oriented agencies. This was reaffirmed at the recent special session of the House. While we are working closely and cordially with the present Department of Social Services staff, it seems that with the possible passage by the Congress of some form of "health insurance" it is more urgent than ever that all health and medical matters be in a health agency.

"Toiling,"—"Rejoicing,"—Yes.

And "Sorrowing" too.

Have we earned our "night's repose"?



HAWAII MEDICAL JOURNAL

Editorials

What Price a Teaching Hospital?

Hawaii has a medical school in its future. It has a two-year school planned to start in 1967 or 1968, and although President Hamilton has unequivocally (and, we have no doubt, sincerely) disavowed any intention to expand this to a four-year program, only the most naive could suppose that this will not follow within twenty or thirty years, if means can be found to finance it.

In any case, a four-year program would merely intensify, not create, the need for clinical teaching facilities—a university hospital. The University, like any other university starting a medical school, will go to any reasonable lengths to avoid having to build or operate its own hospital. It will surely follow the usual course of obtaining these facilities from a privately operated hospital or hospitals.

A potential solution to the problem is outlined elsewhere in this issue of the JOURNAL, in the official report of Dr. Joseph Stokes, Jr., who was employed as a consultant by the boards of Children's and Queen's Hospitals. His suggestion, briefly, is that these hospitals give up their present facilities and join with Kapiolani Hospital to form a hospital complex in which each hospital would maintain its name, individual administration, and identity, sharing ancillary facilities, under a single administrator, and "preferably, though not necessarily, near the University campus." The Directors of Children's and Queen's have unanimously endorsed his recommendations in principle.

That costs of operation would be reduced, and quality of both patient care and training of residents strengthened, by such a union, is unarguable; this was obvious a decade ago, when Children's Hospital was close to selecting a new building site on Queen's Hospital's grounds and did not—to the lasting discredit of both boards of trustees—accomplish it. In the new complex, Kapiolani would do all the obstetrics and probably more than its share of the gynecological surgery; Children's would do all the pediatrics; Queen's would give up both services.

If the new complex could be erected on Queen's present grounds, it would be a good thing, in our view. Within a block are the Blood Bank of Hawaii, the Hawaii Medical Library, the medical society and nursing association offices, and a major private clinic; within a mile are three more major medical groups and a score of private physicians' offices. A freeway is close by. The University is ten minutes away, but there is ample precedent for this much separation so far as service to the medical school is concerned.

One obstacle is that—or so it is said—buildings over about three or four stories in height will not be permitted to further obscure the view of Punchbowl crater (as much of it as the present high-rise apartment buildings have left) from the new Capitol. Another is that Queen's Hospital faces very substantial expenses of renovation and refurbishing its older portions—enough millions of dollars, in fact, to build a pretty substantial new building elsewhere.

A more basic obstacle to the whole suggestion is the apparent determination of the trustees of Kapiolani to defend themselves against the "loss of identity" which they conceive would be their fate, should they join in such a complex. We do not share their fears. Their identity would not be lost, and their stature and reputation would be greatly enhanced, by their becoming *the* Hawaii obstetrical teaching hospital. It is devoutly to be hoped that they will see their larger responsibility to the community and be able to identify it with their own interests as a hospital.

Another facet of the problem may deserve attention, even before the above problems become too pressing to put off. It has begun to seem just possible that the enthusiastic promotion of the resi-

dency training program has obscured the fact that the care of the sick is an even more fundamental responsibility of any hospital than is postgraduate teaching. Quality of medical care must not suffer merely to promote the training program. Some people who are sick, and paying for their care, are getting relatively short shrift the way things are going today. Teaching hospitals or no teaching hospitals, the community will always have room, and need, for hospitals which just see to it that sick people get the best possible care.

In our view, the hospital complex proposed by Dr. Stokes—to take shape, hopefully, within the next 5 or 10 years—should be able to achieve both goals. The project deserves unanimous community support.

The University States Its Position*

Several people have indicated to me that there was some feeling among the physicians that the University had supported, or was supporting, the findings of the Stokes Report. And I thought that I had better set the record straight.

While the University is happy to cooperate with the medical profession and hospital administrators in any constructive way, we are not advocating that a complex of hospitals be located near the University; on the other hand, we would certainly not oppose it. Since our program is only a two-year one, we can work quite well with all the hospitals in their present sites.

The recommendations of Stokes may be good; I am not competent to judge them. But I did want you to know that the University has no desire or interest to develop a University Hospital, and has a strong desire to work with all of the hospitals wherever located. We do stand ready to cooperate with the medical profession in any proposal which is in the interest of medical care in Hawaii.

Members of the medical community have also apparently expressed some concern over the possible development of a four-year medical school. I wish to reaffirm the public statement I made a year ago that the University has no plans to establish a four-year medical school.

University participation in the postgraduate training programs in the Honolulu hospitals has apparently been another area of discussion by the medical community. Such training programs are undoubtedly substantial contributions to medical care and medical education in Hawaii. The University recognizes that these programs are directly under the sole aegis of the medical community and hospitals. However, the University is willing to participate, if requested, in any way that may be deemed appropriate and helpful to the hospitals.

I shall be pleased to clarify further any of the above points or other related matters should further questions arise.

THOMAS H. HAMILTON, B.A., M.A., Ph.D.
President, University of Hawaii

* A letter dated January 15, 1965.

HAWAII MEDICAL JOURNAL

This Is What's New!

• Only a few years ago the chemical structure of the insulin molecule was worked out. With this background knowledge an artificial **insulin** molecule that is biologically active has **recently been synthesized.** (*Med. Research Digest* [Aug.] 1964.)

• A recent conference at Oxford in England on the **computers in science and biology** reviewed the progress to date. A physician need not be either frightfully clever, or a mathematician, to use computers to his patients' advantage. Already computers are reading **electrocardiograms, electroencephalograms,** and **chest films;** reviewing and interpreting **microscopic slides;** and handling as well as directing many of the routine problems in hospitals. (*Brit. Med. J.* [July 25] 1964.)

• **Hypertension of renovascular origin** is one of the several forms of potentially curable hypertension. In that it presents as any form of hypertension, the diagnosis is quite difficult. Routine aortorenography with aortic catheterization technique is too hazardous to use as a screening procedure. The radiorenogram is helpful but also lacks specificity. **Synthetic angiotensin II** shows promise as a **screen** for patients with renovascular hypertension. Such patients are more resistant to the pressor effect of angiotension II than patients with hypertension due to other causes. Unfortunately, the test is invalidated by certain situations such as malignant hypertension, salt-retaining states and plasma volume depletion. (*New Eng. J. Med.* [Sept. 10] 1964.)

• **Measles reduces tuberculin allergy,** with suppression or depression of the tuberculin skin test. This depression may precede the appearance of the measles rash in approximately half of the patients and is uniformly found after the appearance of the rash. The depression of the positive skin test persists for several weeks after the appearance of the rash. There are several possible explanations for this phenomenon. First, the measles virus produces **changes in lymphoid tissue** which may interfere with a delayed tuberculin type of hypersensitivity. This may be due to the direct action of a virus on this function of the lymphocyte. Second, the measles virus may cause an **increased production of an antiinflammatory steroid** which would cause a depression of the tuberculin reaction. (*Abstracts National Tuberculosis Assoc.* [Sept.] 1964.)

• Surgeons in Mississippi **transplanted a chimpanzee's heart** into a 60-year-old man whose failing heart had been removed. The patient survived approximately one hour following the operation, but the chimpanzee's heart was incapable of handling the **large venous return** and went into terminal decompensation. (*JAMA* [June 29] 1964.)

• During **catheterization of the right atrium** via the saphenous vein, a 9 centimeter section of **stainless steel guide wire broke off in the atrium.** This was no great problem to the physician, who passed a long bronchoscopic forceps through the saphenous vein into the femoral vein and up the vena cava, and grasped the broken wire dangling from the right atrium. It was then pulled out through the entry route just described. (*Circulation* [July] 1964.)

• Total hysterectomy would appear to be a reasonable guarantee against further pregnancies—but not always. In a recent reported case, one woman found herself **pregnant nine months after vaginal hysterectomy.** The pregnancy, of course, was **ectopic,** and recovery uneventful. (*Ob. & Gyn.* [June] 1964.)

• Denver physicians take a **dim view** of the **gastric freeze** as treatment of peptic ulcers. Histamine stimulated acid-secretion tests performed before and after the freeze failed to reveal any significant suppression of acid in 21 patients studied. **Gastric ulcers** occurred as a direct result of the gastric freezing in two patients. (*Arch. Surgery* [Dec.] 1964.)

• At least one-third of patients undergoing **Polya gastrectomy** will develop **postgastrectomy steatorrhea,** as measured by radioactive iodine-131-tagged triolein. The incidence of this postgastrectomy steatorrhea furthermore increases with the years after surgery; 10 years after gastrectomy, it exceeds 50 per cent. (*Scottish Med. J.* [Sept.] 1964.)

• It will probably be reassuring to some adolescent boys to know that their **gynecomastia of puberty** is not due to increased concentration of estrogens, but to increased pituitary secretion of **growth hormones.** (*British Med. J.* [Sept. 26] 1964.) ■

FRED I. GILBERT, JR., M.D.

Hawaii Academy of General Practice

MEDICARE AND THE GP

We have often been told that the National Health Program in England was instituted over the objection of British physicians as a whole, by means of a "quarterback sneak" on the part of the pro-socialist Labour Government. The surprise strategy caught organized British Medicine in an unguarded moment, and succeeded because the general practitioners and the specialists were too busy feuding with each other to be minding their defenses against a common foe.

That Government had a lot to do with prior divisive tactics is also well known. The socialistic bureaucrats in Washington are just as clever as the British, and well aware of the maxim, "divide and conquer." They are also counting on the human failing of our not being able to learn the lessons of history—of ancient Rome, nor of modern England.

It behooves us physicians in the U.S.A. to be mindful of what happened in England in the 1950's. Let us general practitioners be particularly careful not to become so engrossed in our battles for hospital privileges, as against the door-closing specialists, that we permit Government to step in through "Medicare," and end up by being relegated to practice only in the neighbor islands!

In England, the lot of the specialist practicing in hospitals is not a bad one, they say. However, it is the general practitioner, denied any and all privileges in hospital, denied even the right to admit to or see a patient in hospital, who is unhappy, overworked, underpaid, and snowed under by the chaff of hypochondriacal patients. The Government, the paymaster, makes the physician subservient to any and all who would abuse him.

Since the lot of us general practitioners would be the worse one under government-controlled medical care, we in the American Academy of General Practice, the organized general practitioners of America, have a greater stake in seeing that "Medicare" does not pass this or any other Congress.

The proponents of "Medicare" themselves admit it is no secret that government-controlled health care for the aged is but a foot in the door, later to be opened wide to socialized medicine. Therefore, organized American medicine, the AMA and the AAGP, is dedicated to fight to keep the foot out.

It is patently understood that to be against "Medicare" is just not going to be enough to stop the juggernaut that we have for a government. Although the framers of the Constitution proscribed the right of any government to alter itself, ours is assuming the tyrannical powers of doing just that: our "benevolent" Administration is determined that Congress shall pass "Medicare" under Social Security. Organized medicine has to come up with a positive approach to the problem. Kerr-Mills *will* work, it is said, but unfortunately, K-M is too dependent upon State legislatures for funds; i.e. it is truly a political football.

The real problem of "Medicare" is not a matter of the indignity of a means test, or whether the aged population is 17 million or 7 million. The crux of the matter rests upon admitting the fact that even though most of the senior citizens may be moderately well off and moderately well protected by retirement plans and voluntary health insurance, most of them fear the possibility of expensive invalidism or terminally drawn-out existence requiring medical care in this day and age when medicine can keep a person alive, if only as a vegetable, until all savings and all of the estate is consumed. To a man in his working years, the prospect of disabling illness is bad enough; but the oldster is denied the working man's hope of being able to return to gainful employment to recoup his fortunes.

It is for the reason spelled out above, that all of the arguments put out by the lobbyists for the AMA in favor of Kerr-Mills, all of the statistics on the numbers and incomes and insurance coverage and morbidity rates of oldsters cannot wipe away the fear of expensive invalidism. This fear can strike at the vitals of the rich, and certainly of the middle class, even more grimly than it can affect the poor.

General practitioners, awake! Start dreaming up a positive plan! We are in the front line, the most vulnerable position, of organized medicine's defenses against socialized medicine.

The Hawaii Academy of General Practice, under its newly elected officers and directors, will try to promulgate a plan of action this coming year. ■

J. I. FREDERICK REPPUN, M.D.
Secretary

HAWAII MEDICAL JOURNAL

Infant Death Study

A gravida VI, para II, abortus IV in her early twenties, who had had a previous episode of "shock and collapse" similar to her present illness, was first seen during the 18th week of this pregnancy by her attending physician, at which time she was treated with penicillin and other medications for "influenza and bronchitis."

Three days following this visit, the patient's bag of waters ruptured when she "fell downstairs at home," striking her abdomen. Subsequently she began having bleeding and lower abdominal cramps. She consulted her physician, who advised hospitalization if the bleeding became more severe during the night; otherwise, she was to report to his office in the morning.

She reported to his office at about noon the next day, bleeding profusely and acutely ill, and was admitted to the hospital. An obstetrical consultant found the uterus to be about 3½ months gestational size, and pus was seen exuding from the cervix. The pus was cultured and was reported later as growing a coliform organism. The following chart summarizes the patient's clinical course and therapy admission.

HOSPITAL DAY AND TIME	PHYSICAL AND LABORATORY FINDINGS	THERAPY
1st Day 1:00 P.M.	WBC 2,250; PCV 32 Hbg 9 gm% T=104°, R=20, P=116, B.P. 110/42	Combiotic 1 ampule IM
3:00 P.M.		ASA gr X
4:30 P.M.	B.P. 90/44 P=120, R=40, Hb 9.4, PCV 30	500 cc 5% D/W IV with 1 gm chloramphenicol
8:45 P.M.	B.P. 80/40 Aborted macerated fetus and placenta	
9:00 P.M.	B.P. 80/40	Combiotic ampule IM
11:00 P.M.		1,000 cc 5% D/W IV with 20 mgm neosynephrine
2d Day 12:30 A.M.	B.P. 70/44 Cool and pale	
3:10 A.M.		1st unit whole blood started
3:45 A.M.	B.P. ?	Foot of bed elevated and blood "pumped"
4:20 A.M.	B.P.59/0	2nd unit whole blood added. Levophed amp 1 added to 5% D/W
5:50 A.M.		3rd unit of blood started
6:30 A.M.		1,000 cc 5% D/W with 250 mg Solucortef Levophed 1 amp. 250 mg Solucortef directly IV
7:00 A.M.	T. 98.6° B.P. not obtainable	Terramycin 1 gm added to IV fluid
8:20 A.M.	P=120, R=28, B.P. 110/80 (faint)	
8:25 A.M.	Foley catheter 100 cc dark urine. Critically ill	Artificial kidney suggested by consultant
8:40 A.M.	B.P. 144/80	Oxygen by mask
9:00 A.M.	Respiration shallow. Pt. apprehensive	
11:00 A.M.	D & C done in O.R. & negligible amount of tissue found	500 cc 5% D W with 80 mgm neosynephrine IV
12:00 NOON	B.P. ?	1,000 cc 5% D/W with 1 gm. Terramycin and Solucortef. Oxygen tent
1:00 P.M.	B.P. 80/58 50 cc urine	Neosynephrine 80 mgm added to IV
1:30 P.M.	B.P. ?	500 cc 5% D/W
1:40 P.M.	B.P. 78/60	
2:00 P.M.	B.P. 80/60 urine several drops	
3:30 P.M.	Pulmonary edema	
6:00 P.M.	Urine 1.5 cc	500 cc 5% D/W with 100 mgm neosynephrine
8:00 P.M.		streptomycin 0.5 gm IM
8:15 P.M.	Urine 6.25 cc	
9:00 P.M.		Cedilanid 0.8 mgm IV
9:30 P.M.		Aminophyllin 0.5 gm IV
9:40 P.M.	Suctioned large amount of fluid from throat	
9:45 P.M.		Phlebotomy
9:50 P.M.	Convulsion	
10:00 P.M.	Expired	

Classification: After a complete and unrestricted discussion the committee unanimously classified this case as being a directly obstetrical death and practically preventable. Preventable factors were (1) lack of prenatal care, (2) error in professional judgment, (3) failure to obtain adequate consultation, and (4) probable criminal abortion. Factors

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Bureau of Medical Economics

From time to time I receive letters from medical men asking how they can expedite the collection of their delinquent accounts, and by virtue of these many requests I would like to head this article "Dollars & Sense."

First, let us examine the primary reasons for the nonpayment of accounts: (a) negligence, (b) inability to pay, and (c) unwillingness to pay. These are the three main reasons, and the doctor leaves himself wide open for nonpayment by the delinquent because of his (the doctor's) approach to the question.

One of the favorite excuses given is the "itemized statement routine." "I haven't had an intemized statement," plaintively cries the offender. The best way to request payment is to explain precisely what the payment is for. Itemize each bill. This has been a standard practice in the business world for years, yet too frequently physicians send out statements merely saying "For professional services." You yourself would be very annoyed to receive a bill from a medical supply house which read "For supplies shipped." Keep this in mind in your own billing.

Then, of course, there is the question of payment at the time of treatment. This was explained very clearly in "The Business Side of Medical Practice," and I quote, "The patient is given a charge slip to take to the doctor's office with him. During his session with the patient the doctor notes on the slip the procedures performed and the charge. As the patient leaves the office he returns the slip to the desk. At this point, instead of the doctor's girl saying, 'Would you like to pay for your visit now?' it might be more effective to merely say, 'This will be five dollars.' Most people are prepared to pay for routine office visits but often leave the office without paying because no one gave them the opportunity to do so. If patients can be encouraged to pay as they go, expensive, time-consuming billing can be reduced."

The foregoing is sound advice. If it were practiced by medical men and their staffs, there would be far fewer accounts that would become delinquent. I have said this before, and will repeat. I fail to see why many physicians consider it *infra dig* to request money which they have earned by excellent service and which is rightfully theirs. In many cases, the assistant seems to consider the physician so exalted a person that, with this image in mind, it would be bad taste to request payment. This type of thinking should be dispelled in the interest of economics: *your* economics.

These are suggestions that could bear financial fruit if correctly applied. However, many of your accounts are bound to become delinquent anyway. When this happens, never let your assistant hang on to these accounts and continue sending out monthly statements, with the hope that "something will turn up." Never waste time, stationery, or hopes on those accounts which are really delinquent. Leaving a bill uncollected is not good business, but neither is forcing collection. Bad collection methods could dispel that carefully nurtured doctor image.

This image virtually hangs in the balance, and if and when an agency is employed, be sure that you are acquainted with the methods they employ in their attempt to collect your money. It is your money the collection agency is trying to collect, but—and it is a very big "but"—be sure they are not spoiling your reputation by collecting in the wrong manner.

Again I would remind you of hoarding accounts. Authorities in the collection field throughout the United States of America have proved that there is a distinct devaluation when delinquent accounts are left static:

AGE OF ACCOUNT	$ VALUE
6 months	.67
14 months	.45
29 months	.23
39 months	.15
5 years	.01

These figures clearly show that the neglecting delinquent accounts definitely costs the physician money. The Medical–Dental–Hospital Bureaus of America advise that the wise move is to get these accounts to your local Bureau of Medical Economics not later than three months from the date of last payment unless there are extenuating circumstances. This is wise advice . . . use it!

I would take this opportunity of wishing my readers a Happy New Year, and thanking them for the many letters and inquiries received during 1964.

Your Bureau of Medical Economics can be of great service to both your staff and yourself. Please don't fail to call us. This is your Bureau. ■

GABRIEL ROGERS
Manager

HAWAII MEDICAL JOURNAL

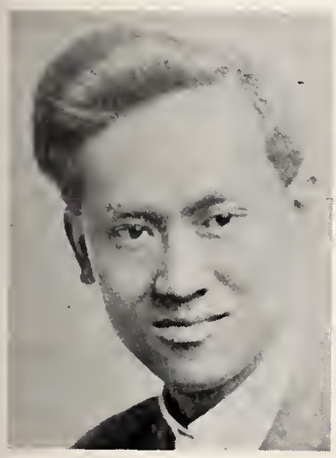
In Memoriam – Doctors of Hawaii

This is the fifty-third installment of In Memoriam—Doctors of Hawaii.

Albert Akow Ting

Albert Akow Ting was born February 16, 1890, in Honolulu, the son of Mr. and Mrs. Ting Chew.

He was a graduate of St. Louis College in 1910. Following graduation, he took a two-year course in engineering at the College of Hawaii. He then entered Creighton University School of Medicine at Omaha, Nebraska, from which he graduated in 1916 with high honors.



DR. TING

Dr. Ting returned to Honolulu to begin his practice of medicine in the same year. On September 16, 1916, the doctor married Kam Yee Ho, daughter of Mr. and Mrs. Ho Poi in Honolulu. Dr. and Mrs. Ting were the parents of a daughter, Alberta (Mrs. Frank K. Chen).

Dr. Ting's promising career was cut short when he became ill and died on January 3, 1918, in Honolulu.

Besides his great interest in humanity, his special pleasures were reading and music.

Russell Cleveland Lichtenfels

Russell Cleveland Lichtenfels, born in 1889, graduated from the University of Pittsburgh School of Medicine in 1912.

From 1916 to 1923 Dr. Lichtenfels was in practice at Hana, Maui, where he also served as Government Physician. By 1931 he had located at Pitcairn, Pennsylvania, where he practiced until his retirement.

Dr. Lichtenfels died in Miami, Florida, on March 9, 1940, at the age of 50.

He was a veteran of World War I and, during his years on Maui, a member of the Hawaii Medical Society.

Ruth Alexander

Ruth Alexander was born in Independence, Missouri, on April 29, 1889.

Her medical degree was received from Woman's Medical College of Pennsylvania, Philadelphia, in 1909.

Dr. Alexander and her doctor husband came to Honolulu about 1915. For many years she was head of a bureau of the Territorial Board of Health. Upon resigning from the Board of Health, Dr. Alexander entered private practice and specialized in diseases of the eye, ear, nose, and throat. In 1939 she retired.

Divorced from Dr. R. A. McKellar in Honolulu on July 8, 1920, she resumed her maiden name.

On January 18, 1941, Dr. Alexander died in Honolulu at the age of 51.

She was a former member of the Medical Society of Pennsylvania, a member of the Hawaii Medical Society, the American Medical Association, and the Honolulu Zonta Club (President in 1924).

Fletcher Greene Sanborn

Fletcher Greene Sanborn, born in 1868, was a graduate of the University of California Medical School, San Francisco, in 1901.

DR. SANBORN

Dr. Sanborn practiced on the Island of Molokai from 1915 to 1919 as physician for the Molokai Ranch at Kaunakakai, following which he moved to Los Angeles.

During the war, the doctor attained the rank of major in the Medical Reserve Corps and served for a time in Hawaii.

In 1927 Dr. Sanborn returned to Honolulu to become manager of the Veterans' Administration. Leaving the Islands in March, 1934, he returned to California, and retired shortly thereafter.

Dr. Sanborn died February 8, 1936, in Arcadia, California.

He was a member of the Honolulu County Medical Society and the Hawaii Territorial Medical Association. ■

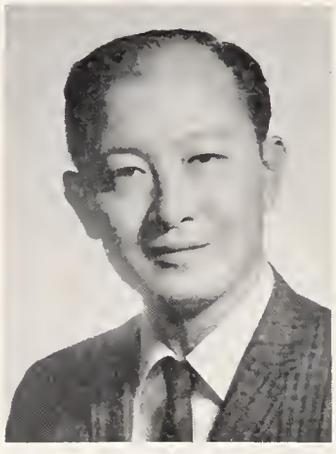
HAWAII MEDICAL JOURNAL

New Members

Clifford J. Straehley, Jr., M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96815
GENERAL AND THORACIC SURGERY
Harvard Medical School—1946
Internship—Massachusetts General Hospital
Residency—Massachusetts General Hospital

Hideo Oshiro, M.D.
1010 South King Street, Room 5
Honolulu, Hawaii 96814
OTOLARYNGOLOGY
University of Virginia, 1958
Internship—University of Chicago
Residency—University of Chicago

Bertram A. Weeks, M.D.
99 South Market Street
Wailuku, Maui 96793
INTERNAL MEDICINE
University of Oklahoma, 1941
Internship—Station Hospital, Ft. Sam Houston, Texas
Residency—Tripler General Hospital



Raymond H. Fujikami, M.D.
1481 South King Street, Room 335
Honolulu, Hawaii 96814
GENERAL SURGERY
Northwestern University, 1957
Internship—Indiana University Medical Center
Residency—Hartford Hospital

Raymond M. Williams, M.D.
888 South King Street
Honolulu, Hawaii 96813
DERMATOLOGY
University of Oklahoma School of Medicine, 1930
Internship—Fresno County Hospital
Residency—University of California School of Medicine, 1947-1949
University of Pennsylvania Graduate School of Medicine, 1948-1950

Albert Y. T. Kong, Jr., M.D.
888 South King Street
Honolulu, Hawaii 96813
ORTHOPEDIC SURGERY
Jefferson Medical School—1959
Internship—Jefferson Medical College Hospital
Residency—Jefferson Medical College Hospital

HAWAII MEDICAL JOURNAL

County Society News

Hawaii

The January 23 meeting was held at the Hilo Hotel. A letter from Dr. Edgar of the Department of Health stated that the EEG machine for private patients was not available. Dr. Best requested approval to employ a part-time secretary who would continue in this capacity through the coming years, giving continuity to the records. Approval was granted.

A report on the Scholarship Fund revealed that for the current year two are in effect—one for $600 and the other for $700. The deficit will be made up by donations by individual doctors in order to avoid drawing on the principal. It was voted to add the $2,000 no-interest loan to the Fund when it is repaid. Methods of handling requests and publicizing the Fund were discussed.

The program consisted of a report from the AMA field representative, Mr. John Pompelli, and a C.P.C. on two infants.

Dr. Bergin spoke of the difficulties in delivering the Message of the Month flyers. The proposed biomedical school of the University was discussed. The Society went on record as being opposed to the proposal. Mimeographed sheets relative to statewide establishment of a medical examiner system were circulated. The meeting adjourned at 9:30 after a discussion on the need of a mental health unit.

* * *

Dr. Donald Char was a guest at the February 7 meeting. He advised that the Congenital Defects Center in Honolulu had cases from each county except Hawaii. A mimeographed fact sheet was distributed. After a brief business meeting, Dr. Virginia Apgar spoke on "Diagnosis of Hidden Congenital Defects."

* * *

At the February 20 meeting it was voted to employ Mrs. Bertha Nagata to act as secretary to the Secretary. The members were advised that the Tumor Registry is almost up to date and the doctors could expect to receive follow-up letters soon. After a lengthy discussion on how to handle charges for emergency room services rendered patients sent by Hawaiian Airlines, it was voted that it is an individual matter whether or not to charge.

It was voted to write the Charter Commission stating the opposition of the Society to the present plans. It was agreed that the Society's Executive Committee should make decisions on small details before bringing them to the Society for discussion. The members were advised that a copy of the proposed curriculum for the Biomedical Science School of the University would be placed in the record room. Action on the Society's position was postponed. Both the HMA President, Dr. West, and President-elect, Dr. Allison, were guests at this meeting, which concluded with a talk by Dr. Allison on "Dermatitis."

* * *

At the March 13 meeting it was voted that minutes should be read for approval. It was also voted to advise the Charter Commission that the Society went on record as preferring an appointed Hospital Management Committee. It was decided that the delegates to the HMA would receive a $20 per diem plus plane fare from the Society. A request from the Civil Aeronautics Bureau for a list of the patients seen in the Emergency Room and a list of the findings was considered. It was decided that a letter should be directed to them listing the names but advising that the nature of the injuries was confidential and could not be released unless the patient gave permission. Dr. James Raleigh from New York spoke on "Smoking in Relation to Carcinoma and Respiratory Diseases."

* * *

At the April 16 meeting replies were reported about a possible overlap of studies being conducted by the Comprehensive Mental Health Planning Committee and the Commission on Children and Youth. The replies advised that both studies were done in a manner to protect the confidentiality of the information and the former included looking at the "risk" population of unwed mothers, etc., while the latter focuses on the use of existing health services.

The Treasurer announced that $800 had been received from the Peace Corps and this amount will be added to the general treasury. It was voted to have the President appoint a committee to study the necessity for revising the Bylaws. Dr. Marvin Royce, formerly of Mayville, Wisconsin, was introduced. He is living at Honokaa and is not yet eligible for licensure inasmuch as he has not completed his year's residence. It was announced that Dr. Crawford had been appointed to the HMSA Board. It was voted to approve the appointment of Dr. Edward Boone as Assistant Medical Director of the HMSA. Dr. Miyamoto reported on the recent Council meeting.

It was voted to approve a resolution relative to the contracts of the hospital radiologist and pathologist. It was agreed that no perquisite system would be available for the Department of Health's psychiatrist and that Dr. Wallis should be so advised. Dr. Wipperman advised that Dr. West had written asking that the importance of discarding disposable syringes be brought to the attention of the members.

Dr. Best reported on the survey of carcinoma of the stomach and lung in Japanese. Dr. Gordon Liu and Mr. Minaai of Honolulu spoke on "Disability Claims by the Social Security Board." Dr. Rose and Mr. Katano of the Veterans Administration spoke on the problems that affect physicians who care for patients under VA jurisdiction.

* * *

At the May 21 meeting it was announced that Dr. Marvin Royce had taken the State Board's test for a temporary license, and Dr. Joseph E. Haddon had passed his State examination. Kauai County's answer relative to removing the pathologist, radiologist, and anesthesiologist from the Civil Service rolls supported the Society's position. It was announced that Dr. Charles Belcher, Health Department psychiatrist, will not be in private practice. He has been allowed $125 a month for housing from the hospital and will be put up at the Nurses' home. Dr. Henderson noted that he recently had an influx of requests for medical information on patients which were not accompanied by written permission of the patients to release such information. It was voted that the Society go on record that a physician cannot give any information to any agency or organization without the patient's express written permission. The question of releasing information on Workmen's Compensation cases was raised and it was felt that consent of patient is still required. Plans for the June 4 visit of Dr. Annis were made and it was voted that the Society pay for the dinner expense of the guests whom the doctors invite. Dr. Matayoshi reported on the Political Action Committee. Dr. Bracher advised that the $100.00 formerly provided by the Board of Medical Examiners would no longer be available to the County for purchasing books. However, $200.00 from the Heart Fund and $200.00 from the Cancer Society are still available for audio tapes. The Society pays for one-

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Book Reviews

The Fear of Being a Woman

By Joseph C. Rheingold, M.D., Ph.D., 756 pp., $10.00, Grune & Stratton Company, 1964.

IN THIS VOLUMINOUS BOOK the author attempts a comprehensive psychopathology of women, focusing on the mother-child relationship. His thesis is based on the assumption of a widespread destructive aim in much maternal behavior, especially towards daughters. The origins, implications, and ramifications of his conceptual model are discussed in extensive detail in their application to many areas of female functioning. To very freely paraphrase the author, the female ego is a pelvic organ.

Nonpsychiatrically oriented physicians will find this book of considerable value in providing them with a jargon-free conceptual model for examining the feminine-maternal role problems of their patients, and their relationship to organic malfunctioning. Depending on their biases, mental health professionals may greet this book with mixed feelings: appreciation may be felt at the appearance of one of the few psychiatric texts devoted to female ego development and function, with its exhaustive treatment of the influence of maternal destructiveness. Distress may be generated by the attempt to be overly comprehensive and explain all behavior on the basis of a limited set of propositions.

ROBERT A. HUNT, Ph.D.

★The Solitary Pulmonary Nodule

By John D. Steele, M.D., 226 pp., $12.00, Charles C. Thomas, 1964.

A THOROUGH ANALYSIS of 887 resected solitary pulmonary nodules in males gathered by a combined Veteran's Administration–Armed Forces cooperative study is presented in this monograph. Over 90 per cent of the lesions proved to be primary carcinomas, granulomas, or hamartomas. The final 200 pages of this 226-page book are given over to reproductions of the radiographs with accompanying case reports. This accounts in part for the sale price of $12.00—substantial in relation to the amount of information offered to the buyer. It should be emphasized, however, that the book is very worthwhile reading in terms of the short time needed to assimilate the well-organized presentation. It should be [and is—ED.] available to all physicians in a central medical library.

GROVER J. LIESE, M.D.

Dynamic Pathology

By Maurice M. Black, M.D., and Bernard M. Wagner, M.D., 296 pp., $8.00, The C. V. Mosby Company, 1964.

IN ATTEMPTING to write for medical students and practicing physicians, the authors have produced a small volume, which may be of benefit to both, but is necessary to neither. At times the text is too basic for the average practicing physician, and yet other chapters assume the reader is well versed in subjects which have only recently been taught in medical schools.

This is not to imply that the book is not worth reading. Some chapters, such as "genetics and development," are very good, and a bibliography is at the end of each chapter. It will introduce the reader to some of the newer concepts, as well as briefly reviewing many basic principles.

ANN B. CATTS, M.D.

★ means highly recommended.

★Hypnoanalysis, 2d Ed.

By Lewis R. Wolberg, M.D., 424 pp., $7.50, Grune & Stratton, 1964.

THIS IS AN EMINENTLY readable book, although confined to a very restricted and specialized area, namely, the use of hypnosis in shortening the admittedly prolonged psychoanalytic process. It is written in a clear and understandable language and style and made interesting by the liberal use of examples. It is well organized, as a glance at the simple table of contents will tell. It will be of interest and provide information not only to the psychoanalyst who is interested in hypnosis but also to anyone who has some interest in hypnosis or psychoanalysis. The author discusses each separately and then attempts to integrate the two, doing this with each phase of the psychoanalytic process.

Also Received

A Marriage Manual for Catholics

By William A. Lynch, M.D., 359 pp., $4.95, Trident Press, 1964.

A USEFUL GUIDE written by a Catholic obstetrician and gynecologist.

Ivory Tower to Workshop

By Richard L. Durbin, M.B.A., James A. Connely, M.B.A., and W. Herbert Springall, M.P.H., 57 pp., $3.00, Tucson Medical Center Press, 1964.

AN INTERESTING monogram on the theory and practice in hospital administration.

Ciba Foundation Symposium on Cellular Injury

Edited by A. V. A. De Reuck, M.Sc., D.I.C., A.R.C.S., and Julie Knight, B.A., 403 pp., $12.00, Little Brown & Company, 1964.

A FUNDAMENTAL DISCUSSION of various stimuli on the individual cell and its metabolism.

Ciba Foundation Symposium Jointly with the Co-ordinating Committee for Symposia on Drug Action: Animal Behaviour and Drug Action

Edited by Hannah Steinberg, Ph.D., for the Coordinating Committee, Editors for the Ciba Foundation, A. V. S. de Reuck, M.Sc., D.I.C., and Julie Knight, B.A., 491 pp., $13.00, 1964.

ANOTHER excellent symposium.

Milestones in Nutrition: An Anthology of Food Science, Vol. 2

By Samuel A. Goldblith, S.M., Ph.D., and Maynard A. Joslyn, M.S., Ph.D., 797 pp., $14.25, The Avi Publishing Company, Inc., 1964.

A COLLECTION of papers reported to emphasize some of the milestones in nutritional science during the past century.

HAWAII MEDICAL JOURNAL

Notes and News

Professional Moves

We wonder if the *homo sapiens medicus* is not essentially a migratory species, judging from their movements during October and November. Local migrants include **Fred Dodge** moving to Waimalu, **Lucy Ma** to York Bldg., **Walter Chung** to 284 S. Vineyard, **James Mertz** to 1133 Punchbowl and **Ike Kawasaki** to 1232 S. King. Mainland to Hawaii migrants include **Herbert Wong,** internist, settling at 63 S. Kukui, and **Raymond Fujikami,** general surgeon, at 1481 S. King.

Elected, Appointed, and Honored

Over 170 friends and admirers honored the **Harold Civins** at Wo Fat's. We learned from Master of Ceremonies **Randal Nishijima** how a small impromptu group had snowballed through word-of-mouth publicity, testifying to Harold's popularity. **Paul Tamura, Charley Judd, Sam Allison,** and **Phil Arthur** were at their articulate best as they related anecdotes and extolled Harold's contribution to local medicine. We especially enjoyed an account of Harold's wartime exploits as an Air Force doctor, how he enucleated a 1-inch lipoma in no time flat and spent the next two hours suturing the 10-inch incision made for adequate exposure. To our knowledge, this was the first time we ever saw Harold get up and remain quite unvocal. We deeply regret his loss to our medical community.

Amiable **Raymond Dusendschon** has been appointed medical adviser of the Hawaiian Sugar Planters' Association succeeding the late **Nils P. Larsen.** He will continue his regular duties in occupational medicine with the Medical Group.

Shoyei Yamauchi, David Lee Pang, and **George Suzuki** were appointed to the State Commission on Aging, an agency permanently established by the 1963 Legislature. We note that Shoyei has also been elected President of the Hawaii Chapter of the American College of Surgeons. Others elected to this Chapter include **Rogers Lee Hill,** Vice President, and **Burt Wade,** Councillor. We offer our congratulations to the three new Fellows of the College: **Walter Chang, Carl Lum,** and **Steve Mahaffy.**

Industrious **Grover Batten** was reelected President of the Hawaii Cancer Society and deservedly received the American Cancer Society's highest national award. His capable lieutenants, **Paul Tamura,** Chairman, Professional Information, and **Irvin Tilden,** Chairman, Service Committee, attended the program planning conference at the Maui Palms Hotel.

We learned that **Ted Tomita** was elected Second Vice President and **Tsuneichi Shinkawa** Director of the Kuakini Hospital and Home for 1964-1965. **Kenneth Momeyer** was elected President, **Robert Dimler** Vice President, and **Fred Reppun** Secretary, of the Castle Memorial Hospital medical staff. **David Woo** of Hilo, **Peter Kim** of Lihue, and **Bertram Weeks** of Wailuku were named to the Hawaii Heart Association Board of Trustees. **Unoji Goto** and **Scott Brainard** attended the fifth anniversary party of open heart surgery patients in Hawaii at the Waikiki Yacht Club with sixteen isle youngsters who were saved by open heart surgery here. A truly heartwarming occasion. Physicians must make good vice presidents in Chinese organizations because we note that **Charley Ching** is First Vice President of the Hawaiian Chinese Civic Association; **Sam Yee,** Vice President of Pun Tao Club; **Francis Lum,** Third Vice President of the Chung Shan School Alumni Association; and **Joseph Kam,** Third Vice President of the Kam Society.

Visiting Physicians

Frank Lock, president of the American College of Obstetricians and Gynecologists and Ob-Gyn professor at Bowman Gray Medical School, North Carolina, lectured at Kapiolani. **Belding Scribner,** University of Washington School of Medicine, Seattle, lectured on fluid and electrolyte balance and dialysis to overflowing crowds at Queen's Kam auditorium. After two weeks of verbal dialysis, our brains still failed to retain the essentials of fluid therapy. Medical historian **Ilza Veith,** University of California Professor of History of Medicine, discussed Asiatic and American medical developments at the Mabel Smyth Auditorium, in four lectures.

Sportsmen

Sailors: Nautical **Al Majoska** was honored as Hawaii's "Yachtsman of the Year" by the Waikiki Yacht Club, and **Les Vasconcellos** installed as commodore. **Ells Harris** won the Hawaii Invitational Regatta PC title and **Yosh Ushiyama** packed the 14-foot division in a Lido 14.

Golfers: In November, at WCC, steady **Kiku Kuramoto** won A flight medal, **Bill Ito** won C flight individual match against par, and **Tom Fujiwara** won B flight. At OCC, poor **Bob Johnston** fired a gross 70, net 60, for only a third place tie and **M. E. Stevens** won the individual medal with net 65. At Ala Wai, **Ike Nadamoto** shot a net 66 in the Japanese CofC tournament to tie for first, only to lose in the coin toss. We recall Ike recently shooting a 72-11-61 with a new set of clubs and complaining, to our chagrin, that he should have done better. We also witnessed fearless **Herbert Takaki** "pushing" dauntless **Joe Nishimoto** and losing an unmentionable number of balls when statistical theory failed. In December at WCC, **Kiku Kuramoto** again won the team Stableford tourney and **Al Ishii** won C flight honors.

After the recent County election, we listened to outgoing Prexy **Allen Richardson** describe the philosophy of "juicing" as simply good management and **Bill Ito** threaten "We were nice to you this year because you were County President, but now that you are not . . ."

Toru Nishigaya was a tournament committee member for the Kaanapali Canada Cup event. No medical convention was ever so well attended by physicians, and **Bill Stevens** was the only one to get his picture in the papers.

Hunters: Belatedly, we learned that **Ed Ichiriu** had bagged a 200 lb. deer on Lanai in September. **Roy Kaye** could show only one pheasant for a weekend trip to Molokai.

Tennis: Late evening playing is as much in vogue as early morning playing for we see **Charley Ching, Ben Tom, Tom Oshiro,** and **Walter Quisenberry** still on the Punahou courts when the only available light is twilight and the ball is a misty blur.

Members Speak Up

F. J. Pinkerton in a preelection letter to the editor refuted charges that Goldwater had suffered one or more nervous breakdowns. We sincerely admire **Andy Ivy, Jr.,**

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HAWAII MEDICAL JOURNAL

Hawaii Medical Association

MINUTES OF THE COUNCIL MEETING

November 17, 1964, at 6:00 p.m.

Ciro's, Honolulu

PRESENT

Dr. Samuel D. Allison, presiding; Drs. Andrews, Chinn, Fong, Fujii (for Dr. Wade), Richard Moore (for Dr. Lum), Miyamoto, Nishijima, Pinkerton, and Tomita, plus Drs. Robert Wong (representing Dr. Richardson), H. Q. Pang, Messrs. John Pompelli (of the AMA) and Tom Thorson (of HCMS).

MINUTES

The minutes of the August 13, 1964, meeting were approved as printed in the JOURNAL.

REPORT OF THE SECRETARY

The Secretary was advised that Kauai County's official information regarding active members being added to their membership will be forthcoming.

ACTION:

The Secretary's Report was approved and accepted as circulated.

REPORT OF THE TREASURER

The Treasurer read the Auditor's Report for the fiscal year ended June 30, 1964.

There was a question about the $30,000 set aside for the Mabel Smyth Building.

ACTION:

It was voted to defer the matter of the $30,000 reserved for improvements to the Mabel Smyth Building until a later date and await the Honolulu County Medical Society's decision on what they propose to do with the space.

It was voted to accept the Treasurer's Report as circulated.

REPORTS OF STANDING AND SPECIAL COMMITTEES BY MEMBERS OF THE COUNCIL

Dr. Andrews reported on the AMA-ERF Committees. There was considerable discussion regarding the chemotherapy program, and Lanakila Health Center's procedures in the referral of patients with suspicious chest films.

ACTION:

It was moved to have the Lanakila Health Center make more definite emphasis in their form letters that the patient contact his private physician. The motion was tabled.

It was voted to have the Tuberculosis Committee evaluate the following areas and report back to the Council: (1) Obtain a statement from the Department of Health concerning their policies relative to patient referral and outpatient care of active cases. (2) Consider advisability of modification and implementation of the Department's program. (3) Submit to the Council copies of forms which are normally sent to the patients.

It was voted to accept Dr. Andrews' report as modified.

Dr. Miyamoto reported on his committees—Careers, Cancer, Communicable Disease and Immunization, Venereal Disease, and Hawaiian Academy of Science. There was discussion about the Department of Health programs including the cytology clinic. He advised that the Hawaii Health Fair dates are set for October 9 and 10, 1965. No specific action was taken on the report.

ACTION:

It was voted to accept Dr. Miyamoto's report.

Dr. West's report covering the Nurses Liaison Committee and the Maternal and Perinatal Mortality Study Committee was read. There was considerable discussion about the Medical Examiner's bill.

ACTION:

It was voted to refer the matter of the Medical Examiner's bill to the Legislative Committee for review and report to the House of Delegates at the Interim meeting in January.

There was discussion about committee chairmen and committees themselves making statements to the newspapers. It was recommended that each councilor remind his committee chairmen of their position and that policy matters should be referred to the HMA officers and, if possible, to the Council members.

ACTION:

It was moved to accept Dr. West's report as amended and discussed.

Dr. Nishijima reported on the Arrangements, Convention and Seminar, and Scientific Program Committees. It was felt that the Arrangements, Convention and Seminar, and Scientific Program Committees should work hand in hand insofar as planning for conventions is concerned. It was felt that there should be more coordination in arranging meetings. Dr. Fong felt that the various specialty societies, voluntary health agencies, etc., should be educated to inform the Hawaii Medical Association about their proposed meeting dates. It was also felt that HMA should act as a "clearing house" and chart all proposed meetings. It was suggested that these committees meet with all the voluntary health agencies, specialty societies, and other interested groups to join together in coordinating programs.

It was noted that the Scientific Program Committee is having problems in getting finances for the HMA Annual Meeting. Dr. Allison asked if the Council would approve advancing up to $4,000 to underwrite the Annual Meeting if funds cannot be obtained from other sources. It was noted that most organizations have their budgets planned one year in advance.

ACTION:

It was voted to authorize the Scientific Program Committee to spend up to $4,000 for the Annual Meeting provided outside financing cannot possibly be obtained after meeting with such groups as mentioned above.

It was voted to accept and approve Dr. Nishijima's report as modified.

continued page 228

LOMOTIL®

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . . 2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . . 0.025 mg.

- lowers motility promptly
- relieves spasm promptly
- stops diarrhea promptly

Lomotil fulfills the first order of treatment in most patients with diarrhea — prompt symptomatic control.

Pending discovery of the cause, early cessation of diarrhea is almost always urgently indicated. Prompt symptomatic control averts distress, dehydration and, frequently, severe exhaustion.

Both experimental and clinical evidence indicates that Lomotil exerts such control efficiently, safely and with maximal promptness.

dosage:

The recommended initial *adult* dosage is two tablets (2.5 mg. each) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is controlled. Maintenance dosage may be as low as two tablets daily. *Children's* daily dosage (in divided doses) varies from 3 mg. for a child of 3 to 6 months, to 10 mg. for one 8 to 12 years of age.

cautions and side effects:

Lomotil is an exempt narcotic; its abuse liability is low and comparable to that of codeine. Recommended dosages should not be exceeded. Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates.

Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE

Research in the Service of Medicine

A statement to physicians concerning a new concept for feeding infants in the home

What is "Nursette"? The Nursette disposable formula bottle is unexcelled in simplicity and safety for routine formula feeding. The Nursette unit consists of a glass bottle already filled with Enfamil in 20 cal./oz. dilution. No further preparation is required. Just twist off the cap, attach mother's choice of standard nipple unit and the Nursette bottle is ready for feeding.

Nursette bottles are available in three sizes (4, 6 and 8 oz.) to keep pace with the infant's growing appetite. It is safe to store unopened without refrigeration and feed without warming, if desired. There are no cans to open, no ingredients to mix or measure, no bottles to wash and sterilize.

Although the concept of a presterilized, ready-to-use formula sealed in a glass nursing bottle seems relatively simple—many years of research and development were required to solve technological problems and perfect the needed processes. While bottles filled with formula are in constant motion, high heat is applied for a critically short period. The result: a sterile formula with the natural whiteness of whole milk and maximal retention of all nutritional values.

Who uses "Nursette"? The Nursette unit is for routine feeding of normal infants. Nursette with ready-to-use formula eliminates much of the work and worry associated with current methods of formula preparation. Consumer surveys with hundreds of mothers indicate high preference for this new concept in infant feedi

Nursette bottles offer benefits to both inexperienc parents and harried multiparas—without compromis ing nutritional quality. Only a minimum amount of your time is required for counseling anxious mothers on the problems of formula preparation.

For infant feeding in hospital and home, Nursette bottles provide clinically proven Enfamil in the most practical and convenient form. This consistent 20 cal./oz. nutritional may be used exclusively or in conjunction with formula prepared from Enfamil concentrated liquid or powder. Nursette bottles in *discharge* packs are available to ease mother's first day at home.

Nursette disposable formula bottles are unexcelled in simplicity and safety for home feeding. In keeping with our dedication of "Serving All Needs in Infant Nutrition," Mead Johnson Laboratories is proud to make this new product available to you and your patients.

Mead Johnson Laboratories

Symbol of service in medicine

Enfamil®
NURSETTE*
disposable formula bottle

Geigy

Butazolidin® alka

Each capsule contains:

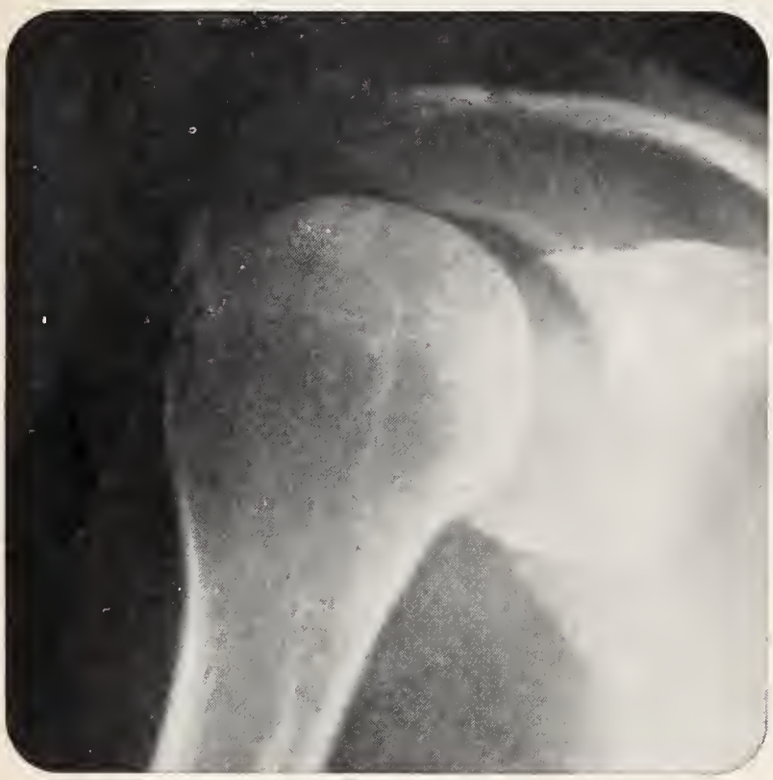
Butazolidin®, brand of phenylbutazone	100 mg.
dried aluminum hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
homatropine methylbromide	1.25 mg.

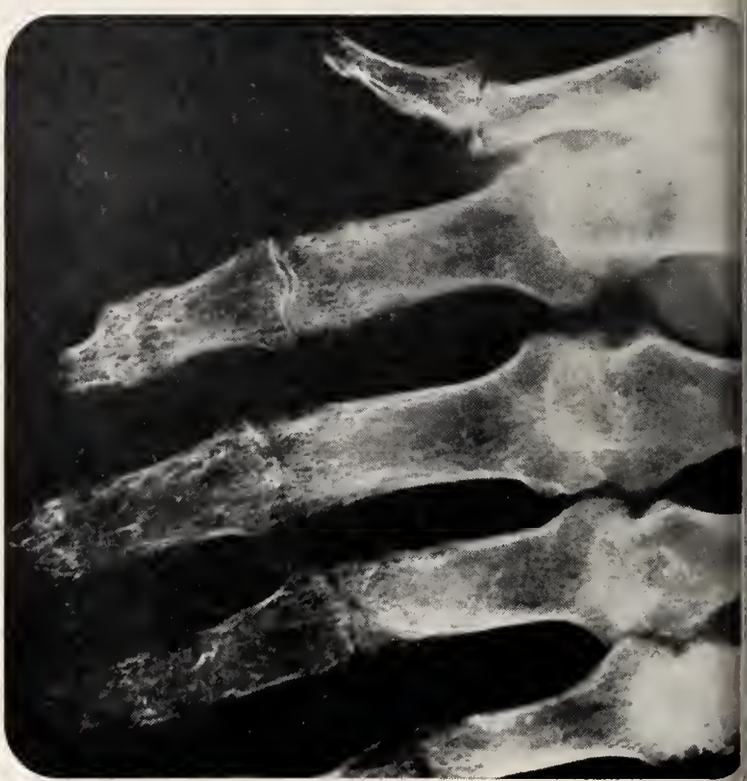
Butazolidin®

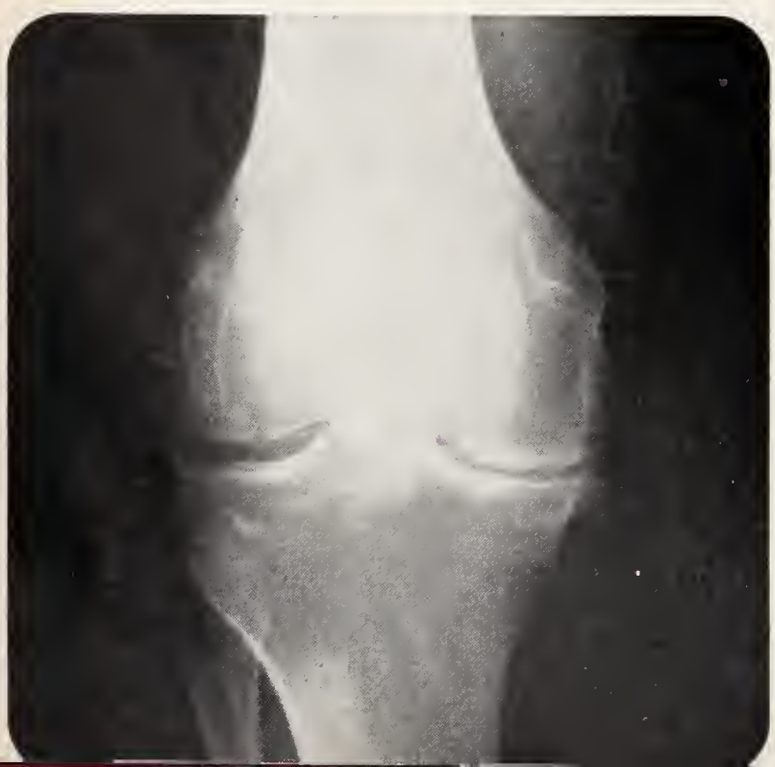
brand of phenylbutazone
Tablets of 100 mg.

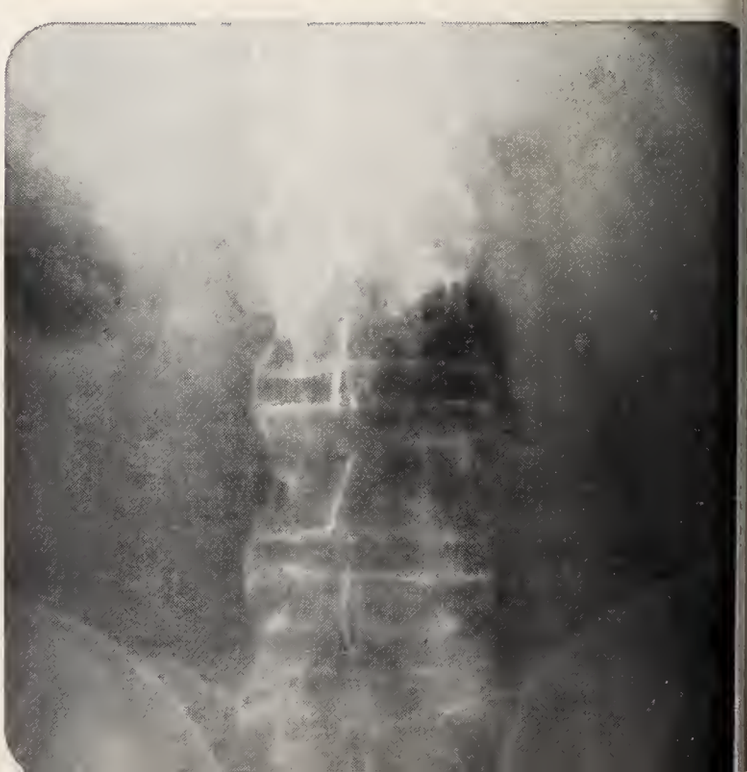
Geigy Pharmaceuticals
Division of Geigy
Chemical Corporation
Ardsley, New York

It works









HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: JAMES YANO, Kaiser Foundation Hospital

Interning Technologists for 1965

The prospective medical technologist interns for the coming year have recently visited the schools of medical technology and have found their tours through the various laboratories and hospitals interesting and informative. We wish them a successful year of internship filled with many challenges and successes.

The following students from the University of Hawaii have qualified for their internship during their senior year of 1965-66: Caroline Adachi, Susan Hess, Geraldine Kiyabu, William Matsuura, Kathleen Okamoto, George Padilla, Angel Ramos, Brenda Shiraki, and Gwynne Takeda.

Mrs. Louise Wulff, Instructor of Medical Technology at the University of Hawaii, has pointed out that several students will begin their internship this coming February and also beginning in September, whereas the majority will begin in June.

Christmas Party Highlights

The December meeting of the Medical Technologists was held in the luxurious and beautiful 7th floor lounge of Straub Clinic. An added attraction of the monthly meeting was the annual get-together for the Christmas party.

President Ken Sato opened the business portion of the meeting with several key announcements. A motion was passed and approved unanimously by the entire group that the Hawaii Society of Medical Technologists will forward to the American Society of Medical Technologists a sum of $75.00 to add to the national Legal Fund. The scientific aspect of the evening was interesting and stimulating with wonderful presentations by Carolyn Dangler on new techniques developed in radioactive scanning; by Dorothy Matsuo on the new pregnancy test, Gravindex, using anti-human chorionic gonadotropic serum; by Francis Koike on new techniques of crossmatching bloods; and by Takeyo Saito on cytogenetics and chromosomal counts. Miss Edith Ekstein must be congratulated for planning a most interesting evening of science, gaiety, music, and surprises.

The Society would like to take this opportunity to express its thanks to the following donors, whose generosity has added much enthusiasm to the support of our scholarship fund: Sears, Roebuck and Company; Foodland Stores; Haiku Gardens; Beach Market; Ala Moana Superette; Blood Bank of Hawaii; and Kum Wah Crack Seed Center.

Successful Candy Sale

As is usually customary in December, the HSMT conducts its annual candy sale. The proceeds are used to send our delegate to the National Convention of the ASMT, for the important scholarship fund, and to help defray some of the expenses incurred by the Society throughout the coming year for scientific conventions and undertakings. Mr. Richard Kurisu and Miss Gloria Dela Cruz did a most commendable job in coordinating and successfully completing this big project. Congratulations are also in order to the members who distributed and sold the boxes of candy. Of course, we are always indebted to our many friends and supporters.

Announcements

- With the unexpected resignation of our Recording Secretary, the Executive Board has selected Miss Ann Stegmaier to that office for the interim period with this administration of the HSMT.
- Official roster for the members of the HSMT includes 73 medical technologists, 4 associate members, and 10 student members. Let us all make an earnest effort to increase our membership.

Quality Control Program Among Local Hospitals

With the rapid advances made in the field of medical sciences, the clinical laboratories are playing a more significant role in the diagnosis and treatment of diseases. Therefore the need for a better and more comprehensive quality control program is increasing. As one speaker has stated it: "Quality control is a child of mass production that can lead to improved diagnostic sensitivity."

In the fall of 1963 an attempt was made by the Chief Medical Technologists of the four major private hospital laboratories in Honolulu* to conduct a quality control program with the prime purpose of accomplishing uniformity of test results for many of the clinical laboratory procedures. The original plans formulated were to cover all phases and departments of the clinical laboratory: chemistry, special chemistry, hematology, microbiology, blood banking, parasitology, serology, immunology, urinalysis, and cytology.

The plans were executed in the following manner. If any of the four participating hospital laboratories was interested in any particular determination, the Chief Technologist would send aliquots of the same specimen to the other three laboratories for the particular test requested. When the specimens were assayed a report was mailed to the requesting laboratory, which, in turn, would tabulate the results, using symbols of A, B, C, and D to denote the four participating hospitals, and send a composite report to all. At no time were any of the laboratories identified by the same symbol; neithed did any laboratory know the results of the other laboratories except for the Chief Technologist, who originally sent the unknown specimens.

With work and circumstances so unpredictable, regularity of these exchanges was very difficult to maintain. However, we were fortunate in performing twenty different determinations for an interesting comparison. The following tables will illustrate the various analyses and results compiled during a six-month period of this inter-hospital quality control program.

Request:

	A	B	C	D
Hemoglobin—	12.0 gm%	12.8 gm%	12.2 gm%	12.0 gm%
Cholesterol—	176 mg%	197 mg%	178 mg%	191 mg%
Creatinine—	3.75 mg%	4.0 mg%	3.6 mg%	4.6 mg%

Complete blood count on a patient diagnosed with chronic myelogenous leukemia.

A.) Hemoglobin—11.4 gm%;
Hematocrit—35.5%; WBC—34,600

B.) Hemoglobin—11.4 gm%;
Hematocrit—36.0%; WBC—34,600

C.) Not available

D.) Not available

	Seg	Band	Juv	Mye	Pro	Blast	L	Mon	ProM	Baso
A.)	23	15	12	21	12	11	4	1	–	1
B.)	39	7	14	11	1	3	7	9	7	3
C.)	48	6	4	22	–	5	5	5	–	1
D.)	31	15	16	10	5	6	5	10	–	1

A.) Three nucleated RBC/100 WBC; occasional basophilic stippling and spherocytes; platelets appear normal; RBC's appear microcytic, normochromic.

B.) RBC's appear aniso, poikilo with microcytes; platelets appear increased; 4 nucleated RBC/100 WBC.

C.) 2 nucleated RBC/100 WBC; occasional macrocytes, marked increase of platelets; giant platelet forms seen—3 lymphocytes with large dark cytoplasmic bodies.

D.) 2 nucleated RBC/100 WBC; slight to modrate hypo and aniso; slight poikilo; approx. high normal or slight increased platelets—several abnormal forms.

	A	B	C	D
Thymol turbidity—	63 units	26.4 units	53 units	22.4 units
Micro-bilirubin—	14.8 mg%	11.4 mg%	13.6 mg%	14.6 mg%
Cholesterol—	193 mg%	230 mg%	227 mg%	266 mg%
Uric Acid—	5.3 mg%	6.1 mg%	7.1 mg%	5.6 mg%
Heterophile—	1:224 titer	1:448 titer	1:896 titer	1:224 titer
17-ketosteroid—	11.1 mg/ 24 hrs.	10.0 mg/ 24 hrs.	8.7 mg/ 24 hrs.	none
17-ketogenic steroid—	41.3 mg/ 24 hrs.	30.4 mg/ 24 hrs.	28.8 mg/ 24 hrs.	none

Laboratory	A	B	C	D
Uric Acid	4.3	4.5	4.7	4.7
Cholesterol	198	185	194	187
Phosphorus	3.5	1.8	3.2	4.2
Creatinine	1.0	1.1	0.9	1.0
Urea Nitrogen	18	16	11	20
Total Protein	6.9	7.1	7.0	6.8
Albumin	3.7	3.5	4.3	4.3

We hope to revive this project of inter-hospital quality control program this year. We think it has great merit. ■

* Kaiser, Kuakini, Queen's, and St. Francis.

Hawaii Medical Association *continued page 220*

Dr. Chinn reported on his committees—Awards, By-laws, Crippled Children, and Disaster. It was noted that the Disaster Committee Chairman, Dr. E. Boone, attended the 15th Annual Conference for Disaster Medical Care on October 31 and November 1, 1964, in Chicago. Mr. Thorson, HCMS Executive Secretary, informed the Council that the County has not received this report and would like an official report from the HMA.

ACTION:
It was voted to accept this report.

* * *

Dr. Tomita reported on his committees—Chronic Illness and Aging, Indigent Medical Care, Legislative, and Pharmacy. It was noted that Dr. Shoyei Yamauchi, Dr. George Suzuki, and Dr. David Lee Pang have been appointed to the Hawaii Commission on Aging and emphasis is being given to the home care program.

Members of the Indigent Medical Care Committee are very concerned and interested in getting the Legislature to appropriate sufficient funds to upgrade Kerr-Mills.

The Legislative Committee met for the first time this year on November 17 to consummate the House of Delegates mandate to work out an agreement with HMA's legislative counsel. It was noted that Mr. Honda stated that if the HMA wanted him to push for certain bills (such as the Medical Practice Act, legislation to license psychologists, etc.) then his fee would be $10,000, but if the Medical Association's only area to be worked on is the opposition of certain bills, then his fee would be $6,500-$7,000. It was also noted that the Legislative Committee authorized the Chairman to negotiate terms as set forth by the House of Delegates. Mr. Honda advised Dr. Tomita that his contract for this particular year would end at the close of the Legislature. Dr. Tomita asked Mr. Honda to put this in writing. It was noted that Mr. Honda in his previous correspondence to the HMA did not prescribe to this concept.

The Pharmacy Committee met twice and is concerned about the bills the pharmacists may present to the Legislature. One bill concerns the nurses dispensing drugs and giving injections.

ACTION:
It was voted to accept this report.

* * *

Dr. Moore read Dr. Chew Mung Lum's report on his committees—Medical Care Plans and Fees, Federal Medical Services, Medical Education, and Medicine and Religion. It was noted that the Medical Care Plans and Fees Committee meets every Monday and the Relative Value Study subcommittee has set up additional meetings so that it can submit a report to the House of Delegates in January.

The Council approved authorizing the President to sign the supplemental agreement to the Medicare Contract covering the claim rate of $1.54.

ACTION:
It was voted to accept this report.

* * *

Dr. Wade's report on the Diabetes and Woman's Auxiliary Committees was not received.

COMMITTEES WITH NO REPORTS BY COUNCILORS

Medical Practice Act: Dr. Moore, Chairman of this committee, reviewed his report which had been circulated. There was considerable discussion about problems which may arise in rewriting the Medical Practice Act. Dr. Moore informed the Council that the Act is patterned after a "model" act and is pretty much the same as Hawaii's present Act except for a few changes in the format.

Council members, as well as any other member of the Association, were invited to attend the Medical Practice Act Committee meetings which are held almost every Wednesday. There was also some discussion about participation of neighbor island doctors on this committee. Dr. Moore stated that a report is sent out weekly to neighbor island members and he has kept in close contact with them, and each neighbor island has commented on changes desired.

Publications Committee: There has been a request by the Editor to run a free advertisement for the Peace Corps in the HAWAII MEDICAL JOURNAL.

ACTION:
It was voted to approve this request.

Public Relations Report: This report was accepted and circulated.

UNFINISHED BUSINESS

Mabel Smyth Building: Dr. H. Q. Pang was present to report on the Mabel Smyth Building. It was noted that the Board of the Mabel Smyth Building did not approve Straub Clinic's request for special rates for the Radio Page Service.

Dr. Pang stated that after talking with the building's attorney, Mr. Watanabe, it was felt that they are in violation when they rent the auditorium out to the public.

NEW BUSINESS

School Health Physicals during the Birthday Month: The proposal of the School Health Committee was outlined. Neighbor island physicians agreed that crowding of examinations in August is a statewide problem.

ACTION:
The Council voted to give this request their strong endorsement.

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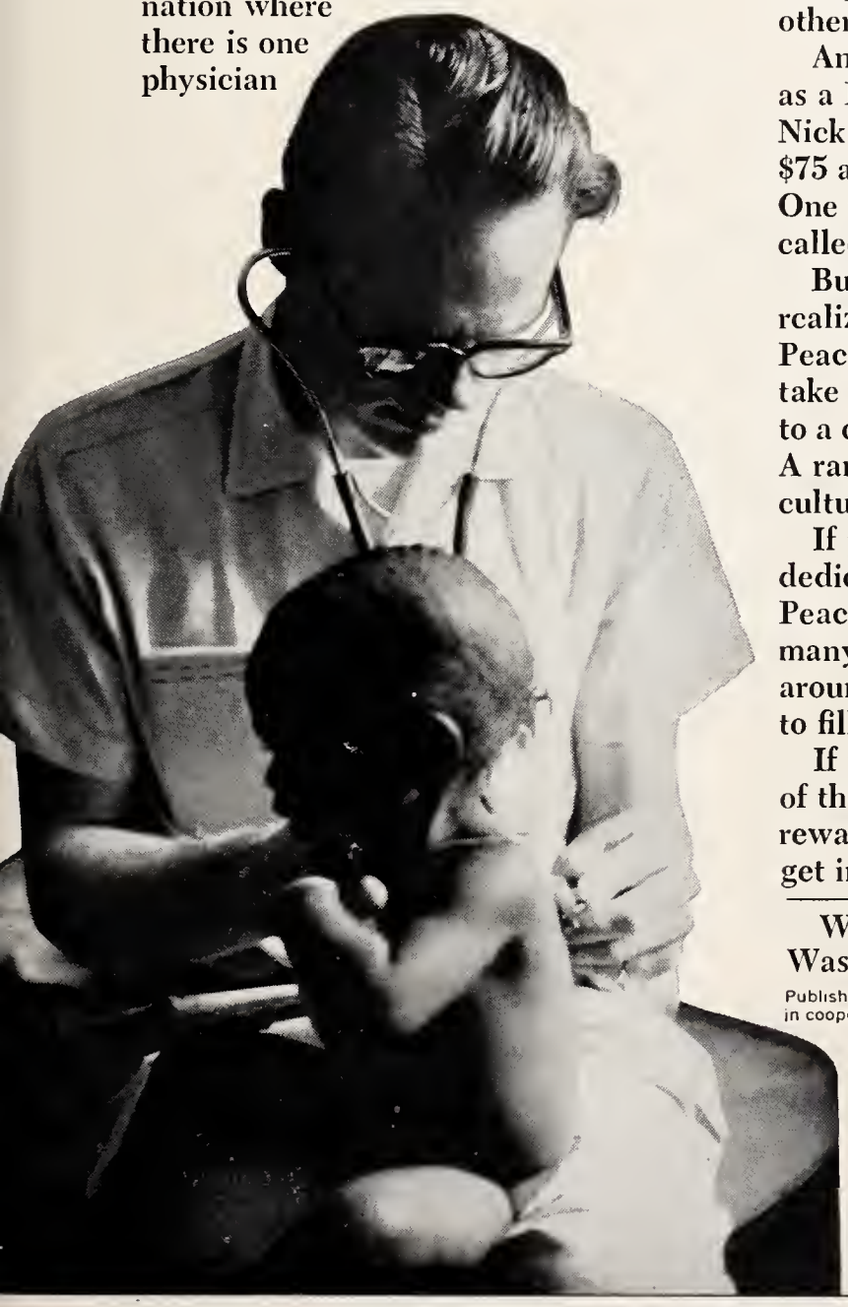
"My colleagues thought I was crazy!"

Nick Cunningham, M.D., was eminently qualified for any number of promising medical posts here at home. Harvard pre-med. Hopkins medical. London's Guys Hospital. New York's Presbyterian Hospital.

Yet, with this rich professional background, Nick Cunningham chose to become one of the first volunteer doctors in the Peace Corps.

He preferred to go to an African nation where there is one physician



for every 80,000 people. Where modern medicine is all but unknown. Where the most stubborn clinical problems exist. Cholera, trachoma, encephalitis, leprosy and a horde of other debilitating diseases.

And for his two-year stretch as a Peace Corps doctor, Nick Cunningham's pay was only $75 a month — plus living expenses. One reason why his colleagues called him crazy.

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Hawaii Medical Association *continued from 228*

ODMC Contract: It was noted that the Federal Medical Services Committee has to set a fee on all unlisted procedures. Committee felt that if set fees were negotiated for some more common procedures, they would not come up each time the committee meets.

ACTION:

It was voted to have future fee negotiations with ODMC delegated to the Medical Care Plans and Fees Committee.

Veterans Administration: It was noted that the VA has been using higher fees than were listed in the last contract. They have indicated that they propose to change their fee schedule format to conform with that of the California RVS (1960). The Federal Medical Services Committee would like permission to proceed with negotiations and authorization for the President to sign a new contract.

ACTION:

It was voted to authorize the President to sign the proposed VA contract; the fee sehedule to be on the basis of a conversion faetor of 5.0.

AMA Delegate's Report: Dr. Moore enlightened the Council on the background of the three nominees for the position of President-Elect of the AMA. The AMA Delegate also asked if the Council had any specific recommendations for him to take back to the meeting. He noted that he has been appointed to the Reference Committee on Medical Military Affairs.

ACTION:

The Couneil voted to send Hawaii's AMA Delegate to the meeting uninstructed.

The meeting adjourned at 10:30 P.M.

RANDAL A. NISHIJIMA, M.D.
Secretary

County Society News *continued from 217*

half and the hospital for the other half of the journals. The meeting concluded with talks by representatives of the HMSA. Mr. Joe Veltmann presented a plaque to Dr. Lewis for having served on a HMSA committee for three years.

The June 4 meeting was a dinnner honoring AMA President, Dr. Edward Annis, who was presented with the key to the city by Mr. Gene Wilhelm.

At the July 3 meeting Dr. John Zelko was elected to membership. Dr. William A. Sodeman spoke on "Acute Pericarditis," and Dr. H. R. Reichman on "Idiopathic Ulcerative Colitis."

At the August 20 meeting Dr. Haraguchi was appointed local chairman for the diabetes detection program. A letter from the Hawaii Heart Association asking support of local physicians was approved. It was voted to apply for tapes of Dr. Robbins' lectures from Queen's. Ballots were distributed asking for a vote on three questions and the following results were announced. Ten physicians opposed inclusion of physicians under Social Security, 15 opposed requiring citizenship for interns, 15 opposed the one-year residence clause in the Medical Practice Act. Eighteen members' votes were recorded on each question. It was voted to write to the AMA to find out what could be done to speed up the delivery of their publications. Drs. Bracher and Best spoke on "Liver Function Tests."

At the September 17 meeting it was voted to include HAMPAC dues in the regular dues billing for 1965. An announcement relative to a forthcoming Workmen's Compensation hearing was made. Two letters relative to hospital utilization committees were read—one from Mr.

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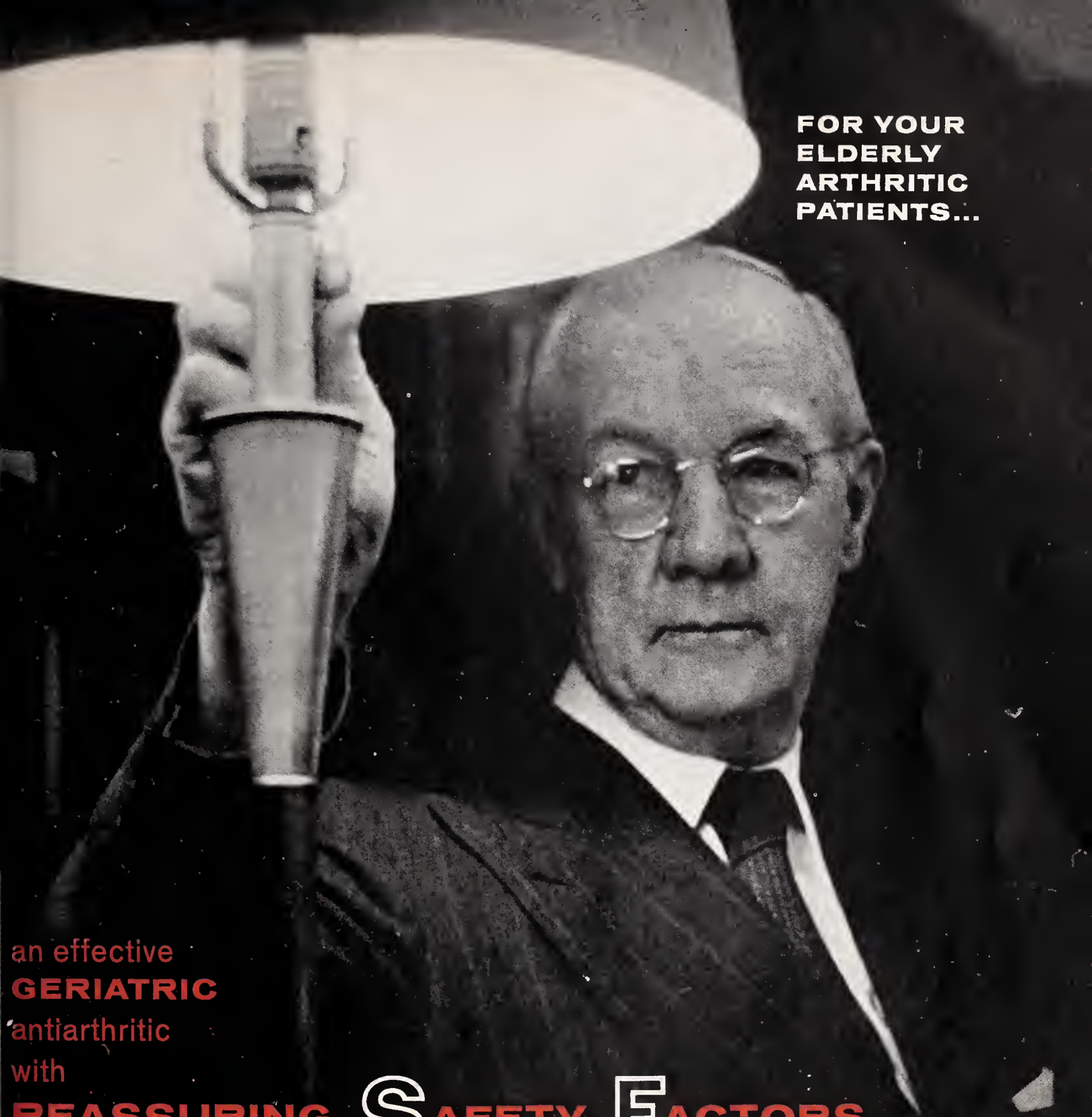

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Among of the Department of Social Services and the other from Mr. Veltmann of the HMSA. The advisability of publicizing the existence of the Grievance Committee was discussed. Both the HMA President, Dr. Allison, and President-elect, Dr. Pinkerton, were present, and the latter presented a talk with slides on "Keratoplasty."

* * *

The October 30 meeting was preceded by a 20-minute film on the irregular rhythm of the heart. Dr. Wipperman advised that he had resigned for personal reasons from the Claims Review Committee of the HMSA and would be replaced by Dr. Mitchel. It was announced that questionnaires were sent to doctors in the rural areas relative to use of a county hospital by a private medical group. All returns indicated opposition to this type of practice. It was voted to write the Workmen's Compensation Board and ask that the workers be informed that the Society endorses the law providing free choice of doctors. Dr. Haddon's request to transfer to the Society was unanimously approved. Dr. Jones stated that he wished to join the County Society only. The legality of this was questioned before he was voted into the County Society. Following dinner, Dr. Charles Vaughan spoke on "Immunological Aspects of Rheumatoid Arthritis and Its Relationship to Systemic Lupus Erythematosus."

* * *

The following were elected at the November 19 meeting: R. T. Eklund, President; Ed B. Helms, Vice-President; E. W. Best, Secretary; P. J. Caldwell, Treasurer; James Mitchel, HMA Delegate; R. P. Wipperman, Hal Lewis, and George Bracher, HMA Alternate Delegates. The Executive Committee recommended consideration of an administrative or executive secretary. It was announced that the Board of Medical Examiners had made $75.00 available to the Society Library, and books were ordered. Dr. Wipperman reported on the Federal Medical Service Committee meeting at which a new VA schedule was approved. Dr. Jones' application for membership was referred to the Credentials Committee. The Society will cooperate with a study concerning a check-up on the health of Japanese males born in the Islands between 1900 and 1925. In January Dr. Belcher will be given a special examination for licensure. Mr. John Pompelli of the AMA spoke briefly. Col. Moncrief spoke of the proposal that the Army take in 60,000 men who cannot pass the physical or mental examinations to try to rehabilitate them. A discussion followed on why physicians should accept reduced fees for welfare and veteran patients. Complaints by the local doctors were reviewed by Dr. Rose and Mr. Katano of the Veterans Administration. The members were advised that no diagnostic procedures related to nonservice-connected disabilities are allowable outside Tripler. Dr. Moncrief concluded the program with a talk on "Hiatal Hernia."

Honolulu

The slate of nominations for the annual meeting was presented at the November 10 meeting which approximately 175 members attended. Only one additional nomination was made: Dr. Theodore Tomita's name was added to the list of nominees for the Board of Governors.

Dr. Winfred Lee spoke on the forthcoming Diabetes Detection Drive and urged the doctors to cooperate in making the drive a success. Following introduction of two members, Drs. Frederick Lee and Windsor Cutting, Dr. K. S. Tom presented the representatives from the Home Service Department of the Hawaiian Electric Company who put on a program on holiday entertaining.

* * *

Approximately 250 members attended the annual meeting on December 1. Five new members were introduced: Raymond Fujikami, Albert Y. T. Kong, Hideo Oshiro, Clifford J. Straehley, and Raymond M. Williams.

Announcements were made relative to the dues, which will remain at $65 for 1965; the coming lecture series by Dr. Ilza Veith; the report on the Diabetes Detection Drive which tested nearly 6,000 people of whom 481 were reported as positive cases; and a request for doctors to identify themselves by giving their assigned number when telephoning in prescriptions.

Mrs. B. A. Richardson, outgoing President of the Woman's Auxiliary, summarized the Auxiliary's activities for the year and her husband, Dr. B. A. Richardson, outgoing President of the Society, reviewed his annual report.

Tellers were appointed, ballots counted, and the following elections announced: John H. Lowrey, President-elect; George H. Mills, Secretary; Richard E. Ando, Treasurer. Four new members were added to the Board of Governors: Robert P. C. Ho, Charles S. Judd, Jr., Chew Mung Lum, and Theodore T. Tomita. Three new alternates were elected: Ralph M. Beddow, Kenneth Chinn, William W. L. Dang. B. A. Richardson was elected to the Board of Censors and Herbert Y. H. Chinn and Andrew L. Morgan to the Nominating Committee. Three new members joined the Medical Practice Committee: Keith F. O. Kuhlman, Don E. Poulson, and Noboru Oishi. Nine new HMA delegates and twelve new alternates were elected.

Kauai

At the June 2 meeting, following a few brief announcements, Dr. Rose and Mr. Katano of the Veterans Administration spoke on the method of handling the medical care of veterans.

No guests were present at the July 7 meeting when it was voted that the Society go on record that an emergency status existed on Kauai and Dr. Otto K. Eichman should

be granted a temporary license. It was also voted to ask for a waiver of the remaining term of residency for Dr. James R. Warner. It was announced that when Dr. Robert J. Emrick arrived to take up his position as pathologist at the G. N. Wilcox Memorial Hospital he would be available to other hospitals on request.

' ' '

Three guests were present at the August 11 meeting. A letter from the Board of Medical Examiners advised that Dr. Eichman's credentials were in order and his residency requirement fulfilled. Arrangements were made for him to take a special examination. The Secretary was instructed to write three letters in connection with a case which had been taken up with the HMA's Hospital Committee.

' ' '

Two guests were present at the September 8 meeting at which Dr. Fujii reported on the August 20 HMA Council meeting. The dates of January 29, February 4, or February 5 were chosen for Dr. Paul B. McCleave's visit. It was voted to sponsor a Diabetes Detection Drive in 1964. It was voted to send copies of HR 11865, which had been received from the AMA, to all members of the Society.

' ' '

Three new members were introduced at the November 2 meeting: Drs. Otto Eichman, Robert Emrick, and J. R. Warner. Announcement of a special breakfast meeting to hear Dr. John H. Vaughan speak on "Rheumatoid Arthritis" was made. Dr. Kim advised that the positives found in the December 7 through 11 Diabetic Detection Drive would be followed up with a glucose tolerance test using the new Somagi-Nelson Technic.

A long report from Dr. Hirschy of the Department of Health regarding polio immunization was read. Action was deferred until the medical-legal questions could be answered. Dr. Boyden reported that he had contacted the Kauai high schools to inform them of the careers program to be held in Honolulu. Financial arrangements will be the same as those made last year.

Recommendations for changes in the Medical Practice Act were voted on and the following positions approved: (1) Elimination of the one-year residency clause. (2) Appointment on the Board of Medical Examiners to be made by the Governor from names presented by the HMA component societies. (3) The Board of Medical Examiners to be made an independent body empowered to discipline, examine, investigate, and suspend licenses. (4) The Board to be made up of medical doctors only. (5) Registration of foreign medical school graduates. (6) Elimination of proposed 10-year limit for reciprocity for National Board diplomates and insertion of an oral examination requirement regardless of age of certificates. (7) Retention of the Hansen's disease clause. (8) In lieu of the one-year residency, physicians licensed in other states may spend one year on the neighbor islands or rural area as a requirement for licensure.

' ' '

At the December 2 meeting Dr. Fujii reported on the recent Council meeting. He advised that no definite decision was reached on the Medical Practice Act, and that all the neighbor islands were in favor of the elimination of the residency clause but the Honolulu Society was not. The Treasurer reported that $175 of the bank balance was earmarked for the Diabetes Detection Drive.

A letter from the Department of Health relative to the legal aspects of immunization with polio vaccine was read. An attorney advised that there was no way for a Society to protect itself from suit except by the preparation of a statement which is signed and agreed to by the parents of the children receiving the immunization. Dr. Kim asked if the Society would care to have him draw up a consent form to be used at the time of the Operation Polio Drive to be held in 1965. He read a letter from Dr. Hirschy

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County Society News *continued from 233*

relative to the scheduling of the different types of Sabin vaccine.

Dr. Wade reported on the proposed changes in the HMA Bylaws and the activities of the HMSA Board. He advised that the next Sunday issue of the "Advertiser" would carry an article on the operation of HMSA.

It was voted to request waiver of the one-year residency requirement for Dr. De Morris, a radiologist who will come to Kauai in 1965.

The following new officers were elected: Webster Boyden, President; Yonemichi Miyashiro, Vice President; and Robert Emrick, Secretary-Treasurer. ■

Notes and News *continued from 219*

for this statement, "I do know that my father has the highest principles and ideals and he will do what he thinks is right no matter what his personal fate."

We feel that controversial issues are more than adequately aired, e.g., when **George Goto's** proposal for a free birth control and family counselling program for indigent mothers was described as a "very un-Christian approach" by **John Felix.**

Eloquent and able **Sam Allison** aptly described the physician's stand on the "Medicare" issue, viz. "We have never been opposed to a medical care program for the aged . . . but we *are* opposed to limited hospital and nursing home care through the Social Security mechanism." In conjunction with Community Health Week, we read Sam's comments on how medical science in the United States has increased man's expected lifespan to 70.2 years as compared to 47 years in 1900. At this rate, we can expect nothing but centenarians to be born in another 60 years.

Keith Kuhlman was indignant about the cowardly actions of the U. S. Consul to the Congo when the Consul and his staff were terrorized into eating the American flag. We would rather recommend some digestive enzymes. **Phil Arthur** was critical of Senator Inouye for voting against the Senate bill seeking income tax exemption on college and higher education expenses and described Dan as a "ward heel politician." **Perry Sumida,** President of the Hawaii Eye, Ear, Nose and Throat Society remarked on the hazards of using contact lenses by industrial workers. **Frank Tabrah** of Kohala delivered the keynote address at the eighth annual Hawaii Pharmaceutical Convention at Princess Kaiulani. The topic was his research project on ancient Hawaiian medicinals, and home remedies of Hawaiian pharmacists known as the *kahuna lapaau.* **E. R. Austin,** when asked by the Inquiring Reporter, remarked that he tells his grandchildren that there's a Santa Claus and if they're nice, he may give them gifts and if they aren't, he won't. Sounds like good adult psychology.

Department of Health

In October, **W. F. Lyons,** State Health Dept. epidemiologist, reported Shigella enterocolitis and infectious hepatitis as being epidemic. He noted that "the people of Hawaii . . . should be ashamed of their filthy habits. Neither disease can exist if hands are washed after going to the toilet." In mid-October, with an epidemic full blown, the "Roaring" Lyon stated, "There's no proof it is influenza." At the end of the month, with the epidemic dying, he announced that there was an influenza B along with an adenovirus and Coxsackie virus circulating and recommended rest and lots of fluid. **Robert Marks** and **Peter**

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Notes and News *continued from 234*

Kim discussed tuberculosis at the Public Health Association meeting at the Princess Kaiulani in November.

Entrepreneurs

Richard Kainuma is a Director of the Central Pacific Bank and **Clarence Fronk** of the proposed United American Bank. **Richard You** may combine forces with boxer Archie Moore in the development of his new health center. Archie commented, "With my knowledge of foods, food supplements, and weight reducing and with Dr. Richard You's medical knowledge, the greatest health center in the world could be here in Honolulu."

House Staff Items

The hardworking Kuakini interns under **Ed Yamada,** Medical Education Director, held their Christmas party at the Monarch Room, Royal Hawaiian, compliments of grateful staff physicians.

Community Notes

Robert Jay spoke to Ewa Elementary School students on acne and smoking during Public Health Week. This is nipping the bud before it even buds. **Fred Shepard** spoke at the 12th annual meeting of the Licensed Practical Nurses Association. **Philip Lee,** Chairman of the Nuuanu YMCA Board, helped lay the cornerstone for the new Nuuanu YMCA. He claims that exercising and taking steam baths at the "Y" helped him prepare for this occasion.

Ichitaro Katsuki, turned 99, attributed his longevity to "regular living, meaning staying away from drinking, smoking and those wild places. . . . Moderation is the answer. Excesses in everything are bad, such as women and love affairs." But such supreme sacrifices.

In December, **Robert Millard** reported the theft of more than 1,000 barbiturate capsules from his office on Bishop Street.

Honolulu Heart Program

On January 12, the Honolulu Heart Program got into full swing with the mailing of approximately 13,000 health questionnaires to male Americans of Japanese ancestry between ages 45-64. This is a large scale epidemiological study of cardiovascular disease being carried out by the National Heart Institute. A similar study is being initiated in Hiroshima and is being planned in Los Angeles. This study is designed to observe the actual incidence of clinical coronary heart disease and cerebrovascular disease among those of Japanese ancestry; and, in particular, to study the importance of environmental factors in causation.

The next phase of the study is the actual clinical and autopsy surveillance of cases of CHD and CVA in the study group. This surveillance is to include all hospitalized as well as nonhospitalized cases occurring among male Americans of Japanese ancestry on Oahu, aged 45-64. ■

Maternal Death Study *continued from 213*

of responsibility were the patient, attending physician, and hospital.

CONCLUSIONS AND RECOMMENDATIONS

1. In view of the critical nature of the patient's illness, management of the case should have been turned over to the consultant upon admission to

the hospital. The hospital's rules and regulations regarding care of critically ill patients should have been rigidly enforced.

2. The total fluid and blood administered IV over a period of 33 hours was 6,500 cc: excessive, in view of the existing anuria. Pulmonary edema and death were the direct result of overhydration.
3. Serum electrolyte studies should have been obtained in order to intelligently replace bodily needs, instead of blindly administering 5% dextrose in water only.
4. The antibiotic of choice was thought to be chloramphenicol but the dosage used was inadequate.
5. Hemodialysis could have been life saving, if used.
6. Levophed produces renal vasoconstriction and is a poor vasopressor in the presence of renal shutdown.
7. When the patient's family refused to allow an autopsy, the attending physician and the hospital should have insisted that the County Medical Examiner perform an autopsy because criminal interference with the pregnancy was strongly suspected.

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MORTALITY STUDY COMMITTEE

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HAWAII MEDICAL JOURNAL

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VOLUME 24 • NUMBER 4

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*Lennox, W. G.: Epilepsy and Related Disorders, Boston, Little, Brown and Company, 1960, vol. 2, p. 865.

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VOLUME 24, NUMBER 4 · MARCH-APRIL, 1965 · $6.00 A YEAR, $1.00 A COPY

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HAWAII MEDICAL JOURNAL

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A Queen's Board Member Speaks Up

TO THE EDITOR:

The Advertiser did a good job, in my opinion, commenting on your Editorial in the January-February issue of the HAWAII MEDICAL JOURNAL. I would comment on just one rather minor statement—"lasting discredit of both Boards of Trustees," presumably referring to their failure to bring about the moving of Children's to Queen's some years ago. I was chairman of the committee during the time when several meetings and long discussions were presented.

In the process of sorting and consolidating my files, I came across the minutes of those meetings and took time to refresh my memory.

I agree with you that the move of Children's Hospital to Queen's should have been accomplished and would have but for lack of understanding, faith and genuine trust plus a few personality conflicts which seemed impossible to overcome. In few words, the amalgamation failed to materialize because of seemingly adjustable compromises. But in spite of every persuasive effort by many sincere, skilled and unbiased minds the project was dropped.

Looking back, I think there were two, possibly three major differences of opinion.

1. Children's fear of loss of identity. It seemed to me and most of the discussants that this difference was resolved when the agreement was reached that Children's would remain as a separate specialized unit with its own building, its own board and its own corporate entity. The intern-resident staff would be under joint administrative control, appointment and classification because as physicians they would naturally be subject to the same regulations, particularly so, because many general physicians were also practicing good pediatric medicine and at that time there were fewer accredited pediatric specialists.

It was in this area only where physicians entered the controversy by one or two physicians.

2. The second most provoking creator of disagreement centered around the philosophy of economy to the patient and family. In fact it was the economy angle which seemed to be the storm center because of its bearing on the whole problem.

(a) The kitchen and food preparation was controversial. From Queen's angle, a great saving would result by using the same kitchen, the same cooks, etc., etc., but Children's contended that adult food was unthinkable for children and insisted on their own kitchen, their chief cook and special cooks for children.

(b) Nursing staff—it was stressed that Children's nurses were specifically trained in pediatrics; therefore, it was argued that there had to be the same Children's head nurse administrator, nurse training supervisor and assistants.

(c) Pharmacy—it was agreed that one pharmacy—Queen's would suffice.

(d) Laboratory—Pathology Department—there seemed to be no controversy here—one laboratory was satisfactory.

(e) X-ray—only one argument was presented against using the same x-ray services—that x-ray techniques were far different with children than with adults, requiring not only a different x-ray unit, but a special room and a specially trained technician.

3. The third point of difference involved a combination of all the above plus others. One very vocal argument concerning the amalgamation was from a nature lover who insisted that the children's wing at the Queen's Hospital *required* a ground level access to the garden

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My, yes! I'm not tired out anymore.

Headaches still bother you?

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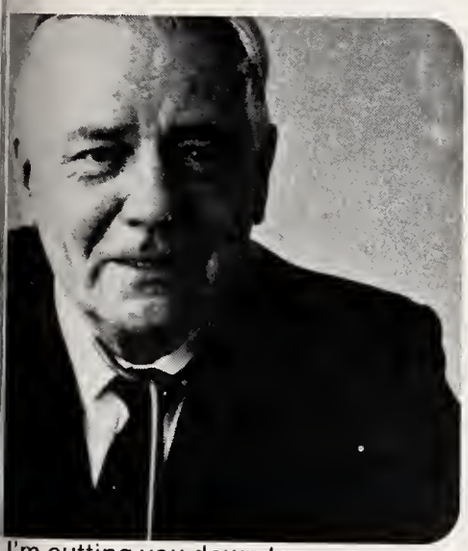
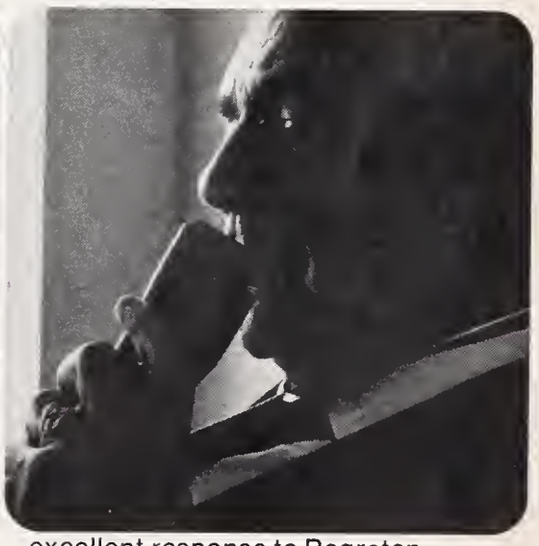
Mmm. Normal. Must be taking your Regroton.

One a day at breakfast. Sure is easy on me.



I'm cutting you down to tablet daily.

Thanks for everything, Doctor. See you on the 3rd.



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osition: Each tablet contains chlorthalidone, , and reserpine, 0.25 mg.
indications: History of mental depression, ensitivity, and most cases of severe renal atic diseases.
ng: Discontinue 2 weeks before general nesia, 1 week before electroshock therapy, depression or peptic ulcer occurs.
utions: Reduce dosage of concomitant anti-ensive agents by one-half. Discontinue if JN rises or liver dysfunction is aggravated. olyte imbalance and potassium depletion ccur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.
Side Effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.
For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets.
Average Dosage: One tablet daily with breakfast.

*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montreal, June 14–19, 1964.

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Superior to other antihypertensives in 76 of 80 patients during a 2-year study*

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HAWAII MEDICAL JOURNAL

Reports—No Snorts

The following letter is in response to a request for a report from Dr. Bowles, who is in Newfoundland.

St. Anthony, Newfoundland
February 7. 1965

Dear Hawaiian Colleagues:

About a year ago, when my wife and I were en route on a trip to Australia and New Zealand. I received a letter from a director of the International Grenfell Association of Newfoundland and Labrador asking whether I would be available to help relieve an acute shortage of medical personnel in the St. Anthony Hospital, Newfoundland. We jumped at the opportunity, as both my wife and I have always had great admiration for Sir Wilfred Grenfell and his work in the isolated areas hereabouts. The idea of ice and snow did not scare us in the least.

In June 1964 we purchased a ¾ ton Chevrolet truck on the west coast and had an Alaskan Camper body installed on it at a Seattle factory. This with its compact living quarters plus a propane three burner stove, a propane operated refrigerator, and ample storage space, was our home as we drove all the way from Seattle to St. Anthony on the northwesternmost part of Newfoundland. We had arranged with the Canadian National Railway for space for our "Camper" on the 5,000 ton M. V. Carson for the 96 mile ferry trip from North Sydney, Nova Scotia, to Port Aux Basques, Newfoundland.

We arrived at 6:30 A.M. on the Newfoundland side and spent the next two days in travelling directly north from Port Aux Basques along the sparsely populated west coast. The road was paved as far as Deer Lake and after that we travelled by a graded crushed rock road. This was completed only in 1962, and is fairly good and bridged except for one ferry ride across Bonne Bay. As we moved north along the shore bordering the Belle Isle Strait, we could easily see the houses on the Labrador shore. We spent the night of September 30 on the banks of Baker's Brook between Lobster Cove and Sally Cove, had lunch at Doctor's Brook, and arrived at St. Anthony Hospital at 5 P.M. on October 1, just in time to catch the Medical Director, Gordon Thomas, as he was starting home for supper.

St. Anthony has a population of about 2,500 and lies on the shore of a bay near the northernmost end of the peninsula which points like a long finger northward from the main part of Newfoundland. Most of the local population are fishermen or loggers. St. Anthony Hospital (125 beds) is the base hospital for a chain of small clinics ("nursing stations") and small hospitals on east and west coasts of this peninsula and from the portion of Quebec close to the Labrador border on the St. Lawrence Gulf, and thence up the Labrador coast as far as Nain. At present St. Anthony has six M.D.'s and about ten nurses on the staff.

Since our arrival, I have been put in charge of the obstetrics and gynecology. Our biggest obstetrical month was October with 47 deliveries. Many are pre-eclamptics, and the percentage of abnormal cases is of course very high. I have had several Caesarean sections, including one on a Holstein cow last week. She had an obstructed labor with an impacted breech that the farmer failed to deliver with ropes and traction. The following morning the mother was eating hay when we made rounds. An Irishman gave intravenous pentothal for the section, a Dutchman assisted this American from Hawaii and Japan, and a Scotch midwife and a Canadian nurse handed out instruments. Four Newfoundlanders held the cow's four legs in the air while we kneeled to operate. I worried about the placentas (10 or so, each about three inches in diameter) but we closed the uterus with them inside. They felt so adherent that I thought they would never come away, but they were all extruded by the next morning. Interestingly, the cow's uterine wall was no thicker than the lower uterine segment of a human uterus thinned out after several hours of labor.

I had one emergency flight to Seal Island well up the Labrador Coast to see an Eskimo woman who was dying of a cerebral hemorrhage. and yesterday I had another emergency flight to Red Bay, Labrador, to bring back a preacher's wife with a hydatidiform mole.

I have three clinics in remote areas south of here at Englee, Conche. and Harbour Deep, and from time to time go there by plane. Weather conditions are so fickle that it is not unusual for us to be called suddenly and to literally stop in the midst of examination of a patient and run to get aboard the plane so as to make it to St. Anthony before the weather there is "down."

Vitamin deficiencies are terrific here and postpartum hemorrhages, and delayed incision healing are common. Many are completely without teeth by the age of 22 or so. The tendency to inter-marry in the same groups is so common that many small villages in isolated coves not connected by road with other communities show high incidence of epilepsy, mongolism, etc. Tuberculosis (human) is everywhere.

In Newfoundland most patients are descended from those who migrated from England, Scotland, Wales, and Ireland. Most small villages have but one church and attendance is practically 100 per cent as it is the only social activity many of them have. On the Labrador side (Labrador is part of the Province of Newfoundland) in addition to the same Caucasian stock, there are Eskimos along the sea coast, and Indians farther inland. Many are of mixed blood. We always have a number of Eskimo and Indian patients as these are flown into St. Anthony.

Dog teams are still used by those who cannot afford the $800 to pay for a "Skidoo" which is a fast moving motorized sled on skis. Labrador dogs, which are very wolf-like and often join wolf bands, are not allowed on Newfoundland Island which has its own large breed of dogs. These are very gentle and make very good sled dogs. It is not uncommon for patients to be brought in here by dog sled.

This will give you some idea of the situation. Winter temperatures seldom drop below minus 15 F., but severe blizzards are common. Our quarters are very dry and well heated.

If any of you know of doctors, dentists, nurses, and social case workers who would like to spend six months to a couple of years or longer with the Grenfell work, please by all means write to Dr. Gordon Thomas, c/o International Grenfell Association, St. Anthony, Newfoundland. There is plenty of need for reinforcements. A new 225 bed hospital is being started as soon as the thaw is over.

Aloha to you all. ■

HERBERT E. BOWLES, M.D.

FOUR, AFEBRILE AND AFFABLE

and a happy return from pneumonia

when the invader
is tetracycline-sensitive

the "extra" benefits raise the level of antibiotic control

DECLOMYCIN®

DEMETHYLCHLORTETRACYCLINE

tasty, cherry flavor

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- include the option of b.i.d. dosage
- lower mg. intake (per dose and per day)
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'e *Effects* typical of tetracyclines which ıy occur: glossitis, stomatitis, proctitis, ısea, diarrhea, vaginitis, dermatitis, over- ıwth of nonsusceptible organisms. Also, ɔtodynamic reaction (making avoidance direct sunlight advisable) and, very rarely, aphylactoid reaction. Reduce dosage in paired renal function. The possibility of tooth discoloration during development should be considered in administering any tetracycline in the last trimester of pregnancy, in the neonatal period, and in early childhood. Increased intracranial pressure is a possibility in early infancy.

Syrup: 75 mg. per 5 cc. tsp., bottles of 2 and 16 fl. oz.

Pediatric Drops: 60 mg. per cc., bottle of 10 cc. with dropper.

Average Dosage for Infants and Children: 3 to 6 mg. per pound body weight per day, divided into 2 or 4 doses, depending on severity. Calcium-containing food or drugs should not be given within one hour before or two hours after a dose.

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Kahanaola Convalescent Hospital
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in peptic ulcer therapy—"little things mean a lot"

it's the sum total of many subtle advantages that makes glycopyrrolate a superior anticholinergic

ROBINUL® FORTE glycopyrrolate 2 mg. per tablet

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glycopyrrolate 2 mg. / phenobarbital 16.2 mg. / (warning: may be habit forming)

The remarkable efficacy of Robinul (glycopyrrolate) in the treatment of peptic ulcer cannot be attributed to any single characteristic of the drug. Rather it is the sum total of several subtle pharmacologic advantages that enables this anticholinergic to make such a significant contribution to the total ulcer regimen.

Epstein[1] found glycopyrrolate's intensive antisecretory action to be exemplary. Breidenbach[2] was impressed by its pronounced antispasmodic effects. And Young and Sun[3] reported that a 2 mg. oral dose "did not affect gastric emptying or intestinal transit time. . . ." According to Slanger[4], the absence of annoying side effects is an important plus factor ". . . for it permits ready individualization of dosage for control of mild to severe symptoms." Posey[5] sums it up when he says, "In effect, with glycopyrrolate, one approaches an ideal agent for the management of peptic ulcer. With it a vagolytic effect may be obtained without interfering with gastric emptying—the medical equivalent to vagectomy plus an adequate drainage procedure."

We invite you to try Robinul (glycopyrrolate) in your practice. Discover firsthand how several subtle advantages add up to make it the superior anticholinergic agent.

BRIEF SUMMARY

INDICATIONS: In addition to its primary indications for duodenal and gastric ulcer, glycopyrrolate is indicated for other G-I conditions which may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

CONTRAINDICATIONS: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

PRECAUTIONS: Administer with caution in the presence of incipient glaucoma.

SIDE EFFECTS: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

DOSAGE: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day: in the a.m., early p.m., and at bedtime. *See product literature for full prescribing information.*

Also available:
Robinul®(glycopyrrolate 1 mg. per tablet)
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phenobarbital 16.2 mg.
(warning: may be habit forming)

REFERENCES: 1. Epstein, J. H.: Am. J. of Gastroent., 37:295, March, 1962. 2. Breidenbach, W. C.: Investigative Clinical Report, March, 1961. 3. Young, R., and Sun, D. C. H.: Ann. N. Y. Acad. Sc., 99:174, Feb., 1962. 4 Slanger, A.: Journal of New Drugs, 2:215, July-Aug., 1962. 5. Posey, E. L., Jr.: Am. J. Dig. Dis., 7:863, Oct., 1962.

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SECURES THE FULL SPECTRUM OF HOSPITAL INFANT FORMULA NEEDS 24 HOURS-A-DAY

Wide-range flexibility — Beniflex serves all hospital infant feeding requirements, including emergencies—around the clock. Meets the needs of normal term newborns, prematures, older infants in pediatrics, and babies with special nutritional requirements—with greater speed and safety than can be obtained by usual means of formula preparation.

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Economy: as low as 8¢ per feeding (for nurser, nipple and formula) — Beniflex is economical: For example, in the newborn nursery, many hospitals have found the net cost to be less than 8¢ per feeding — when utilizing the Enfamil discharge plan. Further, hospital experience with Beniflex has shown an average saving of 35.1% in labor time for formula preparation.

The Beniflex System has already gained high acceptance. It has been providing excellent service in hundreds of hospitals throughout the country for over a year. In these hospitals, the Beniflex System has fulfilled the function for which it was designed — to provide for all hospital infant feeding needs — with a completely disposable system offering greater speed and safety than can be obtained by usual means of formula preparation.

Beniflex includes: Enfamil® infant formula in two dilutions, Lactum® modified milk formula, Sobee® milk-free soya formula, Nutramigen® protein hydrolysate formula, Probana® high protein formula, Sterile water, 5% carbohydrate solution, whole milk and skim milk.

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NEW Nursette*

Disposable Bottle Service

Uses any standard nipple unit—New Nursette Service offers the advantages of a pre-filled glass nurser, yet retains all the basic benefits of attaching a threaded nipple unit to a conventional nursing bottle. Just twist off the hermetically sealed cap and attach any standard nipple and collar (40 mm. diameter).

Economy: 9¢ per 4 oz. bottle (3¢ for optional disposable nipple)—Enfamil 20 cal./fl. oz. is available in three sizes (4, 6, and 8 oz.) to meet infant's feeding requirements more economically. The Nursette Service saves your nursing staff time and effort. There are no special openers or bottle racks to handle and sterilize.

Special discharge service—Discharge packs of four/4 oz. Nursette bottles filled with Enfamil 20 cal./fl. oz. offer maximum convenience for your nursery personnel, as well as your patients. In addition, mothers can obtain the same Nursette product in neighborhood stores for use whenever extra safety and convenience are needed.

For more information about Beniflex and Nursette, write to Mead Johnson Laboratories—or ask your Mead Johnson representative.

Nursette includes: Enfamil® infant formula 20 cal./oz. (4, 6, 8 oz. sizes); Enfamil 13 cal./oz. (4 oz. size); 5% Glucose in Water (4 oz. size); Sterile Water (4 oz. size); Pre-sterilized disposable nipple unit.

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Laboratories

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The tell-tale lesion on the back of her neck

ARISTOCORT Topicals are particularly effective in controlling the inflammatory symptoms of many dermatoses including neurodermatitis. ARISTOCORT Cream or Ointment, sparingly applied to affected areas, reduces both the itching and the inflammation. Three or four applications daily bring early symptomatic relief.

Aristocort® TOPICAL CREAM 0.1%, 0.5% AND OINTMENT 0.1%
Triamcinolone Acetonide

Aristocort®

TOPICAL CREAM 0.1%, 0.5% AND OINTMENT 0.1%

Triamcinolone Acetonide

INDICATIONS: In addition to neurodermatitis, the ARISTOCORT Triamcinolone topical preparations have been found effective as adjuncts in treating atopic dermatitis, eczematous dermatitis, nummular eczema, contact dermatitis, pruritus ani and vulvae, generalized erythrodermia, external otitis, seborrheic dermatitis, eczematized psoriasis and eczematized mycotic dermatitis. In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent, but the 0.5% concentration may elicit a more satisfactory response in some, specifically in atopic dermatitis, eczematous dermatitis, seborrheic dermatitis and certain cases of psoriasis.

ADMINISTRATION and DOSAGE: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

PRECAUTIONS and SIDE EFFECTS: Do not use in the eyes. While there are no special precautions to be taken in administering ARISTOCORT Triamcinolone Acetonide topicals, some patients may react unfavorably, under certain conditions, to topical steroids in general. Special care should be taken in administering topical steroids at infected sites and the hazard of possible spread of bacterial infection should be considered. If such a hazard is felt to exist, antibacterial therapy may be considered advisable even if the steroid is discontinued.

CONTRAINDICATIONS: Tuberculosis of the skin, herpes simplex, chickenpox, and vaccinia.

PACKAGES: Tubes of 5 Gm. and 15 Gm.; ½ lb. jar.

ARISTOCORT® Triamcinolone Acetonide Topical Cream 0.5% or 0.1% contains:

Triamcinolone Acetonide	5 mg. or 1 mg.
Methylparaben	0.16%
Propylparaben	0.04%
Potassium Sorbate	0.2%

Inactive ingredients in water base:

- Glyceryl monostearate
- Squalane
- Polysorbate 80 USP
- Spermaceti USP
- Stearyl Alcohol USP
- Sorbitol Solution

Each gram of ARISTOCORT Triamcinolone Acetonide Topical Ointment 0.1% contains:

Triamcinolone Acetonide	1 mg.
Methylparaben	0.16%
Propylparaben	0.04%

Inactive ingredients:

- Lanolin
- White Petrolatum

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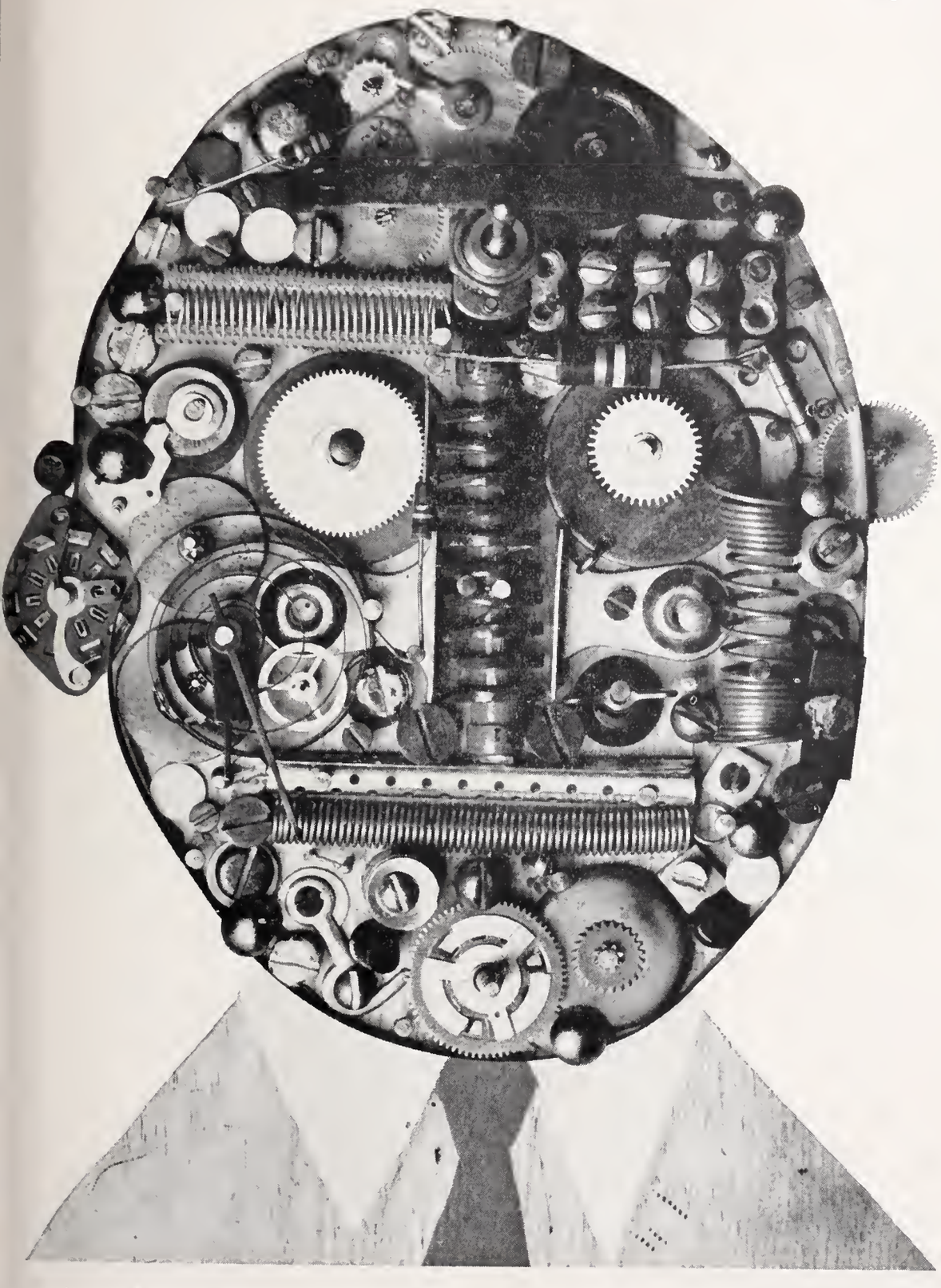

In prescribing: Dosage — Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. **Side Effects:** Side effects, often dose-related, are drowsiness, ataxia, minor skin rashes, menstrual irregularities, nausea and constipation. When treatment is protracted, blood counts and liver function tests are advisable. Paradoxical reactions may occasionally occur in psychiatric patients. Individual maintenance dosages should be determined. **Precautions:** Advise patients against possibly hazardous procedures until maintenance dosage is established. Though compatible with most drugs, use care in combining with other psychotropics, particularly MAO inhibitors or phenothiazines; warn patients of possible combined effects with alcohol. Observe usual precautions in impaired renal or hepatic function, and in long-term treatment. Exercise caution in administering drug to addiction-prone patients or those who might increase dosage; withdrawal symptoms, similar to those seen with barbiturates or meprobamate, can occur upon abrupt cessation after prolonged overdosage. Caution should be exercised in prescribing any therapeutic agent for pregnant patients. **Supplied:** Capsules, 5 mg, 10 mg and 25 mg, bottles of 50 and 500.

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ROCHE

The 1964 highlights of heart disease—research into causes, prevention, management, and surgical cure—are reviewed.

Some Problems of Heart Disease, 1964

IRVINE H. PAGE, M.D.,* *Cleveland*

• *We now know that antistreptococcal antibodies cause rheumatic heart disease. Open heart surgery has become commonplace. Sophisticated new research techniques are being applied to the etiology of atherosclerosis. Organ transplantation, despite the harmful excessive publicity it is getting, is becoming better understood. Coronary arteriography is becoming practicable and furnishing valuable information. The several kinds of hypertension are becoming much better understood, and therefore much better managed.*

PROBABLY the most important thing to realize about heart disease today is that in the industrialized world it is by far the greatest of all killers. Furthermore it is an unglamorous killer in most respects. So the attention given it has been relatively small until the past 50 years.

I have mercly to reflect on the fact that during my days as a medical student, myocardial infarction did not exist. It had been described in 1910 by two Russians, Obrastzow and Straschezko, and a little later by Herrick. But recognition of the disease had no wide acceptance until about 1925. Serious rescarch into the causes of artcriosclerosis only began in about 1911 and but a handful of people were involvcd. It was not until 1930 to 1935 that research of any magnitude got under way. And yet of all the diseases of the heart and blood vessels, arteriosclerosis is the most important from the viewpoint of numbers of pcople involved.

The next most important disease is hypertension. Here again little effort was made to discover the causes of hypertension. Clinicians began to measure blood pressure at the beginning of the century and in the early twentics some interest in mechanism was evinced. Many clinicians believed that blood pressure should not be lowered because insufficient blood supply to vital organs would cnsue. This was based on the authoritarian Cohnheim dictum that blood pressure was raised in order to force blood through thickened arteries and arterioles. In this schema, arteriosclerosis came first and hypertension second. Today the thinking is just the reverse.

INFECTION

In my youth rheumatic fever was considered the chief disease of the heart and blood vessels, with

* From the Research Division of the Cleveland Clinic Foundation, 2020 E. 93rd St., Cleveland, Ohio.

syphilis a not too poor second. I think you are all aware of the rapid decline in both the severity of rheumatic fever and the number of patients afflicted. We would like to believe that in the United States this is due to the American Heart Association's program of rheumatic fever prevention. Some think there has been a spontaneous reduction in the pathogenicity of the streptococci.

There is no longer any doubt that the cardiac lesions of rheumatic fever are caused by streptococci and, therefore, the hope for a more definitive control program lies in the development of a vaccine. Since 1937 it has been known that serum of patients with rheumatic fever exhibits activity as measured by complement fixation with constituents of human heart. These autoimmune bodies contained in the gamma globulin protein fraction react with several components of myofibrils. Kaplan has found deposits of bound gamma globulin as "fibrinoid" in the hearts of patients with rheumatic fever. Recently, he has shown that an antigen in group-A streptococci cross-reacts immunologically with heart tissue. This all supports the hypothesis that in rheumatic fever there occurs an autoimmune reaction. Thus, streptococci have antigens so like cardiac muscle that antibodies formed against them react with heart muscle.

Bacterial endocarditis seems to me to be much less common, due, I think, to the better treatment of infections. Treatment today does not have to be expectant, or with gentian violet or mercurochrome. While not every infection of the heart valves is readily cured, many of them are.

CONGENITAL HEART DISEASE AND CARDIAC SURGERY

This leaves, then, the group of inherited or acquired heart and blood vessel diseases which have received so much loving care from the surgeons ever since the antibiotics gave them the courage to enter the chest without fear of infecting it and since the inception of the pump oxygenator to act as a secondary heart.

I think you will all remember when commissurotomies were first done, with the exploring finger inserted through the auricular appendage. Then the much more elaborate operations for blue babies, coarctation, ductus, etc. Open heart surgery has now become commonplace.

Recently there has been great interest and success in replacement of valves with prosthetic ones. The leaflet variety seems to be much less popular than the Starr-Edwards ball valve. I am told by Dr. Don Effler that over 10,000 of these valves have been sold and perhaps 6,000 are in use. He himself has inserted 140 aortic and 110 mitral valves with a mortality under 5 per cent. Embolic accidents still occur on occasion and there is no unanimity on whether anticoagulants should be used.

Lown's method of direct current countershock has proved of inestimable value in restoring normal rhythm. The insertion of the electronic pacemaker has also proved useful. Studies of oxygenation in the hyperbaric chamber may or may not turn up something useful.

ATHEROSCLEROSIS

Large scale prevention and treatment of atherosclerosis, except for the highly localized variety, will doubtless have to wait on the results of laboratory and environmental health experiments. Currently, much work is under way on the mechanisms responsible for atherosclerosis and only moderate agreement as to what they are. In general, thinking can be divided into those who favor as the primary cause deposition of lipid from the blood stream into the vessel wall with formation of scar tissue, and those who think the lipid is formed within the vessel wall itself and has little to do with level of lipids in the blood. A third group think the initial lesion begins as a process in which fibrin is laid down on the surface of the endothelium. This, they believe, stimulates overgrowth of the latter, producing a fibrous cushion in which lipid is deposited as a secondary phenomenon.

In our own laboratory we follow still another viewpoint. Dr. Abel Robertson has shown that intimal cells cultured from normal and atherosclerotic patients differ in that incorporation rates of tritiated† homologous serum lipoproteins are much higher in the atherosclerotic subjects. The increase in extracellular lipid incorporation without concurrent elevation of intracellular biosynthesis suggests that intimal cells from human atherosclerotic arteries may be identified in tissue culture by their inability to metabolize lipid overloads. These cells become stuffed with lipid and finally die, thus releasing their lipid, which is incorporated into other similar cells.

Ultimately this kind of phagocytic intimal cell tends to be replaced by another type of connective tissue cell that does not incorporate as large amounts of lipids as do the first. We think the evidence favors the view that atherosclerosis is inherited, but occurs only when the genetically predisposed cells are challenged by lipid overloads carried by the blood. How important the deposition of fibrin or platelets on the intimal surface is, as a causal mechanism, we are unable to say.

I am sure you are all aware of the epidemio-

† Tagged with tritium, triatomic molecular hydrogen, H_3.—Ed.

logieal studies that have shown the elose relationship between the total fat eontent of the diet and the ineidence of eardiovaseular disease. It is clear enough that fat is not the only faetor, but it seems an important one despite all of the amusement ereated by the word "cholesterol." "Arc you a 'cholesterol doctor' or a 'cholesterol-is-all-bosh doetor'?" has nearly beeome a soeial trade-mark in the United States.

The most signifieant recent event whieh is aimed at produeing some degree of order into the current ehaos in the field of diet studies is the inauguration of the National Diet–Heart Study. This study was planned several ycars ago by a group reprcsentative of the best thinking in this area. The first phase, the one of "feasibility," was started in May of 1963 with the reeruitment of 1,500 men aged 45 to 54. After suitablc elinieal studies to eliminate overt cardiae disease, thesc people and their families were, and are, being fed from commissaries whieh deliver thc food to their homes. The food is not free, but is about 10 per eent below supermarket prices. The study is being eonducted double-blind, and I am not at liberty to disclose the diets. They are, of course, based on the substitution of saturated by polyunsaturated fats. The study is to test the thesis that lowering of blood eholesterol levels will be aeeompanied by a lower ineidence of heart attacks. It is expeeted that an analysis of the results will be made after the first year, and future planning based on these findings.

One of the most important features of this study is that—so far as I know, for the first time—an important environmental factor has been manipulated in a large group of free-living people in different seetions of the eountry. This alone has made it an interesting and important study.

TRANSPLANTATION

Perhaps the problem that has ereated the most interest, not to say the most eommotion, has been transplantation. It is worth remembering that half a century ago Alexis Carrel worked out mueh of the teehnieal aspeets of surgieal transplants and vaseular surgery. This does not seem so long ago, sinee I knew Dr. Carrell well during my stay at the Roekefeller Institute. The reeent surge of interest eame from the rise of a new surgieal specialist, the vaseular surgeon, and from the trial of human transplants in identieal twins, in whom the rejection phenomenon was not eritieal. This was followed by development of drugs whieh aided in suppressing this immune reaction. Certainly, the time is ripe for this kind of clinical experimentation to be undertaken. But some serious difficulties have arisen that require the thoughtful eonsideration of all physieians.

Beeause of widespread and hasty publicity, the publie has been given the view that transplantation is a proven suecess, ready for widespread applieation. It seems only a question of money and doctors. Even the Ameriean Medieal Assoeiation hailed transplantation as the "breakthrough of the year" and said that repairs ean be made just as on your automobile. Transplants from animals have been made with the expected sueeess. When a hand was transplanted the news of the great sueeess appeared in some medical publieations the day after the hand was amputated beeause the severe rejeetion phenomenon was endangering the patient's life.

This is all a pity beeause it elouds the real importanee of this sort of clinical experimentation. If more emphasis were put on diseovering how to make transplantation a success, and less on making a "first" in the public press, I am sure we outsiders would be much happier about it. I, personally, have seen some most interesting and impressive results in our own patients. How long they will last is still a question.

There seems to be little doubt that effeetive suppressive drugs will be developed that will overeome the rejection phenomenon. It is equally true that the surgeons ean do the job teehnieally. But there has been created an atmosphere of intense eompetition and undue haste whieh is unhealthy for orderly growth of the field. No one objeets to the experimental approaeh but most of us do not like a "first" every other day and even on Sunday; espeeially when a little later it turns out the patient died presumably from "some unrelated cause." Fortunately the basic researeh needed is progressing, although you do not hear mueh about it over the din ereated by "breakthroughs."

CORONARY CATHETERIZATION

In my opinion one of the most important praetieal advanees in eardiology has been the visualization of thc coronary arteries by eoronary eatheterization. Mason Sones at the Cleveland Clinic has been the ehief proponent of this work, and although he has written very little, he has made up for it by being highly artieulate and vastly enthusiastie. The spoken word is a good deal mightier with him than the pen.

He and Shirey have studied 2,550 patients to date. It has been possible to demonstrate anatomieal obstructions eausing more than 20 per eent reduction in lumen of vessels larger than 1 mm in diameter.

One of the important byproduets is the ability to rule out the presence of eoronary atherosclerosis as a eause of ehest pain when elinical and electroeardiographie evaluations are uneertain. In pa-

tients with advanced occlusive disease the presence, or absence, of effective intercoronary collateral channels is demonstrable. The effectiveness of such channels usually governs the potential for recovery and survival of such patients following myocardial infarction.

Severe, diffuse involvement of the anterior descending branch of the left coronary artery has been used as an indication for implanting the left internal mammary artery into the anterolateral wall of the left ventricle, utilizing the technique of Vineberg. Endarterectomy with patch grafting has proved useful in a small number of patients with localized arteriosclerotic lesions. Ventricular aneurysms following infarction may first be outlined by ventriculography and then coronary arteriography used to demonstrate the presence or absence of severe obstructive lesions in other major branches of the coronary vessels. If these show only minor changes, the functional status of such patients may be significantly improved by excision of the aneurysm.

Coronary arteriography is useful in demonstrating presence, or absence, of coexisting coronary atherosclerosis in patients with aortic and mitral valve lesions. Sones has found that such patients often have functionally significant valve lesions but severe coronary disease as well. In these, surgical intervention is useless.

In patients with congenital heart disease in whom ventriculotomy is necessary, coronary arteriography is used to show the presence of congenital anomalies of the origin and distribution of major branches of the coronary arterial tree, thus protecting the patient against inadvertent division of such arteries.

Four deaths attributable to the procedure have occurred, three of them among the first thousand patients and only one death among the remaining 1,550. Ventricular fibrillation has occurred during heavy opacification of individual coronary arteries in 55 patients and in all but four of these sinus rhythm was promptly reversed by external countershock.

Dr. Sones thinks coronary cineangiography's most important potential lies in the detection of coronary atherosclerosis in "normal" human beings. This would help define the "coronary profile" and so provide a group of people in whom the characteristics and course of the disease could be studied.

We have had many of our patients catheterized by Dr. Sones or Dr. Shirey and have been greatly surprised by some of the things we have found. For example, one patient with familial hypercholesterolemia, whose parents were alive and well in their eighties, had a brother who had suffered an infarct. The patient was a vigorous, athletic person who complained only of heartburn a few times a year. His serum cholesterol was 488 mg. On catheterization a long segment of the left anterior descending branch looked as though it was almost occluded. Surrounding it was little collateral circulation. So what does one do? There are many such interesting problems that now face us, for the simple reason we could not see them before.

HYPERTENSION

Advances in our knowledge of the mechanisms and treatment of hypertension have been remarkable in the past 30 years. It can be said to be a disease of regulation in which a genetically conditioned human being attempts to adjust to his environment by keeping the perfusion of all his tissues adequate to their needs. This is a big problem for the body to solve. To do it, it has developed a series of pressure- and chemical-sensitive "stats" which aid greatly in providing the needed signals for redistribution of blood. The body also has a complicated chemical control system which subtends a variety of substances such as angiotensin, bradykinin, norepinephrine, acetylcholine, histamine, and serotonin. Associated with this more "primitive" chemical control is a highly integrated neural control which works in concert with the chemical.

It is now well recognized that hypertension has many causes and mechanisms, and treatment consequently also has many different avenues of approach. The past fifteen years have seen great, and exciting, advances in treatment. Indifference to treatment is no longer acceptable medical practice. ■

Eye symptoms, weakness, dizziness, sweating, hoarseness, chest pain, sore throat, and anorexia heralded the sudden onset of Waldenström's macroglobulinemia in this woman.

Waldenström's Macroglobulinemia with Transient Cholestatic Jaundice

Case Report

ANNA MARIA BRAULT, M.D.,* *Honolulu*

• *A 69-year-old Caucasian woman developed Waldenström's macroglobulinemia, manifested by gastrointestinal bleeding, severe fatigue, and visual disturbances. Diagnosis was made by bone marrow aspiration and confirmed by ultracentrifugation. Five months after the onset of symptoms she became febrile and icteric, but within 12 days her liver function studies returned to normal. On Chlorambucil, she has shown a clinical remission, though after five months, laboratory studies were essentially unchanged.*

MACROGLOBULINEMIA was first described by Waldenström in 1944.[1] It is a relatively rare chronic disease, with symptoms of severe weakness, weight loss, general lassitude, bleeding tendency, and anemia, and marked by the formation of an abnormal serum protein of high molecular weight. Lymphadenopathy and infections are common. Visual disturbances and neurological disturbances have been reported[2] and are referred to as the Bing-Neel syndrome. In 1958, Waldenström[3] reviewed 100 cases diagnosed by ultracentrifugation.

Macroglobulinemia has been defined[4] as a neoplastic proliferative disorder of lymphocytic or plasmacytic origin. It is probably related to lymphatic leukemia, lymphosarcoma, and myeloma. Involvement of the liver has recently been reported by Popper.[5]

Received for publication March 7, 1963.

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This first reported case of Waldenström's macroglobulinemia in Hawaii is of additional interest because of the transient complication of cholestatic jaundice, and because the disease developed while the patient was being followed medically.

CASE HISTORY

A 69-year-old, widowed, retired, Caucasian school teacher was first seen on December 1, 1961, shortly after she came to Honolulu from California. Her significant past history was of known mild-to-moderate hypertension, cholecystectomy, and appendectomy. She had two children alive and well. Her father was alive and well at the age of 87; her mother died of pneumonia at age 85; one brother died of cancer of the testis; and one brother was alive and well.

The patient was a pleasant, cooperative, obese woman, 62½ inches tall, and weighing 194 pounds. Significant positive findings were as follows: blood pressure, 170/100; pulse, temperature, and respirations all normal; fundi showed Grade I arteriosclerotic changes with no hemorrhages or papilledema. Abdomen was obese, with scars in the right upper and right lower quadrants. There was slight right upper quadrant tenderness and a questionably palpable liver edge. She had atrophic vaginitis.

Hemogram on December 1, 1961, showed packed cell volume of 37 per cent; white blood count 6,200 with 58 per cent polymorphonuclear

leukocytes, 35 per cent lymphocytes, 5 per cent monocytes and 2 per cent eosinophiles. Sedimentation rate, corrected, was 19 mm per hour (normal, 20). Electrocardiogram was normal.

Because of her hypertension, a radioisotope renogram was performed. This revealed decreased uptake on the left. Subsequent aortogram revealed no renal artery disease.

The patient was put on a reducing diet and antihypertensive medications, and followed. She was seen approximately once a month with the additional complaints of dysuria (which cleared on sulfonamides), constipation, anal fissure, chest pain, and bronchitis. She lost ten pounds in 11 months and her blood pressure varied between 100-169/82-100.

From September, 1962 on, her complaints were different. She complained of difficulty in focusing her eyes, continued and severe weakness, dizziness, increased diaphoresis, chest pain, hoarseness, sore throat, and anorexia. In October, her appearance changed—she looked ill, depressed, and pale, with dark circles under her eyes. Her blood pressure was 150/100, pulse 80, temperature 98° F., and her weight was three pounds less than a week earlier. A hemogram showed: red blood count 3,100,000 with 8.5 grams of hemoglobin; white blood count 5,750 with 48 per cent polys, 44 per cent lymphocytes, 7 per cent monocytes and 1 per cent eosinophiles. Occult blood in the stool was 4+.

The patient was admitted to the hospital with a working diagnosis of "peptic ulcer" and transfused. She was put on an ulcer regimen, and a gastrointestinal series showed "antral gastritis with redundancy and prolapse of gastric mucosa. No definite evidence of a duodenal ulcer." A barium enema showed "diverticulosis of the sigmoid colon with some spasm, but no changes to indicate a definitive diagnosis of diverticulitis."

The patient received three units of blood on this admission. She was followed closely and in November her hemoglobin was 10.5 grams, packed cell volume 32 ml per cent and white blood count 4,150, with 51 per cent lymphocytes. Erythrocyte sedimentation rate was 55 mm at 37° C. and 30 mm at room temperature. Her reticulocyte response was only 0.4 per cent, although she had been on an oral hematinic daily for the previous month. Rouleaux formation was noted.

A complete re-examination of the patient showed funduscopic changes. Her veins were markedly engorged and there were scattered small punctate hemorrhages. (This examination was confirmed by an ophthalmologist.)

Additional laboratory studies done in November, 1962, were as follows:

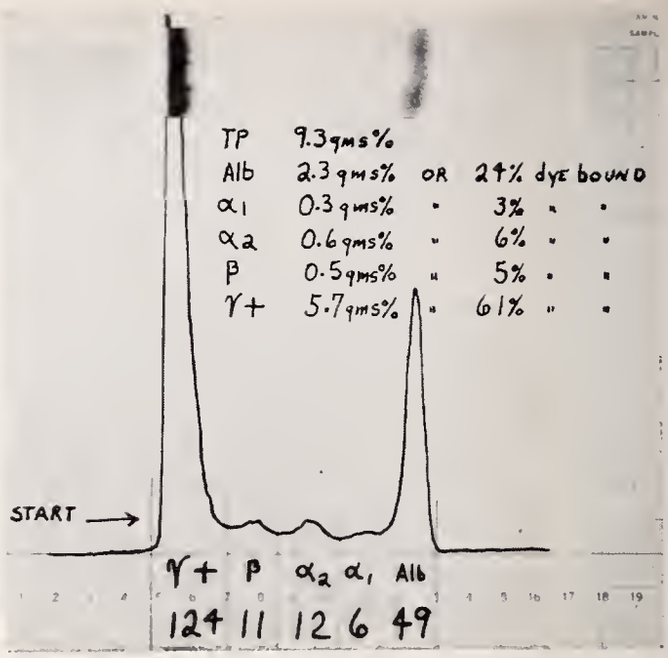

FIG. 1.—*Serum electrophoresis showing narrow, sharp, high peak in globulin fraction.*

Prothrombin time: 51.6 per cent
Sia test: positive
Bence-Jones proteins: negative
BUN: 16 mg per cent
Serum uric acid was 8.0 mg per cent (normal—2-6 mg per cent)
Coombs test (direct): negative
Zinc turbidity 74.8 units (normal—10)
repeated in one week: 58 units
Serum electrophoresis: (see Figure 1)
total protein 9.3 gm per cent
albumin 2.5 gm per cent
alpha one globulin 0.2 gm per cent
alpha two globulin 0.5 gm per cent
beta globulin 0.6 gm per cent
gamma globulin 5.5 gm per cent
Serum gamma globulin by turbidimetry[6] 0.78 units
Blood viscosity 8.90 centipoises[7]
Radioactive rose bengal was 57 per cent (normal—50 per cent or less)
Red cell survival showed reduced survival of red cells with apparent half-survival time of 13 days (normal—20-36 days)
X-rays of the bony thorax, spine, and sacrum showed osteoporosis only
Bone marrow showed a decrease in erythrocytic series (15 per cent of all cells), a marked increase in lymphocytes (35 per cent of all cells), a moderate decrease in megakaryocytes which appeared normal morphologically, and many smudge forms. Recognizable plasma cells numbered only 2 per cent of all cells. The most striking change was chunky condensation of nuclear chromatin affecting virtually all of the lymphocytes, and many of

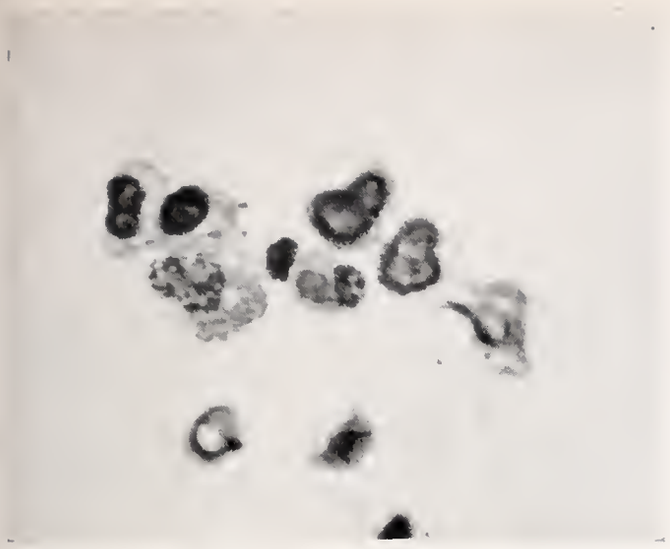

FIG. 2.—*Bone marrow smear showing condensation of nuclear chromatin at the periphery of the nucleus in several myelocytes (Wright's stain, x 1,000).*

the granulocytic cells as well. This was often concentrated in a peculiar dense, irregular ring at the nuclear margin (see Figure 2).

The presence of macroglobulins was confirmed by chromatographic separation of sera on DEAE (diethylaminoethyl) cellulose[8] and approximately 90 per cent of the protein was found in the pH 5.0 fraction.

A sample of the patient's serum was sent to Dr. Karl Schmid of Harvard University for ultracentrifugation. The diagnosis of Waldenström's macroglobulinemia was confirmed.

The patient was rehospitalized and given several units of plasmaphoercsed blood. On January 14, she became febrile and icteric. Liver function studies were done (see Table 1). On January 29, the patient was started on Chlorambucil, 4 mg daily.

She left the nursing home where she was transferred after discharge from the hospital and is keeping house for her son and herself. Her major complaint has been back pain in an area of compressed fracture of the eighth thoracic vertebra. Her vision has improved and re-examination of her fundi by an ophthalmologist shows no additional pathology, only Grade I arteriosclerotic changes. She continues to lose weight and now weighs 169 pounds.

Since started on Chlorambucil, the patient has received only one transfusion of one unit of packed cells and 250 cc of her own plasmaphoeresed blood. Her hemoglobin has varied from 9.3 to 10.0 gm with a reticulocyte response of 3.1 per cent.

On May 24, the serum electrophoresis showed essentially no change: total protein was 9.5 gm per cent; albumin 3.2 gm per cent; alpha$_1$ globulin 0.1 gm per cent; alpha$_2$ globulin 0.2 gm per cent; beta globulin 0.3 gm per cent; gamma globulin 5.8 gm per cent. Uric acid was 7.6 mg per cent. Blood viscosity on May 24 was still elevated at 5.55 centipoises. Zinc turbidity was essentially unchanged at 52.8 units. Serum cholesterol was 95 mg per cent. The bone marrow showed the same chromatin arrangement in the periphery of the lymphocytes and in some of the granulocytes.

TABLE 1.—*Liver function studies.*

	Jan. 18, 1963	Jan. 30, 1963
Total bilirubin mg%	5.8	1.8
Direct	3.3	0.9
Indirect	2.5	0.9
Kunkel units (N = 10)	25.3	7.0
SGOT units (N = 8–40 units)	76	76
Thymol turbidity (N = 5 units)	10	6.9
Alkaline phosphatase (N = 1–4 Bodansky units)	5.9	4.7
BSP (N = 0–8%)	21.8%	

COMMENTS

Waldenström's macroglobulinemia occurs in men 2.5 times oftener than in women, and patients are usually over 50 years of age. The chief complaint is usually bleeding or bruising, or fatigue and dyspnea.[9] Patients may also consult their physicians because of deterioration of vision due to retinal hemorrhages. Anemia is found in about 80 per cent of patients.[10] Hepatomegaly is noted in 40-45 per cent, splenomegaly in 35-50 per cent of cases. Some patients have been followed for years because of a markedly increased sedimentation rate. The white blood count can be normal but usually leukocytosis or leukopenia is found with a relative or absolute lymphocytosis. The lymph nodes can be enlarged much or slightly.

In contrast to the patient with multiple myeloma, these patients seldom complain of bone pain. Instead of the punched-out lesion, diffuse osteoporosis is seen. Paraproteinuria, often of Bence-Jones type, can be demonstrated in approximately 10 to 20 per cent of cases. The Sia test (formation of heavy turbidity within ten seconds when serum is apprcciably diluted) is positive in about 50 per cent of cases.

A further step in the diagnosis is paper serum electrophoresis, which shows a sharp, high peak in the globulin fraction, commonly in the gamma or beta$_2$ fraction (although it has been noted in the alpha and beta$_1$ areas).[11] Differential diagnosis of patients presenting similar complaints and having a similar electrophoretic pattern is with multiple myeloma, chronic lymphatic leukemia, reticulum cell sarcoma and lymphosarcoma. Diagnosis can often be made by examination of the bone marrow or by the presence of lymphocytoid plasma cells or plasmacytoid lymphocytes.

Confirmation of diagnosis is made by ultracentrifugation of patient's serum.[12] In general, 15 per cent or more of the total serum proteins consist of macroglobulins (M fraction).

Treatment is still unsatisfactory. Steroids have been effectively used when hemolysis has been present. Penicillin has been used with transient benefit. Penicillamine,[13] P_{32}, and splenectomy have been used with little success. Waldenström used plasmaphoresis only after determining that the half-life of the abnormal protein is relatively long.[14]

Chlorambucil has been used successfully in four cases at the Mayo Clinic.[15]

SUMMARY

A case of macroglobulinemia is presented, with the clinical symptoms of this disease, including retinopathy and a transient episode of cholestatic jaundice.

The patient has shown clinical improvement following treatment with Chlorambucil, although the laboratory studies have remained essentially unchanged.

ACKNOWLEDGMENT

Appreciation for technical assistance is gratefully extended to Dr. Karl Schmid, Harvard Medical School, Laboratory for Protein Chemistry, Massachusetts General Hospital, who performed the ultracentrifugation of the patient's serum. Also, to Dr. Quentin C. Belles, Biochemist, Leahi Hospital, for electrophoretic and cellulose chromatographic separation, to The Queen's Hospital Laboratory, Department of Pathology, for their estimation of serum gamma globulin concentration by turbidimetry, and to Drs. Rosenblatt and Stokes, *et al.*, for determination of blood viscosity.

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It's easy to miss leptospirosis. Suspect it if jaundice, meningitis, or nephritis occur during an acute febrile illness.

Clinical Leptospirosis in Hawaii

WALTER L. JENSEN, JR., CAPTAIN, MC, USA,* FRANK L. MILLER, COLONEL, MC, USA,* FRANCES WONG, M.D.,† and NICHOLAS C. BETHLENFALVAY, CAPTAIN, MC, USA,* *Honolulu*

• *Leptospirosis has been mildly endemic in Hawaii for decades, with a reservoir in wild rats, from which it is transmitted through urine-contaminated water. The disease should be suspected when meningitis, jaundice, or nephritis supervene during an acute febrile illness. Killed leptospiral slide antigens permit rapid and accurate diagnosis; and though the effectiveness of antibiotics is still moot, certainly a correct diagnosis permits better control of the potentially grave complications, such as renal failure, hepatic necrosis, or massive hemorrhage. Three recent cases, all originally unrecognized, are reported.*

CLINICAL LEPTOSPIROSIS in Hawaii was first described by Keay in 1927,[1] although it had been suspected as early as 1908.[2] It was not until 1936 that L. icterohemorrhagiae was first isolated and demonstrated in a human.[2] From that time through December, 1963, 267 cases of human leptospirosis have been reported to the Hawaii State Department of Health, but only a few papers have appeared on this subject.[1-8]

We suspect many cases of leptospirosis occur here each year that are unrecognized because of lack of awareness of the potential for the disease and lack of familiarity with its varied manifestations. Lending support to this belief is the fact that within a nine-month period we have detected three patients with leptospirosis, none of whom were correctly diagnosed upon referral to the hospital. The purpose of this paper is to present the pertinent clinical data of these three patients in the hope of improving the recognition of this uncommon but not rare disease in Hawaii.

UNRECOGNIZED CASES COMMON

Subclinical and mild unrecognized cases of human leptospirosis are known to have been prevalent in the Hawaiian Islands. For example, in 1943 Alicata[3] found positive agglutination titer against L. icterohemorrhagiae in 12.2 per cent of 860 healthy individuals chosen at random from 16 different plantations on the island of Hawaii. The majority of these people were field workers in rat-infested areas. Examination of the hospital records of those cases which showed positive serological reaction revealed no history of any illness attributable to leptospirosis.

TRANSMISSION BY WATER

Leptospirosis is transmitted by leptospira-contaminated water, animals, or their tissues. The organism usually enters the human body through nasal, oral, and conjunctival mucous membranes or abraded skin.[9] With improved standards of living and mechanization of industry, a fall in the incidence of leptospirosis in Hawaii might be expected. Sporadic cases of this disease as evidenced by our three cases, however, will probably continue to occur by infection acquired from contaminated water. A water-borne leptospiral epidemic following group swimming in a local contaminated stream has recently been suspected, and alerting the public to this potential hazard was attempted by the Hawaii State Department of Health.[10]

It is well known that the potential for leptospirosis exists in Hawaii. Forty per cent of rats trapped along the Kalihi and Nuuanu Streams on the island of Oahu in October, 1962, showed evidence of present or past leptospiral infection.[11] Whereas our first and third patients were known to have been exposed to potentially contaminated fresh water within the accepted incubation period of 4-20 days, our second patient was totally immersed 30 days before recognized clinical symptoms emerged. A history of exposure to potentially contaminated water within the recognized incubation period, and, since the initial symptoms may be mild, perhaps up to one month, should alert the physician to the possibility of leptospirosis.

MAJOR SIGNS AND SYMPTOMS

Our three cases highlight the major signs and symptoms of clinical human leptospirosis. It usually has an acute onset with fever, muscle pain, and weakness followed often by jaundice, signs of meningitis, and occasionally by evidence of neph-

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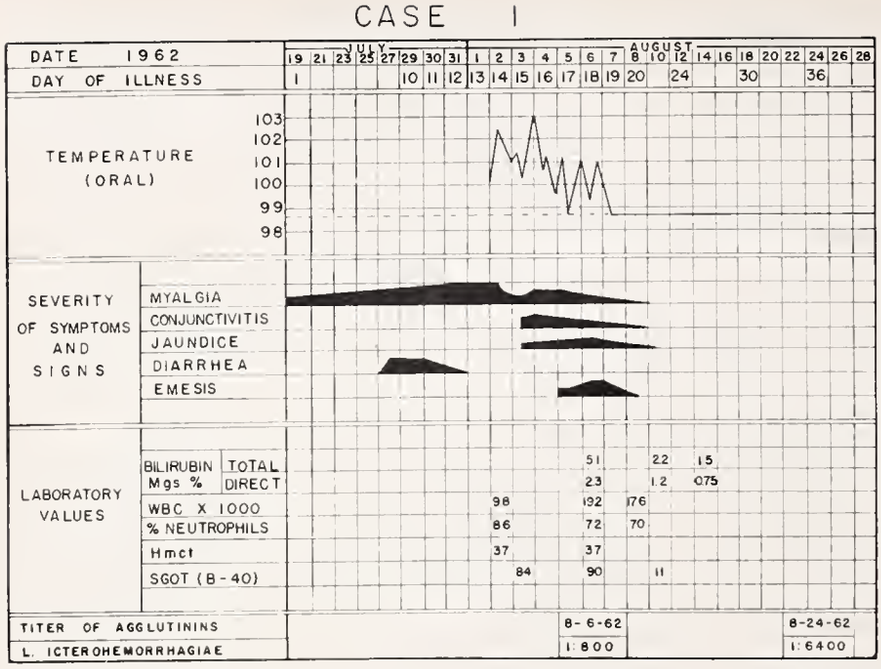
† The Queen's Hospital.
This paper was presented at the Hawaii Regional Meeting of the American College of Physicians on February 19, 1964.
Received for publication May 14, 1964.



ritis. Using killed leptospiral macroscopic or microscopic slide antigens, a simple, quick, accurate, and inexpensive diagnostic method using serial specimens is available to confirm or deny the presence of leptospirosis. Since clinical leptospirosis is often severe and sometimes fatal, the correct diagnosis is important. Although the use of antibiotics in treating this disease is controversial,[9, 12] certainly the early recognition and prompt modern management of complications in leptospirosis, such as renal failure, hepatic necrosis, and massive hemorrhage may be life saving.

Since it is unlikely that this disease can be eradicated or even well controlled in wild animal hosts serving as sources of infection for man in the foreseeable future, clinical human leptospirosis will probably continue to occur in Hawaii for years to come.

CASE REPORTS

Case 1. On July 19, 1962, an 18-year-old Hawaiian man developed severe pain in both calves, rhinorrhea, and diarrhea. The latter two symptoms abated in four days but the muscles of the calves and thighs became progressively more painful. Mild headache, tenderness of the abdominal muscles, and anorexia began on July 23. On August 2, the muscular pain was so intense that he could not stand and he had difficulty moving his legs. He was admitted to The Queen's Hospital on the same day with the tentative diagnosis of poliomyelitis.

He was a thin adolescent in acute distress with a blood pressure of 99/60 mm Hg, pulse rate of 76 per minute, respiratory rate of 20 per minute, and temperature of 100.2° F. His pharynx was mildly injected. His abdomen and both lower extremities were extremely tender. Peritoneal signs were not present. Healing abrasions on his legs were present.

The white cell count was 9,800 with 86 per cent neutrophils. The hemoglobin was 12.1 gm per 100 cc and hematocrit was 37. Urinalysis was normal except for 1+ albumin. The cerebrospinal fluid dynamics, analysis, and cultures were normal. Serum glutamic oxalacetic transminase (SGOT) was 84 units and lactic dehydrogenase (LDH) 480 units. An electrocardiogram and a chest roentgenogram were both normal.

On the second hospital day, August 3, most of the marked tenderness and weakness of the lower extremities, and the headache, had disappeared, but his temperature remained elevated, spiking as high as 103° F. He now had nausea, conjunctivitis, and jaundice. On August 6, repeated emesis occurred, jaundice deepened and the white cell count was 19,200 with 72 per cent neutrophils. The bilirubin was 5.1 mg, of which 2.3 was conjugated, per 100 ml; LDH 590 units, and SGOT 90 units. He became afebrile on August 7, the nineteenth day of illness, and his strength gradually returned. Only symptomatic treatment was administered throughout the two weeks of hospitalization. On the day of discharge, August 16, his SGOT was 18 units and bilirubin 1.5 mg (conjugated 0.75) per 100 ml.

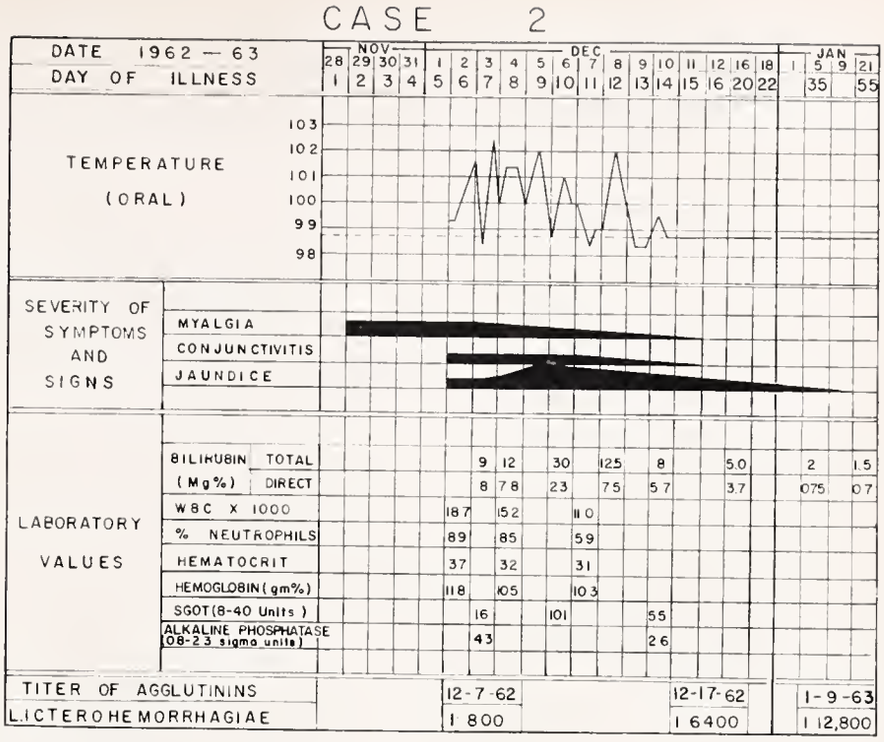
Serum drawn on the fifth hospital day, the eighteenth day of illness, showed a microscopic agglutination titer of 1:800 for L. icterohemorrhagiae. A repeat serum drawn on the thirty-sixth day of illness showed the titer had risen to 1:6400. Following admission, it was learned that two weeks prior to the onset of symptoms the patient had been swimming in Nuuanu Stream in Honolulu.

Case 2. On November 28, 1962, a 19-year-old Caucasian man experienced malaise, frontal headache, a moderately severe nonproductive cough, a mild sore throat, and diarrhea. He recognized that his urine was dark brown. The following day pain developed in both calves, his lower back, and neck. Chills, fever, and blood-streaked sputum occurred on November 30 and these persisted to December 2, when he was admitted from his dispensary to U. S. Army Tripler General Hospital with a diagnosis of pneumonia.

He appeared acutely ill, with an admission temperature of 99.4° F. orally, respiratory rate of 24 per minute, pulse rate of 94 per minute, and a

blood pressure of 106/60 mm Hg. The posterior pharynx was injected, the sclerae were icteric, the conjunctivae moderately inflammed, and fine inspiratory rales were heard along the lower half of the right sternal border. The calves were tender bilaterally and the skin was icteric.

The white cell count was 18,700 with 89 per cent neutrophils, 5 per cent of which were bands. The corrected sedimentation rate was 40, hematocrit 37, and in the hemoglobin 11.8 gm per 100 cc. Bile was present in the urine, which also contained a few red blood cells and 1 + albumin. The serum bilirubin was 9 mg per 100 ml, of which 8 mg was conjugated. The thymol turbidity was 11 units, cephalin flocculation 3 + after 48 hours, and the alkaline phosphatase 4.4 Sigma units. The urinary urobilinogen was 6 Ehrlich units. Sputum smears and cultures were negative for bacterial and fungal pathogens, including examinations for M. tuberculosis. Admission chest roentgenograms revealed a diffuse right lower lobe infiltrate which progressed by December 4 to involve the left lower lobe. The infiltrate thereafter cleared rapidly and was nearly resolved by December 7, 1962 (Fig. 1).



On December 7, without clinical evidence of meningitis, a lumbar puncture revealed normal cerebrospinal fluid dynamics. The fluid contained 41 cells, 27 lymphocytes and 14 neutrophils, per cubic mm. On December 11 the hematocrit had fallen to 31, the hemoglobin to 10.3 gm per 100 cc, and the serum bilirubin had risen to 30 mg per 100 cc, 23 mg being conjugated. On the following day his temperature became normal, ending ten days of spiking fever with a high of 102.4° F. Serum drawn on the ninth day of illness was positive for antibodies of L. icterohemorrhagiae, 1:800; on a convalescent serum drawn on the nineteenth day of illness the antibody titer had risen to 1:6400. On the thirty-ninth day of hospitalization the antibody titer had risen to 1:12,800. Silver stain of the centrifuged urine on December 12 revealed tightly-coiled leptospiral organisms. The patient became completely asymptomatic on December 16. The serum bilirubin remained elevated

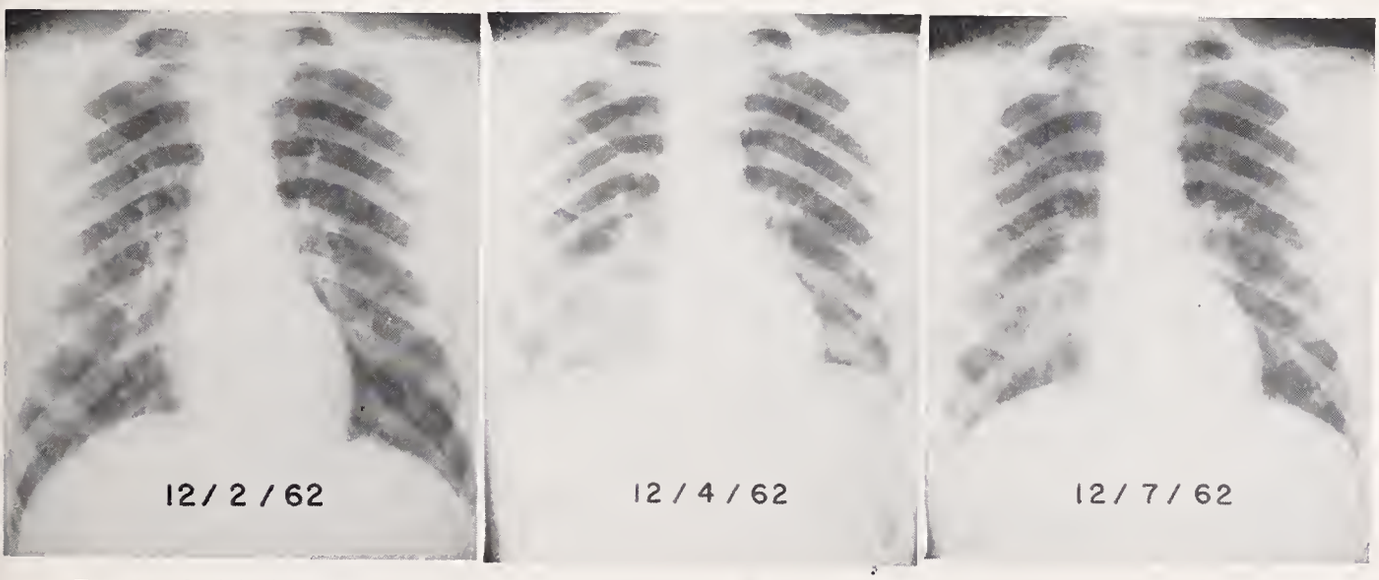
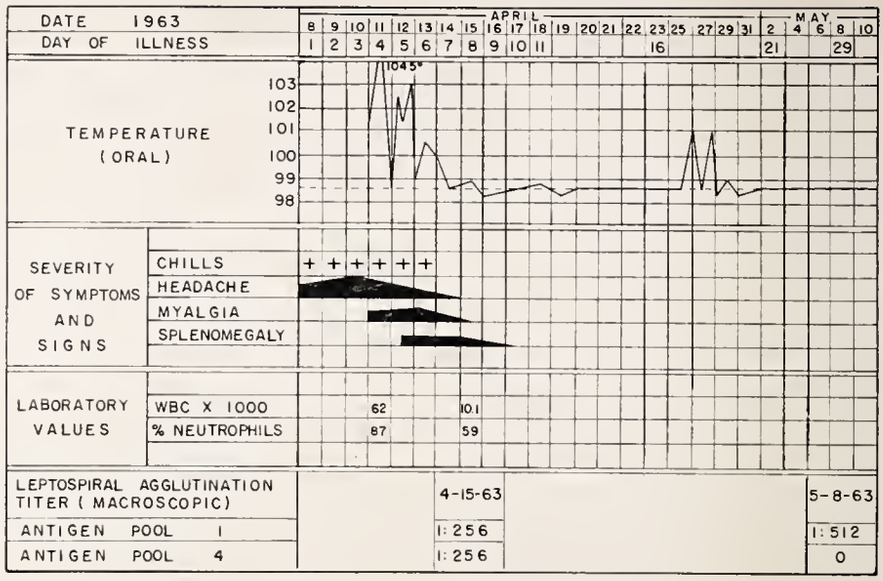


FIG. 1.—*Serial chest films in Case 2 showing initial right-sided infiltrate, progressing to involve the left lung and demonstrating nearly complete resolution by December 7, 1962.*

for 55 days. Subsequent to admission evaluation, we learned that 30 days prior to the onset of his illness he had fallen into a stagnant Honolulu pond.

Case 3. On April 8, 1963, a 25-year-old Caucasian man developed shaking chills, headaches, diaphoresis, and a temperature elevation. These symptoms continued for three days, resulting in his admission from his dispensary to U. S. Army Tripler General Hospital on April 11, 1963, with a diagnosis of malaria.

CASE 3



He appeared acutely ill and was complaining of a frontal headache. His temperature was 104.5° F., pulse rate of 120 per minute, and blood pressure 120/70 mm Hg. There were bilaterally tender axillary lymph nodes, but the remainder of the physical examination was normal.

His white cell count was 6,200 with 87 per cent neutrophils, the hematocrit 46 and the hemoglobin 14.9 gm per 100 cc. Urinalysis was normal except for 2+ albumin. Values for serum bilirubin, thymol turbidity, cephalin flocculation, and alkaline phosphatase were all normal. Eight blood cultures revealed no aerobic or anaerobic growth. Chest roentgenograms, multiple malaria smears, and an electrocardiogram were all normal.

On April 14, he became afebrile but again spiked to 101° F. on the seventeenth and eighteenth days of hospitalization. This was thought to be due to an unrelated bilateral epididymitis.

Febrile agglutinins were normal, but on April 15, the eighth day of illness, a leptospiral macroscopic slide agglutination test revealed a titer of 1:256 against antigen Pools 1 and 4. Pool 1 contained L. ballum, L. canicola, and L. icterohemorrhagiae. Pool 4 contained L. australis, L. hyos, and L. hebdomadis. Convalescent serum drawn on the twenty-ninth day of illness revealed a reactive titer of 1:512 against leptospiral antigen Pool 1. Retrospective history revealed that the patient had waded barefoot in a creek on the island of Oahu one week prior to admission.

The clinical and laboratory data are graphically depicted above.

SUMMARY

1. Three cases of human clinical leptospirosis occurring in Hawaii within a nine-month period have been presented.

2. The potential for acquiring leptospirosis and the variability of the clinical course have been emphasized.

3. It is our hope that we may have succeeded in increasing the awareness and recognition of this disease in Hawaii.

ADDENDUM

Two additional cases of serologically proven human leptospirosis have been diagnosed since this paper was submitted for publication. ■

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Placental prolapse, whether due to placenta previa or abruptio placentae, is best managed by rapid vaginal delivery.

Prolapse of the Placenta

MILLARD SETO, M.D.,* *Honolulu*

• *The prevailing opinion is that most cases of placental prolapse are associated with a low-lying placenta, prolapse occurring rarely from a normal site of nidation. The purpose of this paper is twofold: (1) to emphasize that this condition is not a rarity, and (2) to point out that the end result of placental prolapse is the same, be it prolapse of placenta previa or prolapse of abruptio placentae.*

SINCE 1916, 22 papers regarding the obstetrical phenomenon, prolapse of the placenta, have been recorded in the literature, only 12 cases being reported in the last 25 years. Yet, a number of these papers report knowledge of other cases.

CASE REPORT

A 34-year-old Negro woman, gravida 3 para 2, was admitted to the hospital five days before her estimated date of confinement. Prenatal care had been uneventful until two weeks prior to admission, when she was hospitalized with a chief complaint of painless vaginal bleeding. A review of the hospital record for that admission shows the blood pressure as 110/70 and the hemoglobin as 11.4 gm. There was only a minimal amount of blood in the vagina on admission, with no active bleeding. The gestation was estimated at thirty weeks, despite discrepancy with the estimated date of confinement. Because of supposed fetal immaturity, double setup vaginal examination in the operating room was deferred, in order to forestall premature termination of the pregnancy.

Isotope placentography was not available. It was felt by the attending physicians that soft tissue placentography in the early part of the third trimester is not reliable, and, therefore, this diagnostic aid was not ordered.

A conservative approach was followed, the patient being discharged on the third hospital day when no further bleeding ensued.

Her present illness began with heavy vaginal bleeding followed shortly by "labor pains." When the bleeding failed to abate, the patient was brought to the hospital. On arrival in the emergency room, she was semi-conscious and without detectable blood pressure. No active vaginal bleeding was noted, and the uterus was soft but irritable. No fetal heart tones were audible. Bilateral saphenous vein cutdowns were done, and one unit of dextran plus two units of O-negative low titer blood were given rapidly. Aramine was also given in an effort to raise the blood pressure immediately in view of shock of unknown duration. The blood pressure was then obtained at 100/70.

A blood specimen was finally obtained, this being difficult because of the hypotension and patient's obesity. From this sample, a hemoglobin of 10 gm and hematocrit of 30 were reported, and additional blood was typed and crossmatched. A third unit of blood was given when the blood pressure began to fall.

The patient was taken to the operating room in anticipation of probable Cesarean section. Strong uterine contractions began, and vaginal examina-

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Received for publication April 23, 1964.

tion showed the placenta at station +2. There was still no active vaginal bleeding, and this was interpreted as indicating complete placental detachment. In view of the vigorous uterine contractions, the proximity of the placenta to the introitus, and the absence of vaginal bleeding, it was elected to deliver the uterine contents vaginally.

With fundal pressure, the placenta was delivered, and followed immediately by a stillborn 6 lb. 1 oz. male infant. The placenta fitted over the infant's head in beret-like fashion. Exploration of the uterus showed it to be intact. A second-degree midline perineal laceration was sutured under local anesthesia. Uterine atony developed, but responded well to pitocin drip and methergine. A fourth unit of blood was given.

On the first postpartum day, the hemoglobin was 8 gm with a hematocrit of 30. Because of the prolonged shock, there was concern for renal function. Strict intake and output recording was instituted, and intravenous feedings supplemented sparingly with oral fluids. Baseline serum electrolyte determinations were obtained. The following day, the patient was given a soft diet. The urine output for the preceding 24 hours totaled as 1,455 cc with a specific gravity of 1.020.

The blood pressure remained around 120/80, and the second postpartum day hemoglobin was found to be 9.5 gm. The patient recovered progressively, and was discharged in good condition five days after admission. Follow-up care in the outpatient department showed a complete recovery.

DISCUSSION

The first case of prolapse of the placenta was reported in 1672 by Loss.[1] Not until 1832 was this condition named "prolapse of the placenta" by Osiander to describe the placenta lying free before the fetus.[2] Placenta previa was felt to be the antecedent cause. However, cases have since been reported in which the placenta was believed to have been implanted normally.[3, 4, 5] Simpson in 1845 wrote a classic paper on this subject, observing that the majority of placental prolapses occur with low implantation and that hemorrhage often ceases with complete detachment.[6] This condition also seems to occur more often in the multipara in premature labor, and is frequently associated with malpresentations. Postpartum atony is not uncommon.

Some observers feel that the end result is the same whether the placenta prolapses from a normal implantation or from a low-lying site, and suggest that prolapse of the placenta be applied to all cases in which the placenta lies free before the fetus.[7, 8] As fittingly stated by Rucker, "a placenta has as much right to fall out of the womb when it is situated on the lower uterine segment as when it is situated normally."[7]

A distinction can be made only if it can be shown that the placenta prolapsing before the fetus was not there originally as proven by previous vaginal examination or placentography.

Placental detachment prior to prolapse can be traced to a number of factors. Rapid diminution of the endometrial surface as with sudden emptying of the uterus of fluid or fetus may cause detachment. Cervical effacement or dilatation with a low-lying placenta is another cause of separation. Intra-uterine manipulation as with internal podalic version, traction exerted by delivery of first twin, extra-uterine trauma are all mechanical factors to be considered. One can only conjecture as to the exact mechanism. The basic defect apparently is in the decidua spongiosa, making possible complete cleavage before normal separation should occur.[9] With complete detachment, bleeding ceases secondary to uterine contracture and probably as has been suggested by Kobak *et al.*[8] from blood vessel atrophy in a degenerated spongiosa. Usually, these patients do not experience the shock and abdominal pain common to abruptio placentae. Placental detachment being complete or nearly so, the myometrium is spared the irritating effect of infiltrating blood, and blood loss minimized by immediate uterine contracture.

The absence of a presenting part at the cervical os to block placental descent completes the pathologic process, the empty lower uterine segment resulting from fetal malpresentation or pelvic disproportion. Detachment of the placenta with subsequent prolapse in placenta previa can be readily understood since the placenta already occupies a position preceding the fetus. Placental prolapse with abruptio placentae is not as easily comprehended, particularly if the fetus occupies the lower uterine segment. While many cases of placental prolapse from a high implantation occur in twin pregnancies following the delivery of the first twin,[7] it is difficult to conceive how placental prolapse in single pregnancies could occur without the two basic criteria of a decidual defect and an empty lower uterine segment.

Prognosis for the infant is extremely poor, and is worsened by prematurity, a characteristic of this phenomenon. Immediate delivery after prolapse of the placenta is the infant's only chance for survival. Only with a high index of suspicion can early detection occur. Operative delivery by Cesarean section is not the treatment of choice. The placenta is almost entirely, if not wholly, detached from the uterus in placental prolapse, disrupting the maternal-fetal oxygenation system. The rate of fetal

survival then becomes proportionate to the rapidity of delivery, and fundamentally is dependent on cervical dilatation and adequate pelvic dimensions. Should these be conducive to vaginal delivery, deep ether anesthesia is administered, the placenta displaced, the membranes ruptured if intact, and the infant delivered by internal podalic version and breech extraction in vertex presentations or breech extraction in breech presentations. An alternate method of delivery utilizes the obstetrical forceps or the Malmstrom vacuum extractor in vertex presentations. This is limited by the requisites of the fetal head at low station and in vertex presentation; unless these conditions are met, delivery would probably not be effected in time to salvage the infant.

It has already been suggested that placental prolapse is much underreported, and should no longer be placed in the realm of obstetrical curiosities.[8] Instead, its prevalence should place it among acknowledged obstetrical emergencies, thus provoking a greater awareness of its possible presence and perhaps increasing the infant survival rate.

SUMMARY

1. A case of prolapse of the placenta in the third trimester has been presented.
2. A discussion of the factors leading to this has been done, the basic defect probably being in the decidua spongiosa. Most cases apparently stem from a low-lying placenta, aided by an empty lower uterine segment.
3. Whether the basic pathology is prolapse of the placenta in placenta previa or abruptio placentae, the final manifestation is the same, a low-lying placenta free before the fetus. It is again suggested that the end result be the sole consideration in categorizing this condition.
4. Prognosis for the infant is poor, being complicated by prematurity. Rapid vaginal delivery seems to be the only chance for survival. ■

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The President's Page

Perhaps we need another Chinatown Fire. This was not the ideal way to fight plague sixty years ago, but neither is our present government salary scale the ideal way to combat public health problems today.

Prior to World War II, Hawaii was having about 75 cases of typhoid fever (with about ten deaths) every year. When the war started the hazard of typhoid could not be countenanced, and so massive immunization procedures were undertaken. Typhoid fever became virtually a thing of the past. During the war years VD rates were reduced to phenomenal lows. A dengue epidemic in the summer of 1943 was stopped in its tracks by a heroic effort to rid our community of Aedes mosquitoes. Over the decades, infant and maternal death rates here have become among the lowest in the country. Hawaii's health department, which is the oldest of any in the United States, was recently considered to be one of the half-dozen best health departments in America.

These wartime and postwar programs were headed by youthful, qualified public health physicians. But youth is transient—and so were many of the public health officers. One joined the faculty at Harvard. Another became a professor at Pittsburgh. A political casualty went immediately to a higher-paid position in a large Eastern state where he is now Director of the State Health Department. Recently there has been a migration from the Health Department to the University of Hawaii. Not a single young, well-trained public health officer recruited in recent years has remained with the Health Department. There are at present about a dozen vacant positions in the State for qualified medical health workers. This is not surprising.

Several years ago the *Journal of Public Health* ended a review of public health salaries with the statement, "There is therefore little present incentive for the better kind of young men and women with medical degrees to go on for graduate work in public health, save for those few with a missionary zeal to whom income is a minor consideration."

The health worker often is expected to be a paragon of medical ability with specialty board qualifications, plus public health training. He must be knowledgeable in medicine, sanitation, social problems, statistics, and research. He must also be an administrator, schooled in fiscal and personnel lore, and be able to function effec-

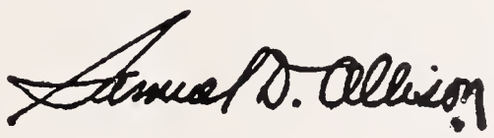
tively in accordance with the myriad rules of local and federal bureaucracy. He should also be an effective teacher at both professional and lay levels. He must speak and write well and be equally fluent in the technical jargon of his profession, the language of bureaucracy, and the local patois.

And for this, what are his economic rewards? If a civil service employee, the public health physician's income is about three-fifths that of the average physician in the United States, about $900 to $1,300 a month. If the position is one at a higher political level with responsibility for hundreds of employees and a multi-million dollar budget, he may receive about three-fourths the pay of the average physician. But with this type position he has no assurance that he will be reemployed following the next election.

The situation seems to be getting worse. In 1951 the top starting salary for a physician in local government was 5.4 times that of the lowest paid state employee. Today it is 4.3 times that of such an employee. While precise figures are not available, data received from *Medical Economics* and from local sources suggest that in the late 1920's the President of the Board of Health in Hawaii received more income than the average private practitioner in the United States. In the mid-forties this was still true. The President of the Board of Health received an annual salary of $12,500; the 1947 average net income of a U. S. physician was $11,300 and the median net income at that time was $8,744. The present net income of the average physician has more than doubled since 1947, while that of the Director of Health has increased only about 50 per cent. It seems apparent that the physician in public health is losing out in comparison with both his peers and his employees.

What I've said has applied primarily to the Department of Health. But a similar situation prevails at the Bureau of Workmen's Compensation and the Department of Social Service. The University physicians seem to be paid relatively better than others in government service but even their salaries are not generous. Thus, the difficulties. Private medicine attracts those primarily interested in patient care and a good income. Business and industry offer better salaries to good medical administrators. Those particularly interested in teaching or research go to the universities. And so the exodus from public health.

We in private medicine must be concerned with this. In addition to the present activities with which we are all familiar, one of these departments may soon be administering major medical care programs, and the administrators should be men with high qualifications in both training and experience. Can we buy such men at the present scale of government salaries? I don't think so! While we still have some excellent public health physicians in Hawaii, it seems imperative to me that means be found quickly to provide appropriate economic and other incentives to attract talented young physicians into our government service and to retain the good people we have.



HAWAII MEDICAL JOURNAL

Editorials

Promote Eldercare

The idea that tax funds should not be spent to provide for citizens who are able to provide for themselves is slowly being done to death by our increasingly socialistic political leaders, but there is life in it yet. According to the London *Times,* even England's Labour government is seriously considering it!

The limited hospital-and-nursing-home-care program cleverly misnamed "Medicare" by Wilbur Cohen and his fellow conspirators, and called just Medicare, without the quotation marks, by a curiously imperceptive and complaisant press, seemed like a shoo-in after LBJ's landslide victory last fall. The fact that it was, as Dr. Edward Annis said, a "cruel hoax," with far less extensive benefits than its name implied, and far higher costs than its proponents claimed, seemed to attract little attention.

The shameful failure of most states to adequately implement the generous provisions of the Kerr-Mills program sharpened the issue; it was hard in many states, and impossible in some, to claim that there was an adequate alternative to socialized medicine for the elderly—on a national basis.

Now there is an answer—one that is growing swiftly in national acceptance, on its merits: Eldercare, the Herlong-Curtis bill, H.R. 3727. It provides all that "Medicare" offered—for those who need such help—plus surgical costs, physicians' services, drugs both in and out of the hospital.

Its cost would be much less than that of "Medicare." No additional payroll tax would be needed. The Social Security system would not be involved, and the Social Security tax would not have to be pushed toward that 20% level which Wilbur Cohen testified two years ago would be, he thought, "about as far as the American people would be willing to go."

Under Eldercare, people over 65 could qualify themselves for assistance before they need medical care or hospitalization, and no welfare type of investigation would be needed.

Do your part to fend off incorporation of the medical profession into the bureaucracy of the Social Security system! Write your Senators and your Congressmen, and ask your patients to do it. This is the time for action!

Welcome, *Kuakini Medical Bulletin!*

Volume 1, Number 2 issue of the *Kuakini Medical Bulletin,* under (as will be acknowledged in a future issue) the editorship of Dr. Edward Y. Yamada, has just been published; and its authors, though they chose to remain anonymous, are to be congratulated, as is Dr. Yamada. Multilithed on uncoated paper, the issue is altogether a most praiseworthy job. Issue Number 1 was an informal "pilot" issue and was not circulated.

Though the articles in this issue (on T_3 uptake in diagnosis of hypothyroidism, necropsy studies in GI bleeding, cardioversion, use of a pacemaker, and hemoglobinopathy in relation to race, plus three "x-rays of the week") are so good that the omission of the authors' names can only be interpreted as undue modesty, the use of names on medical articles also implies willingness to accept responsibility for what is said, and we would urge that this excessively backward-leaning posture be abandoned in future issues.

A third medical publication in Hawaii cannot help having a stimulating effect, and hopefully may shorten the JOURNAL'S present publication lag somewhat.

Dr. Yamada, who has been Medical Education Director at Kuakini Hospital since July, 1964, has done a fine job of editing the material and putting it in shape for publication. We wish him success with the new venture, and look forward to future issues.

HAWAII MEDICAL JOURNAL

This Is What's New!

• **Headache,** museular **weakness, vomiting,** abdominal **pain,** and mental **depression** may all be direetly related to the **high serum calcium** in hyperparathyroidism, as well as in other diseases with hypercaleemia. Furthermore, these symptoms may provide clues to the diagnosis of hyperparathyroidism before skeletal deealcifieation, renal calculi, panereatitis, or peptie ulcer have appeared to tip off the physician. The increased extracellular calcium appears to alter the eell membrane so as to deerease flux of other eations such as caleium and sodium aeross it. This deereased permeability of nerve and muscle cell membranes may explain symptoms and signs. (*Internist Observer* [Dec.] 1964.)

• Pathological examination of the nervous system in **diabetic neuropathy** shows loss of anterior horn cells and loss of neurons in the posterior root ganglia. Probably seeondary to this are reaetive gliosis in the posterior column and neurogenic atrophy of the skeletal muscles. These findings suggest that diabetie neuropathy is related to the **metabolic disturbance** rather than to vaseular disease. (*Brain* [pt. 2] 1964.)

• Eye movements with **nystagmus** may be objeetive evidenee of **visual hallucinations.** Hallucinating hypnotized subjeets were noted to have nystagmus during the period of hallueinations. (*Science* [Oct. 2] 1964.)

• Large doses of **calcium** and **fluoride** ions have been used to treat **multiple myeloma;** this treatment induees skeletal fluorosis, with extensive **recalcification** of the entire skeleton ineluding loealized osteolytic lesions of myeloma. (*New Eng. J. Med.* [Nov. 26] 1964.)

• The search for a simple single blood test as an index of **thyroid** function runs into more problems as time goes on. There no longer is a single thyroxin-binding globulin which is speeific for thyroxin; it appears that all **serum proteins** bind thyroxin to some degree. Pure gamma globulin binds triiodothyronine with at least two levels of tenaeity, one a rather strong bond, and another whieh is weak. Serum albumin has only one binding capaeity, which is strong. (*Metabolism* [Oct.] 1964.)

• **Acute thyroiditis** was assoeiated with **adenovirus infection** last year. Of five eases studied all had positive and rising titers for adenovirus. It would be tempting to conclude that the adenovirus causes acute thyroiditis; a few years ago, however, similar titers were demonstrated with mumps virus during a month's epidemie in Israel. Perhaps thyroiditis is caused by either mumps virus or adenovirus, or perhaps it is caused by neither virus. (*Metabolism* [Oet.] 1964.)

• Anyone who read Kleitman and Dement's work on EEG and eye movement ehanges during **dreams** might have guessed that sooner or later it would happen, and it has. Not trusting the direct observation of a possibly unskilled observer, psychiatrists in New York have used three other methods to determine the presenee of **penile erection** during sleep. These are, for those that are interested, the phalloplethysmograph, the mereury strain gauge and the penile skin temperature. Rapid eye movements during sleep indieate dreaming, and in 17 subjeets studied by the above methods, 95% of the periods of rapid eye movement were associated with at least a partial ereetion. (*Arch. Gen. Psychiatry* [Jan.] 1965.)

• Deseribed in London are two eases of **hereditary intolerance to sucrose;** this inborn error of metabolism causes vomiting, diarrhea, and abdominal distention. Treatment consists of eliminating all eane sugar [*and* beet sugar] from the diet, and substituting glueose or some other simple sugar. Fortunately for the eeonomy of sueh areas as Hawaii, the disease is inherited as an autosomal reeessive. (*Arch. Dis. of Child.* [Oet.] 1964.)

• The presenee of a **duodenal ulcer** in a man inereases his likelihood of developing **pulmonary tuberculosis** by five times, his ehanee of developing a **neurosis** by three times, and his risk of developing **coronary heart disease** or **chronic bronchitis** by two times. (*British Med. J.* [Sept. 26] 1964.)

• The **thymus** gland undergoes an abnormal **epithelial hyperplasia** in **systemic lupus erythematosus, myasthenia gravis,** and various eollagen diseases. (*Bull. John Hopkins Hosp.* [Nov.] 1964.) ■

FRED I. GILBERT, JR., M.D.

M D
KAPIOLANI MEDICAL DENTAL CENTER

FEE SIMPLE OWNERSHIP IN HAWAII'S FIRST CON

FEE SIMPLE LOCATION on a ½ acre lot in Honolulu's new Kapiolani Business District adjacent to the Ala Moana Center and some 50,000 residents in the immediate surrounding area. Kaiser Foundation Hospital, Queen's Hospital and Kapiolani Maternity Hospital are only minutes-distant, while all other major Honolulu hospitals are within a 2½ mile radius of this convenient to-everything location.

PRACTICAL BUILDING DESIGN the first four stories of this nine-story building are divided into nine levels of covered parking, enough space for 241 cars, 23% more than normal requirements. Office floors are 9,000 sq. ft. each with 1,500 sq. ft. available for pharmacy use on the first floor. Two 350-feet-per-minute elevators will provide ample service. Restroom facilities have been provided near the lobby level on each floor. An individually regulated central air-conditioning system is provided.

OFFICE DESIGN Purchasers may specify individual plans and plumbing requirements. Offices will be furnished with carpeting, draperies, aluminum fixed glareless windows, acoustic tile ceilings and recessed fluorescent lighting, as well as interior doors, interior partitions, and necessary air conditioning and electrical outlets.

CONDOMINIUM OWNERSHIP provides individual ownership of single units in a multi-unit structure. Condominiums may be bought, sold and mortgaged separately and are taxed individually. Each owner-doctor is liable only for his own mortgage payments; another's default does not endanger his interests. Absence of mutual risk is the vital difference between a conventional stock corporati and condominium ownership. Purchase includes fractional common ownership of the general cor mon elements, all parking areas, elevators, lobbie corridors, etc. and fee simple title to the land.

EASY FINANCING Purchase is based on a squa foot basis with a price reduction for greater spa Individual 20-year mortgage financing has be arranged with the Continental Assurance Compa for 75% of the total purchase price of each un Buyers do not begin to make monthly payments any nature until the building is ready for occ pancy, scheduled for Spring of 1966. Down pa ments will be placed in escrow with the Bank Hawaii and will earn 6% interest per annum. $500 down payment will secure the unit with ½ the total down payment due August 1, 1965 a the balance due March 1, 1966.

PROFESSIONAL MANAGEMENT The proper management will be controlled by an Association Office Owners but performed by Aaron M. Chane Inc., a Certified Property Management firm, contract with the Association.

BUILDING PROMOTION The developer has s aside a $5,000 advertising fund to properly promo the building upon completion.

FINANCIAL BENEFITS An ownership equity built up through condominium purchase for abo the same cost as renting office space. Additionall the doctor can depreciate office space just as he do equipment and may qualify for capital gains f future re-sale. He is also building a stable, financi base for borrowing.

FOR MORE DETAILS, please contact the developers or the sales agent

Another Condominium development by

OCEANSIDE PROPERTIES, INC.

HUGH MENEFEE, INC. — Sales Agent — Phone 962-177

NIUM MEDICAL BUILDING FOR LESS THAN RENT

HAWAII MEDICAL JOURNAL

In Memoriam – Doctors of Hawaii.....

This is the fifty-fourth installment of In Memoriam—Doctors of Hawaii.

Oliver Anderson Jeffreys

Oliver Anderson Jeffreys was born at Weiser, Idaho, on February 3, 1881, the son of Solomon and Sarah Elizabeth Jeffreys.

DR. JEFFREYS

Having attended high school in Weiser, he then entered Missouri State University from which he graduated in 1903. His medical degree was granted by Rush Medical College in 1905. Dr. Jeffreys served internships in the Children's Free and Knowlton General hospitals in Milwaukee and at the Polyclinic Hospital in Chicago.

On August 23, 1906, Dr. Jeffreys married Maud Jeffrey in Chicago, Illinois. Two children were born to the couple, Solomon and Barbara Jean.

Coming to Hawaii in 1916, Dr. Jeffreys decided to make his home here. He spent six years in Kona and then moved to Honolulu where he practiced obstetrics, in a way, until 1937.

During World War I, the doctor served as a medical member of the draft board of West Hawaii.

In 1937 Dr. Jeffreys discontinued his practice to travel. On his way around the world with his family in 1939, Dr. Jeffreys was stopped in Manila by lack of passenger accommodations through to Europe. He then returned to Honolulu in July with his daughter, who entered the University of Hawaii, while Dr. Jeffreys opened offices and resumed general practice. The family returned to Los Angeles to settle in 1940.

Dr. Jeffreys died in Los Angeles on January 20, 1950, within a few weeks of his 69th birthday.

He was a Mason, an Odd Fellow, and a member of the American Medical Association.

Reginald Harold Reid

Reginald Harold Reid was born in Detroit, Michigan, in 1874. He was educated in the schools of Detroit and received his M.D. from Detroit Medical College when he was 19 years old. Following his graduation in 1893, he went to Germany for postgraduate work and remained for more than a year. On his return, he was appointed one of the city physicians in Detroit.

Just when, or under what circumstances, Dr. Reid became a friend of Dr. Francis R. Day is not known, but on May 27, 1895, he arrived in Honolulu and became associated with Dr. Day. In July Dr. Day gave a dinner to introduce his young colleague to the medical men of the city. In October of the same year Dr. Reid secured an appointment, on the recommendation of Dr. Day, as Government Physician at Waialua, Oahu.

Dr. Reid married Miss Bernice Halstead, daughter of Robert Halstead of Waialua, on September 15, 1897, at St. Andrew's Cathedral in Honolulu. The doctor and his wife had one daughter, Carol.

After slightly over two years at Waialua, Dr. and Mrs. Reid sailed on the S.S. "Manoa" February 1, 1899, to settle in San Jose, California. The death of Mrs. Reid's father brought them back to the Islands in June, 1900. The following month they moved to Hilo, Hawaii, where Dr. Reid succeeded Dr. W. L. Moore as Government Physician when the latter came to Honolulu. The Reids built a beautiful home on Reed's Island and were active in the community and social life of Hilo. The doctor had one of the first, if not the first, x-ray machines in Hilo. Along with his professional duties he was registrar of deaths, births, and marriages.

Dr. Reid died in Hilo on February 19, 1903, at the age of 28.

He was on the honorary staff at the Hilo Hospital, surgeon of Company D, Hawaii National Guard, and a member of the Foresters, the Knights of Pythias, and the Hilo Cotillion Club. While in San Jose he became an Elk, and he was instrumental in organizing the Hilo Lodge.

Maurice Joses

Maurice Joses, born in 1891, received his medical degree from the University of California Medical School in San Francisco in 1916. In 1917 Dr. Joses was associated with Dr. Burt of Lahaina, Maui, and the following year he was Assistant Surgeon in the U. S. Naval Reserve, stationed in Honolulu.

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Bureau of Medical Economics

Usually this page deals with collection of accounts, but this month I would like to say a few words on the subject of billing. In many offices it appears that the assistant sends out statements whenever she has a few moments to spare. This way she eventually gets notices to all patients with outstanding accounts before the end of the month.

PROMPT AND ACCURATE BILLING

Every effort should be made to get statements out promptly. Promptness is the first step in collections. Haphazard billing has been one of the major causes for delayed payments and slow collection. Set a definite date, usually the first business day of each month, for mailing statements.

Remember, Promptness and Accuracy—P and A—are the first two letters in PAY. You are two-thirds of the way to good collections by following those two rules. Have your assistant arrange her schedule of work so that this highly important work of billing is accomplished and *double check* every step to insure accuracy.

AGE ANALYSIS

The next step is to prepare an "Age Analysis" of the "Patient's Ledger." This means listing all accounts showing the balance owing according to the length of time they have been outstanding. By such listing, every month, you have a record which becomes to you, valuable in many ways. The Bureau of Medical Economics has such sheets which are available to clients of the Collection Division upon request. The work of aging accounts should be done, if possible, during the first week of every month. Not only is it the preliminary step in collection follow-up, but aging accounts also gives a comprehensive and easily understood analysis of all money owing to the doctor. It highlights and emphasizes the more serious collection problems. Age analysis is an essential tool of sound credit management.

VALUE DEPRECIATION

It is not fully realized how rapidly "accounts receivable" depreciate in value. Last issue I gave figures which clearly showed how the dollar drops in "Collectibility." After only six months its worth drops to 67 cents, and in two years it is worth approximately 23 cents. These figures are from the U. S. Department of Commerce and the Medical-Dental-Hospital Bureaus of America.

"APPROACH" IN THE TONE OF YOUR LETTERS

Many assistants have a happy knack of sending a personalized note when partial payments are be-patient's back up. Always compliment a patient who is trying to pay an account, they *will* react to it.

All letters, whether coming from a great public organization, a tiny crossroads general store, a hospital, or a private individual, reveal personality. Each letter is an ambassador, or a personal representative. Here are three rules that help in letter writing.

The language should be informal, but dignified.
The tone should be courteous and well bred.
The appearance should be immaculate and pleasing.

Pages could be written on the subject but space does not permit. If however you follow the rule of writing in the manner that you yourself would like to be addressed you will not go very far wrong in your approach.

BILLING THE PATIENT

Consistent monthly billing is essential; however, it is wise to use stickers on your statements after you have billed for the first time. The B.M.E. supplies such stickers free of charge to any doctor using its collection service. These stickers have been found by most doctors to be effective in bringing the account to the notice of the debtor in a more definite manner than the normal statement. The first sticker reads "Have *You* Overlooked This Account?" The second reads "Protect Your CREDIT: Your Account Is Now Past Due." The next step is a special letter which can be obtained from B.M.E., and the final statement should inform the debtor via a sticker the account will be turned over to the B.M.E. for collection if it is not paid within a specified time. This has been found to be the most straight forward, ethical, and direct manner of handling the "accounts receivable" problem, and it has stood the acid test in many offices. Some good commercial brains set this system up. It could do your office no harm to follow their example. ■

GABRIEL ROGERS
Manager

HAWAII MEDICAL JOURNAL

Maternal Death Study

ANTEPARTUM HISTORY

A part-polynesian gravida III, para II, in her late twenties, was admitted to the hospital in labor. The patient was not seen by any physician or paramedical personnel and was separated from her husband and living with relatives in a small community. No medical information concerning the pregnancy was available; relatives said the patient refused to obtain prenatal care even though it was strongly urged.

HOSPITAL ADMISSION

The patient was admitted to the hospital at 9:05 A.M. on a Sunday, with severe abdominal cramps and diarrhea. Since the patient had no attending physician, the physician on call was contacted at the time of admission and was notified that the patient was in labor, that the cervix was soft and dilated to only 2 cm, and that the patient was suffering from lifelong asthma and severe diarrhea. The patient was, however, never told directly by any physician that such was the case. She also denied that she had any attacks of asthma during the past two pregnancies or during the present pregnancy.

A surgical prep was done and the patient was cleansed because of soiling from her extensive diarrhea. Orders were given to administer ephedrine sulfate and oxygen, if necessary, but ephedrine was never given because there was insufficient time, inasmuch as the nurses were busy cleaning her up.

At approximately 10:10 A.M. the patient told the nurse on duty that she was dying. Oxygen was promptly started and the physician assigned to her was contacted. He was already in the hospital making rounds. He ordered administration of adrenalin, oxygen, caffeine sodium benzoate, and finally more adrenalin, all to no avail. The patient expired at 10:25 A.M., 1 hour and 20 minutes following admission.

POSTMORTEM CAESAREAN AND EXAMINATION

Immediate preparation was made to do a postmortem Caesarean section and this was done by the attending physician but the baby was stillborn. Adrenalin was injected directly into the heart but this was not successful in reviving the infant.

Inasmuch as the abdomen was opened, it was deemed advisable to conduct a cursory postmortem examinatioin to discover, if possible, the cause of the patient's sudden demise. Gross examination of the heart revealed marked dilatation of all the chambers, but there did not appear to be definite hypertrophy present as the left ventricle was about 10 mm thick and the right ventricle about 3 to 4 mm thick. The coronary arteries appeared to be patent and there was no evidence of myocardial infarction. The pulmonary vessels appeared to be normal, although they were not opened. The possibility of pulmonary embolism could not be ruled out. The lungs themselves were completely aerated and appeared to be entirely normal. The kidneys were normal in size and consistency. The abdominal organs looked normal. The bladder appeared to be contracted.

From this partial gross autopsy, the only conclusion that could be drawn was that the patient died of acute dilatation of the heart from an unknown cause. A pregnancy was diagnosed. The fetus weighed 8 lb. 7 oz.

CLASSIFICATION

After critical analysis and unrestricted discussion the committee attempted to classify the case as to the cause of death and assessment as to preventable factors. Classification of the death was impossible because of insufficient information and because of incomplete autopsy.

Conclusions and recommendations.

1. A cursory postmortem gross examination of the organs of this patient was made by the physician in attendance. None of the organs were saved for the pathologist to examine. For this reason, the physician should not have signed the death certificate and should have had a complete autopsy performed by a pathologist. Since an enforceable postmortem medical examination system was not available and since the death occurred under suspicious circumstances, the committee felt that a statewide medical examiner system was urgently needed and that all responsible physicians should be concerned until a statewide system is enacted.

2. The patient apparently had very inadequate treatment during the hour and 20 minutes she was in the hospital. Vital signs on the patient were not taken and fetal heart tones were not recorded. In spite of the severity of the diarrhea, no attempt was made to look for the reason for the diarrhea such as cultures for pathogenic organisms or chemical or pathologic examination for arsenic poisoning or for other possible criminal involvement.

3. The patient was obviously critically ill, yet

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Hawaii Academy of General Practice

MORE ON "MEDICARE"

Deadlines being so far ahead of publication, by the time this appears in print and the JOURNAL reaches your hand, eye, and brain, this Congress may have passed "Medicare" into law. As of this writing, I feel that Congress will have not; that the inherent forces of common sense and wisdom, once such a proud heritage of Americans, will have prevailed.

It is in this vein, then, that I continue on the subject of "Medicare," or one general practitioner's point of view.

HOSPITAL CARE WITHOUT PHYSICIANS?

Most physicians seem to be oblivious of the implications in the King-Anderson type legislation, which purports to offer only hospital and nursing home and some inhospital diagnostic facilities to the entire segment of population labelled "Over 65." We have been fed the pap that is to soothe our ruffled feathers: "This does not concern doctors' visits or surgery."

Of course, we are all aware that this is "the foot in the door," despite HEW's innocent protests to the contrary. However, are we equally aware of the *fait accompli:* That no patient can be hospitalized, no patient can get an x-ray or a laboratory test done, except he present himself with a slip of paper signed by a physician? And who are the physicians who will be signing these admission papers and these requisition for diagnostic services?

Who is to say now, that King-Anderson will not involve doctors' services?

Everyone of us who will turn his hand to the care of the elderly will, even though at no recompense, be putting on the stamp of approval of his signature on these requisitions. If we refuse to sign, we will be derelict in the eyes of the people. Anyway, paid, salaried MD's can be found who will sign the oldsters in. If we do sign them in, some of us may hesitate to charge for our services a patient who has put himself on the public dole, as it were. Others of us may reason that since the government has provided the patient with that much, he is ahead and should be able to pay his private doctor. If the patient is admitted by a salaried staff physician, will it mean that the hospitals will take over that segment of the practice of medicine? Will the oldsters have to attend outpatient hospital clinics, just like the welfare cases do?

Have the people themselves—the senior citizens—looked upon these possibilities?

NONPARTICIPATION

. . . is a dirty word, sort of like a strike by doctors; intolerable!

If the legislators, the representatives of the people of this republic, if the President himself, were made aware of the way King-Anderson will degrade the private practice of medicine, and will hurt the oldest the most, they might reconsider. If the physicians of the USA signed up en masse with the AMA or with the AAGP, or with any of the large specialty societies, promising *never* to affix a signature authorizing hospital admission or diagnostic services under "Medicare," that program could not continue. The people themselves would turn on salaried hospital staff physicians who might do it.

If, at the same petitioning, every USA physician would vow to care for any patient over 65 for free, if he could not afford to pay, then there could not, ever, be an allegation of a strike by doctors.

. . . OUR SERVICES ARE BEING SOLD

Consider, then, the implication in the King-Anderson "Medicare": That our services *are* involved, *must* be utilized. Consider again, you who think about these things, how the Congress is binding us to a contract, not only against our will, but without even a by-your-leave. This will be involuntary servitude, banned by the Constitution. Who would criticize us if we refused to sign up?

Will you join us in signing a pledge of: "Service forever, but participation never"? ■

J. I. FREDERICK REPPUN, M.D.
Secretary

HAWAII MEDICAL JOURNAL

Notes and News

Professional Moves

For whatever it is worth, we note that this is the Year of the Serpent in the Oriental zodiac. Since the Aesculapian emblem includes a serpent, we should also call this the year of the medic. With the new year, we see new physicians; **William Won,** neurosurgeon, opened recently at the Nuuanu Medical Center; and **Kazushi Tanaka,** general surgeon, at the Yogi Building in Kaneohe. The old are also moving: **Thomas Cowan,** ophthalmologist, moved back to 888 So. King St.; **Don Poulson,** orthopod, to 1481 So. King St.; **Yoshiki Ushiyama,** internist, to 1010 So. King St.; and **Robert Dimler,** pediatrician, to 324 Kuulei Rd. **David Bronder** and **Charles Custer** moved to their spanking new ranch-style Kahuku Clinic.

Elected, Appointed, and Honored

"Joe" Strode was honored by the kind words of close friends and a standing ovation from 300-plus people at the Monarch Room. **Masato Hasegawa** directed the evening and **Bob Johnston** did the introductions. After a long series of testimonials, "Joe" amused everyone with his opening comment, "Many of you here bear the scars of my handiwork."

Fred Kwai Lam celebrated his 70th birthday at Wo Fat with 520 relatives and friends. **Fred, Jr.** thanked the guests, and before dinner, yards and yards of firecracker were exploded to shoo off the devils so Fred, Sr. can celebrate his 80th. Practical, these Chinese. . . .

F. J. "Pink" Pinkerton, on retiring from a half-century of public service and the practice of medicine, has been receiving honors galore. In December, he was extolled by **Harry Arnold, Sr.,** and re-elected President of the Blood Bank of Hawaii in an annual meeting at the Pacific Club. In January, he received the coveted "Splintered Paddle" award from the Honolulu Chamber of Commerce. In February, the Hawaii Eye, Ear, Nose and Throat Society established a Forrest J. Pinkerton Fund for the encouragement of blood and tissue research and anted up $1,600 for a starter.

Clarence Fronk, white hunter, insurance executive, and ex-army surgeon personified, became the second person to be honored as an honorary member of the California State Horsemen's Association for his work as Hawaii Regional Director of the American Horse Show Association.

On the political front, we note that **Dick Ando** was appointed to the State Board of Education and that **Chisato Hayashi** of Kona became a Police and Liquor Commissioner for Hawaii. On the religious front, **Richard Sakimoto** and **Tsuneichi Shinkawa** were elected advisers for the Young Buddhist Association of Honolulu at a Hilton Hawaiian Village convention. On the academic front, **Richard Kelly** and **Young Paik** were certified as Diplomates of the American Board of Pathology; and **Francis Terada** will be installed as a Fellow of the American College of Obstetricians and Gynecologists at its annual meeting; **Isami Umaki** is a candidate for their Fellowship.

We see that **A. S. "Bill" Hartwell** is the new President of the Waialae Country Club (the membership application queue forms to the rear); **Grover Batten** was elected Senior Warden of the Lodge le Progrès de L'Océanie (of the Masons); and **Daniel Palmer** was elected a Director of the Hawaiian Botanical Society. **George Mills** was re-elected President of the State Association of Hawaiian Civic Clubs; **John Chalmers** became Second Vice-President of the Hawaiian Civic Club; and **Fred Lam, Jr.,** is President of the Emergency Amateur Radio Club. **Walter Char** is Vice-President of the Chinese University Club, and **Gordon Chang** its Treasurer. **Gail Li** is President of the Lee Association of Hawaii; **David Lee Pang,** First Vice-President of the United Chinese Society; and **Abraham Ng Kamsat,** President of the Mun Lun Chinese School.

Visiting Physicians

Soft spoken, erudite **Waldo "Bill" Nelson,** Visiting Professor at Children's Hospital, epitomized the essence of doctorhood as "a doctor's basic job is to assist people to live a better life." We enjoyed **Sir Charles Robb's** quiet British humor as he described carotid artery surgery for cerebral ischemia. Sir Charles (once physician to Sir Winston Churchill) is head of the Surgery Department at the University of Rochester and was visiting surgery lecturer. We met dynamic **Clifton Reeder,** Medical Director of Continental Assurance Company, who discussed the "Economics of Medical Cost" at a meeting of the Hawaii Society of Internal Medicine. **Albert Sabin** (of oral polio vaccine fame) spoke at the cholera conference at the University, but was unable to appear on our "Call the Doctor" program on viruses. **Paul Hodgkinson,** chairman of the Ob & Gyn Dept., Henry Ford Hospital, is Visiting Professor at Kapiolani, St. Francis, and Queen's. **Thomas Durant,** President of the American College of Physicians, spoke to local internists at Tripler on a program containing such esoteric subjects as "gas sniffer's" disease and effects of high carbohydrate diet.

Sportsmen

Polo: **Masato "Tiger" Hasegawa** was again in action at Kapiolani Park with mallet swinging high. . . . Shades of Tommy Hitchcock, Jr.!

Golfers: Perennial winner **Kiku Kuramoto** won match vs. par at WCC in December. **Toru Nishigaya** won the team best ball in January while **Mac Mitsuda** tied for first in the January ace. **B. Allen Richardson** led in B and was again 7 up to lead in B flight for individual match vs. par. **Richard Chun** was also 1 up in B flight. In February, **Ted Tomita** was 2 up on par in match vs. par while **Richard Chun** continued his hot pace with 1 up in B flight. At OCC, **Jim Marnie** was 4 up in A flight in individual match vs. par. At Ala Wai, **Ike Nadamoto** was chopped 4 strokes to a realistic 8 handicap by handicap chairman, **"Honest" Paul Tamura,** for winning the Thursday Club's monthly trophy.

Fishermen: There was a dearth of fishy tales because of inclement weather. We venture to guess, however, that the real unheralded fishermen like **Cliff Kobayashi, Sidney Fujita,** and **Carl Lum** caught their usual quotas. We understand from reliable sources that **Coolidge Wakai,** unable to gather a boatful of sailors brave, is now recruiting golfing groups for the neighbor islands. Even staunch fishermen like **Tom Taira, Phil Lee,** and **Cal Sia** are cool toward Cool's invitations. **Phil Lee** turns a greenish shade and pops a Dramamine tab into his mouth whenever deep sea fishing is mentioned.

Hunters: We have on record that **Ed Ichiriu** bagged another deer on Molokai.

Tennis: The tennis players are organizing a doubles tournament for the annual HMA convention, replete with prizes, we hope. Aspirants should notify **Charley Judd** or the HMA offices. Even **Sam Allison** and **Cal Sia,** whose rackets are slightly mildewy, have signed up. Charley promises that the players will be paired evenly according to ability and temper, so that stalwarts like **Leahert Fernandez, Shigeo Horio,** and **Yutaka Yoshida** will not monopolize the prizes.

Hors de Combat

Masato "Tiger" Hasegawa, who has emerged unscathed from countless forays on his polo pony, forayed into an embankment near his home in his trusty Jaguar and received a forehead laceration and a traffic ticket. We gather that polo ponies are safer than jaguars. Horseman **Clarence Fronk** blamed some shrubbery for obscuring his view after his car collided with a jeep; his car sustained $300 damages and the formidable jeep $25.

Community Notes

We congratulate **Morton Berk** for repeating his 1963 state championship in the Potato Chip Institute International with his "Potato Chip Aubergine Italienne" which, not surprisingly, uses 1 cup of olive oil instead of shortening. His recipe for "Rolled Steak Hawaiian" with ½ cup claret wine sounds quite exhilarating.

We are proud of the Windward doctors who volunteered aid to the flood victims and remained anonymous to the bitter end. The **Dr. Robert Chung** trophy was given a week earlier to the Lani-Kailua Outdoor Circle for outstanding community service in 1964.

Clarence Chang and **Lester Yee** spent their Christmas morning removing Mrs. Jack Burns's appendix. **Joe Nishimoto** is the co-chairman of the Leeward YMCA Drive.

Richard Ho, Director of the Poison Control Center, says the best way to avoid fish poisoning is to thoroughly clean all fish before cooking and to discard the intestine and remove fins. How about shark fins?

Travellers and Social News

We learned that author-traveller **Kazuo Miyamoto** had attended the International Meeting of the American College of Chest Physicians in Mexico City and had combed the Central American republics in the post-convention tour. We have a personally autographed copy of his excellent historical novel, *Hawaii, End of the Rainbow,* which depicts life in early Hawaii and in the war-time relocation centers.

Altarations

The **Ogden Pinkertons** announced the marriage of their daughter, Constance Suzanne, to Michael Terry Oakland at St. Clement's Episcopal Church. The **Thomas Maedas** also announced the wedding of their daughter, Gertrude Eleanor, to Arthur Tomio Ueoka, at the Soto Mission. **Reginald Ho** and his new bride, the former Sharilyn Dang, will make their home at 44-588 Kaneohe Bay Drive after a Kaanapali honeymoon.

Travellers

The **Harry Arnold, Jrs.,** attended the AMA meeting in Miami and the Academy of Dermatology meeting in Chicago, where Harry was elected Vice President at the organization's 23rd annual meeting. **Wilbur Lummis,** Chief of the Medical Health Services Division of the State Health Dept., attended the 2d National Conference on Cardiovascular Diseases in Washington, D. C. **Maurice Silver** returned from New York where he was on the program of the American Academy for Cerebral Palsy meeting. Another gadabout neurosurgeon, **Ralph Cloward,** returned home from a global trip. **Robert Johnston** spent his second "vacation" in American Samoa in response to the island's emergency call for a surgeon. **Robert Rose,** likewise, left in November for the same mission. **Cal Sia** of Children's Hospital attended a conference of hospital chiefs of staff in Denver.

Social News

Castle Memorial Hospital medical staff members, 150 strong, attended an international smorgasbord of vegetarian dishes only. Another smorgasbord dinner was held by the **Amir Hemmats** of Kapaa, but this included meats and fish. The Queen's Hospital annual Festival of Trees was held at the Princess Kaiulani and the Kuakini Hospital Auxiliary held its annual fashion show before a crowd of more than 1,200 in the Royal Hawaiian's Monarch Room. The **Sidney DeBrieres** of Hilo hosted a cocktail and pupu party in November and the **Ralph Beddows** held one in December. The **Yonemichi Miyashiros** of Eleele, Kauai, entertained with a sukiyaki dinner and the **Winfred Lees** entertained for the **Clifford Changs** who recently returned to Honolulu.

The **Sam Allisons** announced the engagement of their daughter Kathryn Lynn to Ensign Thomas Mack Claflin III. The **George Brachers** of Hilo are parents of Lt. Randall Wilcox Bracher, U.S.M.C., whose engagement to Joyce Victoria Fothergill was announced. The **Raymond Kongs** also announced the engagement of their daughter Vivien Puanani to Capt. (USAF) Walter Ho.

The **Timothy Wees** and **Richard Yons** were guests of Korean Consul General Se Won Kim at a reception honoring the Arirang dance and song troupe which performed at the International Center.

Announcements

A nine-month tutorial program in Cardiology, September 15, 1965 to June 15, 1966, will be offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, California. This will be an intensive program covering the field of cardiovascular diseases and is especially designed for the physician in private practice who wants an academic year of organized instruction with freedom from direct patient responsibility. For details, write: E. Grey Dimond, M.D., Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, California.

Rotating internships available in 275 bed approved general hospital. Stipend $455. Residency training also offered with beginning stipend of $480/month. ECFMG certified applicants considered. Active social clinic. University-affiliated medical staff and well-organized hospital teaching program. Write: Administrator, St. Joseph Mercy Hospital, Detroit, Michigan 48211.

The National Foundation has a New Birth Defects Reprint Series. The first group of 10 covers a wide range of subjects including prevention, genetics, DNA synthesis, etc. There is no charge.

"SUMMA MEDICA," a new service of Loma Linda University, is a systematic, sequential curriculum of lectures by eminent specialists from leading medical centers and universities, comprehensive in scope, and issued weekly on *magnetic tape*. This concept permits maximum flexibility for the physician to listen/learn at home, in transit, at office. For further information, write 1832 East Michigan Avenue, Los Angeles, California 90033. ■

HAWAII MEDICAL JOURNAL

New Members

Robert W. Peyton, II, M.D.
1441 Kapiolani Blvd., Suite 415
Honolulu, Hawaii 96814
SURGERY
University of California Hospital, 1959
Internship—University of California
Residency—Highland Alameda County Hospital, Oakland, California

Billie Fern Strother, M.D.
P. O. Box 929
Wailuku, Maui 96793
ANESTHESIOLOGY
Southwestern Medical School, University of Texas
Internship—The Queen's Hospital
Residency—University of Texas Medical Branch, Galveston

Daniel Clarence Newbill, Jr., M.D.
888 South King Street
Honolulu, Hawaii 96813
OTOLARYNGOLOGY
Medical College of Virginia, 1959
Internship—St. Francis Hospital
Residency—Barnes Hospital, St. Louis, Mo.

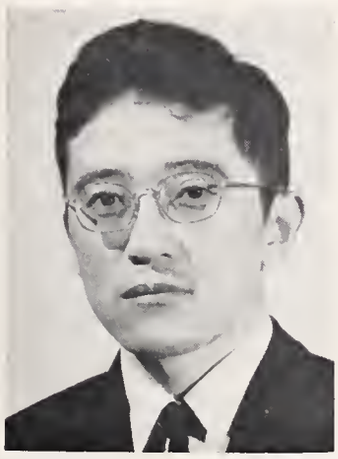
David Wm. Jones, M.D.
Box 748
Kamuela, Hawaii 96743
GENERAL PRACTICE
University of Pittsburgh, June 1963
Internship—The Queen's Hospital,

Stanley Batkin, M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96814
NEUROSURGERY
Royal Colleges, Edinburgh, Scotland, 1944
Internship—Royal Infirmary, Edinburgh, Scotland
Residency—Royal Infirmary, Edinburgh, Scotland
Syracuse Medical Center

J. Mark B. Sowers, M.D.
1827 Wells Street
Wailuku, Maui 96793
GENERAL PRACTICE
Northwestern University, 1958
Internship—The Queen's Hospital

HAWAII MEDICAL JOURNAL

County Society News



Naomitsu Tajima, M.D.
2365 Pacific Heights Road
Honolulu, Hawaii 96813
ANESTHESIOLOGY
Tokyo Jikei-kai Medical School
Internship—Kuakini Hospital
Japan Red Cross Hospital, Tokyo
Residency—The American Hospital
Chicago
The Presbyterian Hospital
Philadelphia
University of Washington Medical
School

Paul F. McCallin, M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96814
OBSTETRICS–GYNECOLOGY
University of Colorado, 1947
Internship—Indiana University
Medical Center
Residency—University of Colorado
Medical Center
U. S. Naval Hospital
Oakland, California

Honolulu

Approximately 190 members were present at the January 5 meeting. Two new members were introduced: Drs. Stanley Batkin and Paul F. McCallin. It was announced that Drs. William Dang and Carl Mason were appointed to the HMSA Review Committee for three-year terms. Mr. Thorson advised that 290 doctors contributed to the Community Chest Drive, achieving over 90 per cent of the projected goal.

Drs. Windsor Cutting, Terence A. Rogers, and Richard A. Lockwood presented a report on the proposed two-year medical school and the University of Hawaii's Biomedical Research Center.

Dr. Masato Hasegawa discussed the Stokes' report. He said he was not in favor of moving Queen's until a more thorough study could be made. The President commented that Dr. Stokes was misinformed on some things and he didn't think that Dr. Stokes's recommendation to move Queen's Hospital to Manoa Valley was feasible.

* * *

The 177 members at the February 2 meeting were introduced to two new members: Daniel C. Newbill and Robert W. Peyton. Two AMA representatives were on the program. Dr. Paul J. McCleave discussed the purpose and function of the Medicine and Religion Department, and Mr. John Pompelli gave a talk on the present status of health legislation in Washington.

Dr. Wong presented some figures he had requested on the number of physicians licensed in Hawaii over the past five years. Of the 336, 72 were natives of Hawaii. Dr. Charles Brown reminded the members that Dr. Clifton Reeder, Medical Director of the Continental Assurance Co., would speak the following evening. Dr. Andrew Ivy, Jr., asked for cooperation of the members in the educational program under development.

Dr. Wong announced that the BME needed more office space and found the idea of basement space in Mabel Smyth not feasible. He advised that the Long Range Planning Committee had been meeting many times over the past year and would have recommendations relative to a building program to present to the membership at the next meeting.

Dr. Tomita announced that the Hawaii Medical Library is embarking on a fund raising campaign and asked that members attending the unveiling ceremony of the Brownlee statue come prepared to make a donation.

Kauai

The January 5 meeting was held at the G. N. Wilcox Memorial Hospital. Dr. Kim reported that the Polio Program would begin at the end of January and the vaccine will be given in the following order: II, I, and III. It was voted to ask for a temporary license for Dr. De Morris, radiologist. It was reported that all action on the Medical Practice Act was temporarily shelved until a satisfactory compromise can be worked out in regard to the residence clause. A letter from the HMA inquiring about the Society's methods of handling complaints was reviewed. In the past the Board of Censors usually handled these problems. Dr. Wade recommended that the Society's Bylaws be reviewed and that the President should appoint a special committee whenever a problem arises. It was noted that the public was not informed of this mechanism. Also that there is no formal organization for the promotion of interprofessional relations.

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Book Reviews

★Growth Disorders in Children and Adolescents

By Solomon A. Kaplan, M.D., 202 pp., $8.50, Charles C. Thomas, 1964.

THIS INTERESTING and well-prepared monograph covers the entire clinical range of growth disorders. Its style makes for easy reading and there are sufficient illustrations, also well prepared, to complement the text.

The current knowledge of these problems is well presented and documented, and the index is extremely well done. This book is of interest to physicians in general who care for growing children.

JOHN R. STEPHENSON, M.D.

Animal and Clinical Pharmacologic Techniques in Drug Evaluation

By John H. Nodine and Peter E. Siegler, 660 pp., $18.00, Year Book Medical Publishers, 1964.

THIS BOOK is a collection of short, generally lucid papers on clinical pharmacological techniques. The first chapters deal with such subjects as variability in drug responses, the statistical problems of drug evaluation, the difficulties of drug screening and evaluation in animals, et cetera. These are of some value to the practicing physician as they point out some of the pitfalls in evaluating and testing drugs. For instance, it is pointed out that merely because a double blind study is carried out in evaluating a drug, its efficacy is not necessarily proved or disproved.

The subsequent chapters deal with specific problems, for instance evaluating adrenergic and ganglionic blocking drugs, antihypertensive drugs, et cetera. Thus, though enlightening, they are of less practical value to practitioners than to physicians engaged in clinical pharmacology.

Certainly anyone contemplating the possibility of evaluating a new drug would do well to read the early portion of the book and the later chapters which pertain to his studies specifically.

M. G. BOTTICELLI, M.D.

Medical Department, United States Army Surgery in World War II, Activities of Surgical Consultants, Vol. II

Edited by Colonel John Boyd Coates, Jr., M.C., USA, 1062 pp., $8.50, Office of the Surgeon General, Department of the Army, U. S. Government Printing Office, 1964.

THIS SECOND VOLUME concerns the activities of the Surgical Consultants at the overseas theatre level, and depicts their clinical and administrative procedures, problems, successes, and failures. It is an amazingly detailed and comprehensive presentation of the subject matter.

This is not a book to be read by the average practicing surgeon, but one that will be of inestimable value to the military surgeon of today and tomorrow and perhaps more particularly those of tomorrow in times of conflict, for the experiences, so well documented here, that will allow them to more properly, and with less fumbling, plan and execute the particulars of surgical practice in military field operations. For the purpose this book attempts to serve, it is extremely well done in presentation and in comprehension of subject matter.

ROBERT A. ROSE, M.D.

★ means highly recommended.

Handbook of Obstetrics and Gynecology

By Ralph C. Benson, M.D., 656 pp., $5.00, Lange Medical Publishers, 1964.

IN SUPPLYING practical and useful information on the clinical practice of obstetrics and gynecology, Dr. Ralph C. Benson has done a creditable job. Having had the privilege of listening to a number of his lectures during his tours of duty as a visiting professor in the community hospitals in Honolulu, comparison is possible between his writing and lectures; his comments in this handbook are concise, to the point, and easily understood, just as his lectures are. This is particularly true of the section on obstetrics. The chapter on contraception made no mention of the intrauterine devices, probably because none of them were available at the time the handbook went to press. In spite of its value as a quick source of reference, the small print used is a disadvantage.

GEORGE GOTO, M.D.

Parasites of the Human Heart

By B. H. Kean, M.D., F.A.C.P., and Roger C. Breslau, M.D., 186 pp., $5.00, Grune & Stratton, 1964.

THIS MONOGRAPH categorizes the parasitic infestation of the human heart into two essential groups—the protozoan and metazoan diseases. Included in the third section are two unidentified parasites and anthropod parasites.

The detailed life cycle of the parasites is not delved into. The main focal point is the clinical aspect of their human infestation. There are a number of illustrations demonstrating the pathological involvement of the myocardium.

Mentioned also are some of the newer drugs in treating a few of the parasites.

Physicians should be aware of parasitic infestation of the human heart because of their local existence and also because, in this jet age, traveling to and from various endemic areas is becoming more frequent.

CHARLES CHING, M.D.

Infectious Diseases of Children, 3rd Ed.

By Saul Krugman, M.D., and Robert Ward, M.D., 423 pp., $15.75, The C. V. Mosby Company, 1964.

THE MOST IMPRESSIVE aspect of this new edition of a well-known text is the major emphasis given to viral diseases. The authors have devoted two-thirds of their chapters to these diseases. Most of the new data in this revised edition (and much of the controversial material as well) are found in these chapters.

As in the earlier editions, the orientation is practical and largely clinical, the illustrations and diagrams are graphic and well chosen, and the brief lists of differential diagnosis are most helpful. Figures depicting the manifestations and clinical course of the several exanthematous diseases are extremely valuable memory aids.

On the other hand, this volume is disappointing in several respects. The writing is often highly repetitive, some of the clinical material is rather superficial, and the index is relatively spotty and incomplete. In addition, there are several minor typographical errors and a disconcerting major error in Figure 58. This picture, labelled as a case of cytomegalic inclusion disease, is used to illustrate the chapter on toxoplasmosis. Furthermore, this reviewer does not agree that the omission of such diseases as tuberculosis, syphilis, and the leptospiroses is justified in a book of this sort that deals extensively with such other prob-

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PROCEEDINGS OF THE HOUSE OF DELEGATES SPECIAL MEETING

January 16, 1965
Mabel Smyth Auditorium

The meeting was called to order at 1:30 P.M. and the following members were seated: (Officers) Samuel D. Allison, O. D. Pinkerton, Rodney T. West, Randal A. Nishijima, Herbert Y. H. Chinn; (Councillors) Bernard W. D. Fong, Chew Mung Lum, Robert M. Miyamoto, Theodore T. Tomita; (County Presidents) Raymond T. Eklund, Robert T. Wong, Marion Hanlon; (Hawaii Delegate) Ruth T. Oda; (Honolulu Delegates) Francis T. C. Au, Marcelino J. Avecilla, Ralph M. Beddow, Douglas B. Bell, II, Morton E. Berk, Walter Y. M. Chang, Kenneth Chinn, William W. L. Dang, Robert T. S. Jim, Carl B. Mason, Richard D. Moore, Andrew L. Morgan, Walter M. Ozawa, L. Q. Pang, John I. F. Reppun, R. Frederick Shepard, R. Varian Sloan, Coolidge S. Wakai, John R. Watson, Carolina D. Wong, Warren L. H. Wong, Bernard J. B. Yim; (Maui delegate) Edward Tompkins.

OPENING REMARKS OF THE PRESIDENT:

Dr. Allison welcomed the members of the House of Delegates and thanked them for giving up their weekend to attend the special session which upon consultation with the officers and Council was called to set the legislative platform of the Association for the forthcoming session of the Legislature. In addition, the report of the HMA/HMSA subcommittee of the Medical Care Plans & Fees Committee was reproduced for review and recommendation of the Delegates.

The President pointed to the beautiful Japanese doll which he had received in the name of the Hawaii Medical Association from visiting dignitaries of the Ogaki Doctors Association of Ogaki, Gifu Prefecture, Japan. The officers will choose an appropriate gift to return to the Japanese Society.

After a short resumé of the two special AMA meetings recently held in Chicago which were attended by Drs. O. D. Pinkerton, George Goto, Andrew D. Ivy, Jr., and Keith F. O. Kuhlman, Dr. Allison advised that the AMA is calling a special meeting of its House of Delegates for February 6 and 7.

The protocol for the meeting was explained. In general, only those portions of the reports which related to legislative matters were reproduced. The reports of the standing committees were divded among the councillors. Each councillor was appointed recorder to be responsible for making the motions which would instruct the Legislative Committee whether or not to support the legislation outlined in the report and what priority to assign the support. The officers and county medical society presidents would consider the ad hoc Medical Practice Act Study Committee report and resolutions. Dr. O. D. Pinkerton was appointed recorder for this group. To help the recorders the delegates were assigned in alphabetical order to the six groups which would meet at various places throughout the building as indicated on the list which was circulated. Alternate delegates were asked to sit with the group to which the member for whom they were substituting had been assigned. In the absence of Councillor Dr. Andrews Dr. Beddow was asked to substitute as recorder for that group. Dr. West was asked to substitute for Dr. Wade, who was not present.

Dr. Allison explained that there were several matters which might be considered controversial and which were of considerable importance. In order that there should be full discussion with everyone present, the reports had been circulated to the entire membership and, after consultation with the officers and the parliamentarian, decided that the usual reference committee divisions would not be in effect at this meeting.

ACTION:

It was voted that the House of Delegates recess to discuss the committee reports and the resolution.

It was voted that the House reconvene at 5:00 P.M. A motion to amend and reconvene the House at 5:30 P.M. was lost.

* * *

Dr. Bernard W. D. Fong presented the motions relating to the proposals of the Automotive Safety, Mental Health, and School Health Committees.

AUTOMOTIVE SAFETY

The Committee recommends that the House of Delegates instruct the Legislative Committee to make every effort to get traffic safety legislation passed in the coming session. Measures which the Committee feels should have strong backing include the following which were introduced during the 1964 session: HB-37 (allocates money from fines imposed for moving violations for driver education programs), HB-86 (sets forth qualifications for driver instruction schools and personnel), HB-176 (provides for a comprehensive traffic safety code to include driver education and contains special provisions for licensing of drivers under age twenty, periodic licensing of drivers, accident investigation and analysis, and stricter penalties for the offenses of drag racing and homicide or personal injury with a motor vehicle), HB-242 (provides for renewal every four years of every operator's license issued after the approval of the act and for special renewal procedures covering examination of chauffeurs; it also specifies how renewal procedures are to be handled), HB-243 (would make installation of seat belts mandatory), HB-245 (would establish a motor vehicle driver training program in the Department of Education), HB-246 (provides for hearings and penalties for refusal to submit to a chemical test to determine alcoholic content of the blood), HB-448 (provides for compulsory driving instruction for certain applicants), HB-581 (provides for revocation of driver's license upon conviction of driving under influence of intoxicating liquor), SB-156 (similar to HB-246), SB-281 (creates a statewide office of traffic safety).

ACTION:

It was voted to instruct the Legislative Committee to exert every effort and give highest priority to all proposals in the committee report and in addition the Legislative Committee should work for a compulsory automobile liability insurance law for the protection of all car owners.

MENTAL HEALTH

Report of the Committee on Mental Health to the Interim Meeting of the House of Delegates, January 16-17, 1965:

We have noted some improvement in insurance coverage of mental illness for government employees in that HMSA has reduced the deductible, and a summary calling attention to the details of the greatly expanded coverage made available to 2 million UAW workers has been forwarded to insurers in Honolulu by your chairman. About one-third of the Committee is active one way or another in the continuing work on the State Plans in mental health and in mental retardation. Dr. Edward Furukawa was sent to the Second AMA Congress on Mental Health in Chicago last November through funds contributed by a local foundation. We have also prepared an application for a grant from the National Institute of Mental Health to put on seminars for medical specialty groups in psychiatric factors specific to each specialty, and have had a site inspection by two top officials of the Manpower Branch. The Committee has proceeded on its programs as approved by the House of Delegates last May. Most of our activity has been centered on legislative matters.

1. *Legislation Governing Admission of Mental Patients:* The Committee voted to refer the four "emergency bills" on hospitalization of mental patients in private hospitals and on temporary admission of mental patients on emergency status by physician(s) certificate(s) to the Legislative Committee with the recommendation that the latter mutually work out the kinks with the Health Department. While three of the bills were reported out of committee last spring, changes suggested by the Health Department effectively killed them for lack of time to rewrite them. While the Legislative Committee has not acted, the new Executive Officer of the Mental Health Division has been added to our Committee, and conferences have gone ahead with the Health Department and its legal counsel.

While the latter advises dropping the bills relating to emergency admissions, our Committee still recommends that HMA endorse and back as strongly as possible each of these bills, or such substituted bills as incorporated the meaning of those bills in the last (1964) Legislative Session known then as H.B. 501-504.

2. *Mental Health Act Revision:* Most of our Committee being acquainted with one or more of the revisions of the "Mental Health Act," our Committee has gone on record as favoring the general provisions of the rewriting, which have been approved by the Hawaii Psychiatric Society and the Mental Health Association, and tentatively favorably looked upon by the Interprofessional Relations Committee of the Honolulu County Medical Society and the Hawaii Bar Association. The Committee realizes the support of the Health Department is vital to obtaining passage of any revision, and voted to refer this matter to the Legislative Committee with the recommendation it work wtih the Health Department. However, we have proceeded ourselves in this line, and have become convinced that divergences of opinion are so great that much more time working with the Health Department and its counsel will be required.

We recommend that Hawaii Medical Association do no more than accept one or more positions on a committee to rework this law in cooperation with other interested agencies, and prepare to educate the public on the advantages of medical (nonlegal) admission (not committment) to hospitals for treatment of mental illness.

3. *The Medical Practice Act:* This has been discussed in Committee, and the Chairman has met with and communicated by letter with the Ad Hoc Committee on the Medical Practice Act. The Ad Hoc Committee has done nothing to incorporate the ideas of our Committee, finding this very difficult, nor has our Committee formulated specific wording.

We believe that for mental health, and more specifically psychiatric, purposes the Act should include, and recommend, that it include words and their definitions specific enough that no question can exist as to their meaning, including, "diagnosis," "treatment," "psychotherapy" but also an "escape clause" releasing certain professionally trained persons under specified conditions to carry on their professions. The Committee favored a definition of "psychotherapy," suggested by a Wisconsin law, which includes indirectly a definition of mental distress and a list of symptoms.

4. *Licensure or Certification of Psychologist:* In the past eight years psychologists four times have attempted to pass a certification bill, three of these times with backing from the Hawaii Psychiatric Society. Two years ago the Hawaii Medical Association preferred a licensure bill, and, perhaps expecting more assistance the psychologists are planning this year to have introduced into the Legislature a licensing bill for psychologists. Our Committee is not greatly concerned whether the bill is one seeking licensure or certification, and approves in principle the purposes of the Hawaii Psychological Association. However, failing to have had time to study the newly proposed bill, we expect it will be most difficult to come to agreement with any definition of the practice of psychology, which is likely to include specifically "psychotherapy" and to overlap the practice of psychiatry, unless a new Medical Practice Act with provisions mentioned in the above paragraph is also enacted.

The Committee recommends that the Hawaii Medical Association take a stand that any certification or licensure bill for psychologists should include provision in the structure of their examining board for either: (1) the Psychology Examining Board be a sub-committee of the Medical Examining Board, the latter having power of review of its actions, or (2) the Psychology Examining Board itself include a psychiatrist certified in psychiatry by the American Board of Psychiatry and Neurology, and also a provision that every psychologist engaging in private clinical practice must have an effective consultative relationship with a licensed psychiatrically-trained physician.

5. *State Budget:* The budgets of the Mental Health and Mental Retardation Divisions of the Health Department have been examined, and the former, as approved by the Bureau of Budget and Review, discussed with the Executive Officer of that Division. In conjunction with the latter, the proposed resolution of the Hawaii State Hospital Auxiliary was also discussed. The consensus was that the budgets of the two Divisions, as prepared by the Health Department before being cut by the Bureau of Budget and Review, were modest, well-balanced, reasonable documents which requested the minimal amounts necessary to keep up with current levels of services, particularly considering that there has been no increase in the Preventive and Clinical Services Branch of the Mental Health Division for several years. The State Hospital Budget was the most cut-into by the Bureau of Budget and Review, which is unfortunate, because contrary to the popular notion that mental hospitals are having less work to do by reason of a lower daily census, the latter is the result of the hospital actually doing more, and better quality work, and treating actually an increased number of patients per year. Nevertheless, the Committee did not feel it appropriate to endorse the Auxiliary's Resolution, on ground that (1) compared to other state hospitals across the nation, Hawaii State Hospital is in a relatively favored position, (2) should it be possible to obtain such increase in funds and/or personnel the over-all best interest of the mental health of Hawaii would be better served to spread the funds among the several programs of the Mental Health Division rather than concentrating them in one, and (3) it would be reasonable to await the recommendations of the Comprehensive Mental Health State Plan, due July 1, 1965, to determine the best application of funds which may become available.

The Committee, therefore, recommends to the Hawaii Medical Association that it do all possible to restore the budgets for the Mental Health and Mental Retardation Division of the Health Department to the general provisions of the budgets as prepared by the Health Department.

6. *Family Planning:* The Committee recommends that the report which was prepared by Dr. Goto's task force division of the Oahu Steering Committee of the Comprehensive Mental Health Planning Body be endorsed by the Hawaii Medical Association.

ACTION:

It was voted to endorse the committee proposals relating to emergency admissions, licensing or certification of psychologists, and restoration of budget requests for the Mental Health and Mental Retardation Divisions of the Department of Health and instruct the Legislative Committee to exert every effort and give highest priority to see that legislation is passed implementing the proposals.

It was voted that the definition of the practice of medicine in the Medical Practice Act be clarified, particularly as it relates to the practice of psychotheraphy and psychologists and that the Legislative Committee be instructed to make the wishes of the Association known and to see that legislation is passed implementing the proposal.

It was voted to approve the endorsement of the task force's report on family planning provided that in no way will these family planning programs interfere with the moral and spiritual beliefs of the patients involved.

SCHOOL HEALTH

With this report we wish to inform you that through reliable sources we have learned that in the absence of the School Health Coordinators the school health program is faltering, and that administrative personnel are subsequently being forced to do this work at the expense of their other duties.

We therefore recommend that the School Health Coordinator Program or an equivalent is important and necessary and request that our Legislative Committee so inform the Legislature. A letter on this subject from Mr. Yarberry is on file.

The University's School Health Services Budget was not discussed by this Committee. It is believed to be as follows:

Expenditure Items	Total Proposed Expenditure*
GRAND TOTAL	$140,672
Personnel Services	$112,064
Director (1:0)	17,784
Physicians (1:1.5)	42,550
Clinical Nurses (RN) (2:1)	17,784
Infirmary Nurses (RN) (3:0)	15,228
Practical Nurse (PN) (1:0)	4,530
Medical Records Clerk (0:1)	4,836
Clerk-Stenographer (1:0)	4,536
Laboratory Technician (0:.5)	2,662
Study Help	2,154
Current Expenses	$ 18,502
Stationary and Office Supplies	565
Laundry	1,356
Educational and Scientific Supplies	141
Medical and Hospital Supplies	9,964
Postage and Postal Charges	90
Telephone and Tolls and Cables	236
Printing and Binding	100
Repairs and Maintenance	50
Provisions (infirmary meals)	2,000
Contractual Services	4,000
Equipment	$ 2,106
Desks	320
Chairs	140
Examination Table	738
Treatment Cabinet	261
Otoscope	165
Examination Light	67
Revolving Stool	40
Electric Typewriter	375
Contingencies	$ 8,000

* Sources:
A. General Fund, $46,253
B. Regular Academic Year Students, $78,684
C. Summer Students, $15,735

ACTION:

It was voted to instruct the Legislative Committee to exert every effort to see that the School Health Coordinators are restored.

Dr. Fong advised that his discussion group noted several discrepancies in the unofficial budget of the University for its School Health Services program, especially with reference to the purchase of equipment and services needed.

ACTION:

It was voted that in the absence of details the House recommend to the Legislative Committee that it scrutinize the University's budget for health services carefully and use its own judgment on what to support.

* * *

Dr. Theodore T. Tomita presented the motions relating to the reports of the Indigent Medical Care, Chronic Illness, and Hospital Committees.

INDIGENT MEDICAL CARE

Recommendations: Indigent medical services should be developed and administered by medical career men under the Department of Health and not by lay political appointees of welfare departments. Medical decisions must be made by medical men qualified in their fields of endeavor. Medical indigency budgets cannot but be better sold to the lawmakers by doctors, completely supported by the State Association than by politically appointed lay intermediaries with only a part-time physician who is low man on a large table of organization.

Until, and unless the medical needs of those who depend upon the State for help are thus organized, the short-comings of the program will be blamed upon each and every physician of our State. He will be unjustly accused of being against "medical care" and he will be helpless in getting lay political appointees to effect programs of which the State can be proud.

The inherent weaknesses in the present set-up will not be overcome, nay, they will invite outside (federal) interference and put more medical decisions in non-medical hands.

Ho'opono is receiving intelligent planning management that it has needed since its inception. An addition to it that can be leased to the Lanakila Craft Shop operations will further integrate service to the handicapped. The services are goaled at making the physically and visually handicapped more independent of tax dollar handouts. The budget request covering the Ho'opono addition deserves our support.

ACTION:

It was voted to endorse all proposals in the Indigent Medical Care Committee report and instruct the Legislative Committee to exert every effort and give highest priority to see that legislation is passed implementing these proposals.

CHRONIC ILLNESS & AGING COMMITTEE

This Committee respectfully requests that the House of Delegates instruct the Legislative Committee to support and exert every effort to obtain legislative acceptance of the following:

(1) Sufficient funds for the State of Hawaii to implement the Kerr-Mills (MAA) Program in conformity with the purposes for which it was designed. The 86th Congress set forth the purpose of this program in Title I, Section 1, of the Law, ". . . to furnish medical assistance on behalf of aged individuals who are not recipients of old-age assistance but whose income and resources are insufficient to meet the costs of necessary medical services." It was not the intent of Congress to demean or impoverish the senior citizens who seek medical assistance. It is recommended that the HMA exert every possible effort to

see that Hawaii carries out the intent of Congress and that the senior citizens be made eligible for MAA benefits within reasonable standards which will permit them to retain the limited savings they may have accumulated. Unlike the younger medical indigents, the older individuals are not expected to return or to resume employment to replenish their savings. They should not be reduced to indigency in order to receive MAA aid.

(2) The Commission on Aging has asked for a budget of $39,000. The Committee asks that the HMA support this request as reasonable and necessary for the functioning of this important organization.

(3) The Committee asks that the HMA actively support legislation which would permit insurance companies writing health insurance for the over 65 to pool their losses in order to permit them to offer policies at lower rates with greater benefits. This type of legislation has been enacted in a number of states and has proved helpful to the senior citizens seeking health insurance coverage.

ACTION:

It was voted to endorse all proposals in the Chronic Illness and Aging Committee report and instruct the Legislative Committee to exert every effort and give highest priority to see that legislation is passed implementing these proposals.

HOSPITAL COMMITTEE

This Committee recommends that the House of Delegates instruct the Legislative Committee to support the Hospital Association of Hawaii's proposal that the DSS payments to hospitals be on a fee-for-service basis for all hospitals at both the in- and out-patient levels.

ACTION:

It was voted to endorse the Hospital Committee report and instruct the Legislative Committee to exert every effort and give highest priority to see that legislation is passed implementing the proposal.

* * *

Dr. Ralph M. Beddow presented the motions relating to the reports of the Tuberculosis, Communicable Disease & Immunization–Venereal Disease and Medical Education Committees. A letter from the President of the Kauai County Medical Society was read in which he stated "All with whom I have discussed the matter are against any one spending any money for a medical school in Hawaii—extravagant and not needed. There may be compensating factors in the proposal, however, which may justify the large expenditures necessary."

TUBERCULOSIS

The budget requests submitted by Dr. Marks for increasing funds related to workload increases in tuberculosis control and treatment were supported by this Committee.

Present programs in effect for tuberculosis control and treatment should be supported by adequate funds.

ACTION:

It was voted to endorse the proposal in the Tubereulosis Committee report and instruct the Legislative Committee to see that legislation is passed implementing the proposal.

MEDICAL EDUCATION

Inasmuch as the Hawaii Medical Association has gone on record as strongly favoring the Biomedical Science Program provided that it is properly staffed and with sufficient funds to carry out a program of excellence, this Committee recommends that the Legislative Committee be instructed to support the University's budgetary request for this program, provided it is assured that the University will not request funds for the Biomedical Science Program at the expense of other University programs.

A meeting of this Committee is scheduled for January 13 and there may be an additional report.

ACTION:

It was moved and seeonded that the Medical Education Committee report be changed in conformity with the Committee's wishes; i.e. insert "six-year" between "the" and "Biomedical Science Program" and end the report by placing a period after "program" in the 7th line deleting balance. No vote was taken on the motion.

Dr. Tomita asked if the Legislative Committee sees an item in the University budget that doesn't look appropriate, are we to say that beeause we have agreed in prineiple that we are not going to oppose this particular portion of the budget? The President noted that the Medical Association has never spelled out the number of years. He was advised that the Committee wanted "six years" inserted to alleviate the concern of some members about the expansion of the program.

It was moved and seeonded that the House recess until the following day at 9:00 A.M. The motion was amended to ehange the time to 9:30 A.M. The amendment to change the time to 9:30 passed. The main motion to reeess was lost.

It was moved and seconded to amend the report to delete the first two words. It was noted that this would leave the report in the form of an ineomplete sentenee. The House of Delegates' 1964 action was read. The motion was tabled.

It was voted that the Hawaii Medieal Assoeiation go on record as reaffirming its stand of last year.*

COMMUNICABLE DISEASE & IMMUNIZATION & VD COMMITTEE

The following problems were thoroughly discussed and recommendations suggested:

(1) Polio Immunization: It is recommended that Sabin live-virus vaccine (now available in a trivalent form) be used as the preparation of choice for the routine immunization of all persons including those treated in Well-Baby Clinics as part of their regular care.

(2) Measles Vaccine Proposal: This Committee unanimously favored the advisability of administering measles vaccine. Measles vaccine is available as killed or live attenuated. The live vaccine appears to be effective; only one injection is needed for permanent protection. It was voted to give the Department of Health full support for supplying the live vaccine for the Well-Baby Clinics 1965.

ACTION:

It was voted to approve the report with the elimination of the parenthetical phrase (now available in trivalent form) whieh appears in the seeond paragraph.

* * *

Dr. Rodney T. West presented the motions relating to the Maternal & Perinatal Mortality Study, Nurses, and Careers Committees. The Secretary read a letter from the President of the Kauai County Medical Society in which he stated "Our pathologist has no modification to suggest for the SB-1179. As a Society we are in favor of the Medical Examiner System."

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* The Hawaii Medical Association would strongly favor an extension of the present Biological Sciences at the University of Hawaii to include a Biomedical Science Program provided that it is properly staffed and with sufficient funds to carry out a program of excellence—with three additions: (1) That this is a two-year program; (2) that the expenses for other areas of education should also be upgraded; and (3) that we approve the report on the principle that this program will be one of excellence.

CAREERS COMMITTEE

This Committee has not in the past concerned itself or discussed any matters likely to come before the State Legislature.

This Committee has become aware of the Summer Work Study Program in Mental Health and Mental Retardation at the University of Hawaii carried out last summer under the direction of Dr. Richard Lee. While this Committee has not attempted to familiarize itself with other programs related to paramedical education and training, the great success of this program and its usefulness to the people of the State of Hawaii indicate its deserving support by the Hawaii Medical Association before the Legislative Committee.

Finally, indirectly this Committee might become concerned about the general vocational counseling and guidance offered to the children of this State both in private and public schools. Increased emphasis on this aspect of our education effort might be of great benefit to the maximum vocational achievement of students and the economy of this State. In this respect the Department of Education's request for increased personnel to train the mentally handicapped children should be given our considered attention and support. Even to the casual observer however the duplication of services requested in this area by the Department of Education, Department of Health, and Department of Social Services raises the question of planning and coordination by these various departments.

ACTION:

It was voted to endorse all proposals of the Careers Committee and to instruct the Legislative Committee to see that legislation is passed implementing them.

NURSES LIAISON

There may be legislation proposed which would provide for shift differential pay schedules for registered nurses working in county and state hospitals. This matter was not discussed by the Committee.

ACTION:

It was voted to endorse the Nurses Liaison Committee report and instruct the Legislative Committee to see that legislation is passed implementing the proposal. It was noted that there was no recommendation in the motion. The motion was retracted. It was voted that the House of Delegates accept the Nurses Liaison Committee report.

MATERNAL & PERINATAL MORTALITY STUDY

Your Committee on Maternal and Perinatal Mortality Study wishes to submit the following interim reports:

1. The members of this Committee are still encountering incomplete autopsies with highly questionable diagnoses on infants whose deaths fall under the jurisdiction of the Medical Examiner. We feel these autopsies discredit the medical profession in this state and should not be allowed to continue.

For this reason and pursuant to the approval granted by the House of Delegates in May 1964, we shall prepare and reintroduce a bill during the general session of the Legislature so that the Medical Examiners' System shall be on a statewide basis and that the qualifications for the Medical Examiner shall be stringent. A bill similar to Senate Bill No. 1179 of the 2nd State Legislature in 1963 shall be reintroduced. We shall cooperate with the Legislative Committee in whatever capacity possible to insure passage of this very important bill.

Your Committee did not discuss the budget of the Department of Health relating to PKU testing and submits the following to the House for its consideration and recommendation. It is understood that Tripler, Kapiolani, and Kaiser hospitals plan to do PKU testing routinely beginning this year using the Guthrie method. The California State Department of Health hopes to have a statewide system of voluntary PKU testing in operation by spring which will utilize six regional laboratories. California pathologists have tentatively agreed on a charge of $3 a test, including a follow-up Guthrie test, if indicated.

There are no hospitals in Hawaii which test newborn babies for phenylketonuria on a routine basis.

The PKU detection program should be available throughout the state, especially in the hospitals, where over 98% of all babies are born. The estimated incidence is one in 10,000 newborn. Therefore, Hawaii has one or two new cases each year. So far, 10 cases of PKU disease have been discovered in Hawaii, only one of which was discovered during the newborn period. Late detection increases the severity of mental retardation. It is estimated that each case of PKU disease detected late, thus deferring the onset of treatment, costs the taxpayers between $50,000 and $100,000 for a lifetime of institutional care.

It is essential that blood samples be taken before the baby leaves the hospital. Any positives will require confirmation by further testing.

The Health Department is requesting funds for the fiscal year 1965-66 to initiate a detection program. Itemization of the funds requested from the State Legislature are as follows:

1 Medical Technician	$5,328
1 Typist	3,444
Medical Services	2,888
Stationery and Office Supplies	300
Laboratory Supplies	2,000
Equipment	715
Postage	100
	$14,767

After the program is initiated, the cost can be partially offset by charging a fee for the test to those able to pay.

Presently, there are no funds for this program.

ACTION:

It was moved that in the best interests of the HMA that the first paragraph and the first four words in the second paragraph of this report be deleted. It was believed that the motion should refer to the second and third paragraphs. There was no second.

It was moved to amend the motion to read "that the first two paragraphs of the Maternal & Perinatal Mortality Study Committee be deleted." The attention of the maker of the amendment corrected his amendment to refer to the second and third paragraphs. The amendment was passed. The motion as amended was passed.

It was voted that the House of Delegates endorse the Committee's recommendation of the establishment of a statewide medical examiner's system and that the details of this system be worked out by the Legislative Committee after receiving the report of the present *ad hoc* committee appointed to study the subject in detail.

It was voted that the House endorse the remainder of the proposals of this committee report and that the Legislative Committee be instructed to see that legislation is passed implementing the proposals.

* * *

Dr. Robert M. Miyamoto presented the motions relating to the reports of the Diabetes, Heart, and Pharmacy Committees. He called attention of the House to the combined budget for the Heart and Diabetes work of the Department of Health. He was informed that the proposed budget was already in effect.

DIABETES

See budget report under Heart Committee.

ACTION:

It was voted not to incorporate the proposals

contained in this report in the legislative program of the Association; that the Association take no official position and that this House instruct the Legislative Committee not to act either to pass or to try to keep from passing any legislation which would incorporate the intent set forth in the proposals of this report.

HEART

The Committee did not learn of the multifaceted surveys being conducted by the Department of Health until its last meeting and so did not have an opportunity to formulate recommendations. The following budget is submitted for the House's consideration and recommendations.

CHRONIC DISEASE BRANCH
PROJECTED BUDGET 1964-65

Appropriation—Federal Heart Funds			$55,808
"A" Funds—Salaries			
Rehab. Nursing Consultant		$7,723	
Steno I		4,993	
Steno II		5,078	
Cardiac Clinic Nurse		6,697	
Nutritionist		3,994	28,485
		$8,100	
"B" Funds—Operating Expenditures		3,644	
Independent Living Program			
Diabetes Screening Surveys			
Personnel	$1,218		
Travel by Consultant	358		
Transportation of Van	188		
Supplies—Reagents, Alcohol, Cotton, Lancets, etc.	700		
Forms	130		
Miscellaneous	50		
Hawaii Survey	1,000		
Postage		800	
Educational Supplies		1,200	
Travel to Other Islands		600	
Car Allowance—Chronic Disease Physician		160	
Office Supplies		100	
Multiphasic Screening—State Hospital		362	
Kauai Heart Study		2,120	
Repairs—Clinitron, Projectors, etc.		150	
Miscellaneous		10	17,246
Available Uncommitted Funds for Forthcoming Programs			10,077

ACTION:

It was voted that the proposals set forth in the Heart Committee report not be incorporated in the legislative program of the Association; that the Association take no official position and that it instruct its Legislative Committee not to act either to pass on or to try to keep from passing any legislation which would incorporate the intent set forth in the proposals of this report.

PHARMACY

Your Committee at its next meeting will discuss proposed legislation and present suggestions and requests from the State Health Department to strengthen present rules and regulations with view to preventing further government domination and possible take-over of administrative regulation of hospital pharmacies by the Board of Pharmacy.

ACTION:

It was voted that the House endorse the principle of the State Health Department's strengthening the present rules and regulations with the view of preventing further government domination and possible take-over of administrative regulation of hospital pharmacies by the Board of Pharmacy.

* * *

Dr. Chew Mung Lum presented the motions relating to the reports of the Cancer and Medical Care Plans and Fees Committees. The Secretary read a letter from the President of the Kauai County Medical Society in which they had no comments but hoped for a speedy conclusion.

CANCER COMMITTEE

The proposed oral exfoliative cytology program will not seek funds at this year's legislative session and the Committee has no recommendation at this time. The Committee requests that the House of Delegates instruct the Legislative Committee to strongly oppose the passage of any bill similar to SB-118, introduced in 1964, which related to a cancer testing program. The Committee voted to defer introduction of a quackery bill at this session, pending development of more comprehensive legislation.

ACTION:

It was voted to accept the recommendation in the report of the Cancer Committee.

MEDICAL CARE PLANS & FEES

See Addendum.

ADDENDUM

REPORT OF HMA/HMSA NEGOTIATING COMMITTEE

A. ITEMS DEFERRED PENDING COMPLETION OF RVS

1. **Aftercare** periods, length of.
2. Percentage arrangement for **Assistant's Fee** and marking of procedures for which no allowance would be made.
3. **S.V.** items.
4. **Aftercare** periods, concurrent.
5. **Multiple coverage** (national policy is expected to be developed).
6. **Income limits** for surgical fees.

B. ITEMS ON WHICH NO CHANGE WAS SUGGESTED BY HMA AND NO CHANGES ARE PROPOSED

1. **Independent** procedures (if procedures so marked do not require a separate incision they command no fee; i.e., indemnity payment for home and office visits, etc.).
2. HMSA allowance for **Medical Care** (i.e., indemnity payment for home and office visits, etc.).
3. **Changes in Fee Schedules** (HMSA will make no reductions or other changes without prior written agreement of the Society, etc.).
4. **Compensation** (same compensation to all participating physicians whether or not members of Society).
5. **Society Liability** (participating physicians free of HMSA debts and obligations).
6. **HMSA Allowance for Medical Care** (sets indemnity fees).

C. ITEMS WHICH HMSA WANTS DELETED FROM ADMINISTRATIVE OPERATING PROCEDURES AND PLACED UNDER "GENERAL INFORMATION," WHICH WOULD ELIMINATE THESE ITEMS FROM FURTHER CONTRACT NEGOTIATIONS THE COMMITTEE RECOMMENDS THE HMA CONCUR

1. **Diagnostic X-rays** (allowance in accident cases).
2. **Physician-Patient Relationship** (re free choice of physician).

D. ITEMS WHICH HMSA WANTS DELETED FROM ADMINISTRATIVE OPERATING PROCEDURES AND PLACED UNDER "GENERAL INFORMATION" WITH WHICH THE COMMITTEE RECOMMENDS THE HMA NOT CONCUR

1. **Maternity Indemnity Benefits**—(sets forth terms of medical allowances, surgical care during one hospitalization, etc.). Committee feels further study should be made before this item is deleted from contractural direction.

E. ITEMS ON WHICH NO CHANGES WERE ORIGINALLY SUGGESTED BY HMA BUT SUBSEQUENTLY CHANGES WERE RECOMMENDED AND CONCURRED WITH WHICH COMMITTEE RECOMMENDS HMA ACCEPT

1. **By Report**—Present wording: Procedures marked "By Report" mean that individual consideration will be given to set a fee based on a full written report of the services rendered. The fee will be based on the magnitude of the case.

Proposed rewording: When the value of a procedure is to be determined "By Report" the evaluation will be made on the basis of a report of the service rendered which must include the size and location of the lesion (or extent of the procedure) and when appropriate the operating time and any additional information (usually a copy of the operative report) will be required to assist in determination of an equitable allowance.

2. **Unlisted Procedures**—Present wording: Procedures not specifically listed will be given a fee comparable to the listed procedure of closest similarity upon written report.

Suggested rewording: Procedures not specifically listed will be given the value comparable to the listed procedures of closest similarity. A written report (usually a copy of the operative report) may be requested by the Medical Director in order to determine the Plan allowance for such procedures. Value for these procedures will be determined by the Medical Director.

3. **Two Physicians**—Present wording: Two physicians will not be compensated by HMSA while in attendance on the same case at the same time except in cases of unusual complications or severity where in the opinion of the Medical Director the services of two physicians were warranted by the necessity of supplementary skills such as major injuries or surgery on an individual suffering from or developing heart disease, pneumonia, diabetes, etc.

Two physicians will be paid in cases where the operating surgeon returns the patient to the referring physician for aftercare, provided that such transferral is made necessary due to the geographical factors or extraordinary extenuating circumstances. Separate billings by each physician is necessary setting forth the value of each service, the total of which shall not exceed the fee schedule allowance. In such instances, requests for separate payments must be submitted in writing to the office of the Medical Director of HMSA. HMSA agrees with the ethical principles of the American Medical Association, which does not condone or allow fee-splitting. When an operative procedure is performed in two or more steps or stages within the (four-week aftercare period)—words in parenthesis were originally requested to be eliminated—the major fee only will apply. Individual consideration may be given for subsequent procedures after the four-week aftercare period. (Four week was again asked to be eliminated, due to changes which may be proposed in various aftercare periods) and in other unusual circumstances.

Proposed rewording: (A) Two or more surgeons may be allowed separate fees for their services at the same operative session in relation to their respective responsibilities and work performed. An operative report supplemented by additional information when indicated will be required.

(B) The services of two physicians may also be allowed in certain unusual cases when the physician in charge certifies by written report that supplemental skills of another physician were required, and includes the reasons for such requirements.

(C) Two physicians will be paid in cases where the operating surgeon returns the patient to the referring physician for aftercare, provided that such transferral is made necessary due to the geographical factors or extraordinary circumstances. Separate billing by each physician is necessary setting forth the value of each service, the total of which shall not exceed the Fee Schedule allowance. In such instances, requests for separate payments must be submitted in writing to the office of the Medical Director. HMSA agrees with the ethical principles of the American Medical Association which does not condone or allow fee splitting. When an operative procedure is **performed in two or more stages,** within the aftercare period the major fee only will apply.

4. **Intensive Medical Care**—Sets forth indemnity fees and procedures for establishing need. Last sentence states "to the satisfaction of the Medical Director and/or Medical Committee." It is proposed to eliminate "and/or Medical Committee."

5. **Medical Management,** definition of. Present wording: Procedures marked "Medical Management" are not considered eligible for surgical fees. HMSA will allow call-rate for these services when the member is eligible for medical visits as a benefit of his plan.

Proposed rewording: Procedures marked "Medical Management" are not considered eligible for surgical fees. HMSA will make an office visit allowance for these services when the member is eligible for medical visits as a benefit of his plan.

Injury case where no actual surgical procedures are carried out (see Definition of Surgery, paragraph 1) are considered "Medical Management" and the difference between the physician's charges and the Plan allowance shall be the responsibility of the member.

6. **Penalties**—A 10% penalty applies for claims over 60 days, but less than 91 days, and a 25% penalty for claims which are 91 or more days delinquent.

F. ADDITIONAL PROPOSED PROVISIONS CONCURRED BY HMSA WHICH THE COMMITTEE RECOMMENDS HMA APPROVE

1. **Surgical Services,** definition of. Not presently included. Proposed wording is as follows: "Surgical Services" means services necessarily and directly performed by a physician in the treatment of an illness or injury requiring cutting, suturing, diagnostic and therapeutic endoscopic procedures, debridement of wounds including burns, surgical management of fractures and dislocations, orthopedic casting and manipulation of joints, and destruction of local lesions by chemotherapy, cryotherapy, or electrosurgery.

This definition was copied from the one that appears in the HMSA membership certificate.

2. **Claims,** processing of. Not presently included. Proposed wording is as follows: On receipt of claims in the HMSA Medical Claims Department, each claim is numbered and stamped with a receipt date.

All claims are then processed in receipt-date sequence by Medical Claims Department personnel. Eligible benefits are determined and coded for morbidity and other statistical studies.

All problem cases or requests for special consideration are referred to the Medical Director for evaluation. In cases where the Medical Director requires more infomation, he will contact the physician and, if necessary, consult with other physicians in the same type of practice or specialty to arrive at a decision.

Whenever the attending physician does not agree with the decision of the Medical Director, such cases are referred to the Medical Committee which consists of nine physician-Directors of the Association (HMSA). The Medical Committee, following complete review of the case (reevaluation of records including personal interview with the attending physician, when indicated or desired, etc.) makes its recommendation to the Executive Committee for approval.

The physician is then notified by the Medical Director as to this decision.

3. **Indemnity allowances,** change of. Not presently in administrative operating procedures. The following is proposed. Indemnity allowances of the Plan will not be re-

duced until they have been reviewed and discussed with the appropriate committee of the county medical societies.

4. **Employment of Medical Director or Assistant.** Present wording: HMSA will not employ a new Medical Director or any physician assistant to the Medical Director except after prior consultation with all the County Medical Societies in the State of Hawaii who have contracts with HMSA identical in form to this agreement, and will make no such employment if two or more of such societies shall disapprove the same, or if any one of such societies shall disapprove the same for cause shown to HMSA.

Proposed rewording: When the employment of a new Medical Director or new physician assistant to the Medical Director is necessary, the following procedures will apply:

(a) Written notification of a vacancy will be made by HMSA to all Medical Societies.

(b) The Medical Societies will announce the position to its general membership and request those interested to fill out an application with HMSA.

(c) HMSA will not select an applicant for the position until 45 days after the date of announcement to the Medical Society.

(d) HMSA will report its selection to the Medical Society and make its appointment within thirty (30) days unless prior thereto

1. The candidate is disapproved by two or more Medical Societies with notice of disapproval in writing to HMSA, or

2. The candidate is disapproved by one Medical Society for cause shown to HMSA with notice of disapproval in writing to HMSA.

G. CHANGES NOT ORIGINALLY PROPOSED BY THE HMA WHICH WERE DISCUSSED BUT ON WHICH THERE WAS NO AGREEMENT BETWEEN HMA AND HMSA

1. **Change to Operating Procedures**—Present wording: HMSA will make no changes in its Administrative Operating Procedures without prior written approval of the Society. A copy of the Administrative Operating Procedure (marked Exhibit "B") is attached hereto. HMSA and the Society agree that upon request of the other it will meet to confer on any proposed revision of the Administrative Operating Procedure.

HMA requested addition of the following clause at the end of the first sentence, "nor any change in the Physicians' Handbook without sixty (60) days' prior notice to the County Medical Societies."

HMSA did not concur with this suggestion and proposed the following: HMSA will incorporate the following sentence in the Introduction section of the Physicians' Handbook: "HMSA will promptly notify each County Medical Society of any changes in the Physicians' Handbook."

H. CHANGES NOT IN THE ORIGINAL HMA PROPOSAL AND ON WHICH THERE WAS GENERAL AGREEMENT BETWEEN HMA AND HMSA

1. **Assistance at Major Operations**—Original HMA proposal was to add to present "except that the allowance be $25 or 15% of the listed value for surgery, whichever is greater." It was agreed (note in first category) to defer action on the percentage agreement until after completion of fee schedule study. The following rewording of provisions was agreed upon:

(A) Surgical assistance fee will be allowed where a resident and intern training program is in effect only when some high-level hospital operating room staff or the Chief of Surgery certifies that a resident or intern was not available and that an assistant was needed or required, and when approved by the Medical Director.

(B) Surgical assistance fee to be on a "service basis" based on $25 minimum or a percentage of the surgical fee. (Deferred until completion of RVS.)

(C) Procedures for which no assistant's fee allowance will be made will be appropriately marked in the Fee Schedule. (Deferred until completion of RVS.)

2. **Bilateral Procedures** (Eye, Ear, Nose, and Throat)—Original recommendation was that this not be limited to EENT. It was agreed that this section should be extended to include bilateral procedures for extremities, hernia, and breast lesions. Present allowance to remain unchanged; i.e., 1½ if on same day, full fee for each on separate days; ½ if same surgeon and site if repeated within 60 days.

3. **Infections and Trauma**—Present wording: For surgical services rendered, whether in a doctor's office or in a hospital, the stated Fee Schedule amounts include four weeks aftercare. Where complications develop, special consideration will be given provided written request for additional benefits, together with an explanation, are submitted to the Medical Director for necessary action. Where no actual cutting, debridement, incision, and drainage is involved in an accidental injury case, such case is considered medical (nonsurgical) and the difference between the physician's charges and the HMSA allowance shall be the responsibility of the member.

The original HMA proposal was simply to eliminate the first sentence. Subsequently, the HMSA recommended that the title of this paragraph be changed to read "Uncommon complications and unusual services" and changed to read as follows: "When uncommon complications or other circumstances develop following surgery which require additional or unusual services, special consideration will be given and additional allowances may be made when the physician submits a report which is approved by the Medical Director. The HMA requested the removal of the words "following surgery."

Final HMSA proposal follows: "When uncommon complications or other circumstances develop **during or** following surgery which require additional or unusual services, special consideration will be given and additional allowances may be made when the physician submits a report which is approved by the Medical Director."

4. **Multiple Procedures**—Present wording: For multiple procedures in remote or in separate fields, an additional 50% of the lesser scheduled fee will be paid for each additional procedure the total amount of such payments not to exceed twice the major fee. Multiple procedures in the same operative field are payable only at the fee of the major procedure. No further payment will be made for the additional procedures.

HMA original proposal was: When multiple surgical procedures are performed through the same incision, the value will be that of the major procedure only, unless otherwise specified, except when additional values (as indicated below) are warranted; e.g. multiple procedures in the hand, foot, or other small part. Written report to be submitted upon request in the latter case.

While multiple surgical procedures are performed in the same operative session in separate operative fields and two separate incisions, full fees will be allowed.

HMSA/HMA compromise reads as follows: Multiple procedures in the same operative field are payable only at the fee of the major procedure. If other operations at the same sitting are in remote areas, an additional 50% of the lesser fee schedule may be paid for each additional procedure. The total amount is not to exceed twice the major fee except when additional values are warranted. For example: multiple procedures in the hand, foot, or other small part are allowed at 50% of the lesser scheduled fee when accompanied by a written report and approved by the Medical Director.

Subsequently the HMSA asked that this section be changed to read as follows: Multiple procedures in the same operative field are payable at the fee of the major procedure unless operations in remote areas are performed at the same sitting. In the latter case, an additional amount

up to 50% of the lesser scheduled fee may be allowed when approved by the Medical Director.

The total amount is not to exceed twice the major fee except when additional values are warranted as in multiple procedures in the hand, foot, or other small part where the aggregate total of allowances may exceed twice the major fee and when accompanied by a written report approved by the Medical Director.

5. **Consultations**—Present wording: (a) Consultation fees will be paid if the referring physician is present or the patient is referred and a written report is submitted to HMSA. Consultation should not be confused with referral. If a case is referred to you and surgery or treatment is performed by you, the HMSA allowance would be made to you and no consultation fee will be allowed; however, if you were called in by the physician for consultation and the case is continued by the physician requesting your opinion, your service would be a consultation and a fee of $10.00 would be paid directly to you. Only one consultation fee will be paid by the plan. (b) Consultation fees are not allowed for the following: 1. When the patient continues treatment with the consulting physician. 2. When the consultation is between physicians in the same clinic or office. 3. When such consultation is required by the hospital. 4. Surgical consultation where Fee Schedule amount is less than $75.00.

Original recommendations by HMA: (A) Identical, except that one consultation per case will be allowed without written report submitted to HMSA, and that other consultations may be allowed when a written report is submitted and approved by the Medical Director or the Medical Committee. (B) Identical, except that consultation under conditions in this paragraph (b) may be allowed when a written report is submitted and approved by the Medical Director or the Medical Committee.

HMSA final version is as follows: One $10 hospital consultation fee (indemnity) per case will be allowed when approved by the Medical Director. A copy of the consultation report, which is a part of the hospital record, may be requested by the Medical Director. However, if the necessity of an additional consultation in another specialty is substantiated by a letter from the physician in charge, an additional $10 hospital consultation fee may be allowed by the Medical Director. (B) Consultation fees are not allowed for the following: (1) When the patient continues treatment with the consulting physician as a referral. (2) When the consultation is required or requested by the hospital. (3) Pre-operative medical evaluations, such as histories and medical examinations will not be considered as consultations. (4) Office consultation (office visit will be made for such service). (C) HMSA has difficulty in separating consultations from referrals. To avoid discrimination, inequity, and difficulty of controls, office consultations will be deleted. An office visit allowance will be made to be equitable to all.

6. **Medical Care Concurrent with Surgery**—Present wording: Medical conditions treated concurrently with surgical conditions do not command an additional fee when such services are rendered by the same physician. Surgical allowances include four weeks aftercare.

HMA original proposal: Medical conditions treated concurrently with surgical conditions by the same physicians may command an additional fee by report.

HMA/HMSA compromise: Medical conditions treated concurrently with surgical conditions within the aftercare period by the same physician may be eligible for a medical allowance, predicated on the indemnity amount for an office or hospital visit, if the medical condition required supplementary skill and effort and when authorized by the Medical Director following his review of a written report submitted by the physician.

I. ITEMS ON WHICH THE HMA/HMSA NEGOTIATIONS WERE INCONCLUSIVE AND ARE BEING PRESENTED TO HOUSE OF DELEGATES FOR FURTHER INSTRUCTION

1. **Termination of Contract**—Present wording has no expiration date and provides for termination by either party's giving 120 days prior written notice to the other. HMA proposed that the contract shall continue in force for a period of one year or unless terminated as in present agreement. The HMSA thought it was mutually recommended that the paragraph remain unchanged and that the Medical Society maintain a permanent committee designated to review subjects of mutual interest. They felt it was impractical and cumbersome to consider yearly termination of the contract.

2. **Endoscopic Services**—Present wording: Endoscopic services are payable by HMSA. In cases where major surgery follows as a result of endoscopic findings, HMSA will allow the major fee for the surgery and one-half of the endoscopic fee.

HMA original proposal was: HMSA will allow the major fee for the surgery and one-half the endoscopic fee if both services are performed on the same day, HMSA will pay the full combined fee for the two procedures if done on separate days.

HMA/HMSA reached a compromise in the subcommittee hearings which was not acceptable to the committee as a whole and which the subcommittee awaits further instructions by the House. The compromise reads: Endoscopic and other diagnostic procedures, which lead to major surgery, are payable in cases where major surgery follows as a result of endoscopic or other diagnostic procedures. HMSA will (A) allow only the major fee for surgery and no endoscopic or diagnostic fee if such service is performed at the same sitting in surgery. (B) Allow one-half of the endoscopic or diagnostic fee if service is performed on the same day as surgery, but not at the same sitting. (C) Allow full fee for endoscopic or diagnostic services if services were performed on separate days.

3. **Anesthesia Services**—Present wording is: When services are rendered by an Anesthesiologist, HMA will allow up to $15 for the first hour and $3.75 for each 15 minute period thereafter. No allowances will be made on T&A cases. HMA originally had no recommendations to make. During discussions HMSA advised that increases had been made. Subsequently, HMSA proposed the following, which was questioned by committee as a whole which felt that anesthesia should be a separate section in the fee schedule. Since item is not related to surgical fee schedule, delete from administrative procedures and outline separately under "General Information" in a new section of the Physicians' Handbook.

4. **Termination of Participating Physician's Contract**—Present wording: No Participating Physician's contract shall be terminated by HMSA unless termination (a) is affirmatively recommended by the Medical Committee of the Board of Directors of HMSA and approved by the Executive Committee of the Board of Directors of HMSA, or (b) is approved by the Board of Directors of HMSA after prior consultation with the Medical Committee.

HMA proposal: add ". . . after prior consultation **and approval** by the Medical Committee of the HMSA."

HMA/HMSA compromise was to leave wording as it is at present. Committee did not concur.

J. ITEMS WHICH THE HMSA ACCEPTED WITHOUT CHANGE

1. **By Report**—Include when the value of a procedure is to be determined "by report," a report including the size and location of the lesion or procedure, where appropriate, and the operating time will usually be considered adequate. Follow-up care for such procedures will be that of the nearest similar procedure.

2. **Complications or Unusual Services**—Include: Complications or other circumstances requiring additional or unusual services may warrant additional charges on a fee-for-service basis. Written report to be submitted upon request and payment to be made upon approval of the Medical Director or Medical Committee.

3. **Unlisted Procedures**—Include: Procedures not specifically listed will be given values comparable to the listed procedure of closest similarity. A written report will be submitted upon request. Values for these procedures to be determined by the Medical Director or Medical Committee.

K. ITEMS PREVIOUSLY MANDATED CHANGED BY HOUSE OF DELEGATES ON WHICH NO COMPROMISE WAS REACHED AND HMSA DECLINED TO ACCEPT HMA PROPOSALS

1. **Payments**—Present wording: Payment for services rendered HMSA members is made directly to Participating Physicians by HMSA. Payments are made twice monthly. All claims paid or payable are subject to review and verification including inspection of pertinent records of any physician or hospital upon authorization of the Medical Committee of HMSA.

Proposed change: Include an additional sentence to read: "All payments made for services rendered by nonparticipating physicians will be made directly to the physician if an assignment of benefits is made. HMSA did not concur.

2. **Nomination of Physicians to HMSA Board and Committees**—At present three nominees are made for each vacancy. Proposal was to follow procedures now outlined except that only the exact number of nominees needed to fill the vacancies should be nominated. HMSA did not concur.

3. **Individual Agreements**—HMA proposed to omit. HMSA did not concur with proposal.

4. **Separate Agreements for Federal Plan**—At present time a participating physician must participate in all plans which HMSA offers. HMA proposal was "A physician who agrees to be a participating member in the regular HMSA Plans does not automatically become a participating member in the Federal Employees Medical Plan. In order to become a participating physician of the Federal Employees Medical Plan, the physician must so agree in writing." HMSA did not concur.

5. **New HMSA Plans**—Present contract calls for society approval of new plans only if they are at variance with provisions of the HMSA schedules of compensation or the Administrative procedures. HMA proposal was that "Any new medical or surgical plan not being offered for sale at the time of this agreement must be approved by the medical association prior to being offered by HMSA." HMSA did not concur.

6. **Individual Contracts, encouragement of society to participate, etc.**—HMA proposed to delete. HMSA did not concur.

7. **Federal Plan**—States that the Society approves contract commencing November 1, 1961. HMA proposal was to delete. HMSA did not concur.

ACTION:

It was voted to accept Divisions A, B, C, and D of the report.

It was moved and seconded to approve Division E with the elimination of the words "certain unusual" in Section 3 (B). The motion was amended to ask HMSA under Section 6, Division E, if legally possible, to give the money obtained from penalties to the Physicians Benevolent Fund of the Association. There was an expression that 25% was not enough of a penalty for those physicians whose claims run several years late. The motion was passed as amended.

It was voted to approve Division F.

It was voted to reject the proposal of HMSA in Division G and reaffirm to the original stand of HMA regarding the 60-day prior notice for changes in the Physicians Handbook.

It was voted to approve Division H noting that the proposed change concerning assistance at major operations was in the original HMA proposal. It was suggested that assistants' fees should be indemnified. All decisions of the items relative to the fees themselves have been deferred pending completion of the RVS.

It was voted to approve Division I, Section 1, with the following change: The contract period shall be for two years and that termination of the contract by either parties may be effected by 60 days (instead of 120 days) prior written notice.

It was voted to approve Division I, Section 2, with the following change: Reject the proposed changes and reaffirm the original recommendation that a fee and a half apply (endoscopic services followed by major surgery) regardless of what day the endoscopic service is performed, and that supplemental skills also apply in relation to endoscopic services.

It was voted to accept Division I, Section 3, with the following change: That anesthesia services remain in the Administrative Operating Procedures. It was explained that T&A is an indemnified procedure and although anesthesiologists' services for T&A are not allowed, the physician may bill the patient for his services.

It was voted to accept Division I, Section 4, without change. It was explained that although the HMA wanted "and approval" added to this section, the HMSA turned down this proposal. It was felt this was not too vital a point and should not be pushed.

It was voted to accept Division J. The advisability of giving the Medical Director authority to set fees for unlisted procedures was questioned. It was explained that the physician always has the right of appeal to the Medical Committee. The right of the Medical Care Plans & Fees Committee to set the fees was discussed.

It was voted to reaffirm the original proposals in Division K, except for Paragraph 7, which is eliminated since it has already served its use. There was considerable discussion about Paragraph 5. It was noted that HMSA now has the prerogative to set up new plans without Society approval, the HMA proposal is to take this away from them.

It was voted to approve the report as a whole as amended.

It was moved and seconded that the House of Delegates make the negotiating committee a standing committee. It was noted that it is a subcommittee of the Medical Care Plans & Fees Committee, which is a standing committee. The motion was withdrawn.

It was moved and seconded that since the HMA has been kicking this around for so long a time and all they get is negative answers, a time limit should be set. This committee now goes back to HMSA with the recommendations the House has passed and if they cannot come to some solution within ninety days, the House recommends that the counties discontinue their contracts with HMSA.

It was moved and seconded that instead of the 90-day clause the motion be amended that we notify the HMSA if some type of agreement cannot be reached by the negotiating committee and HMSA on these controversial items, such failure shall be reported to the next meeting of the House of Delegates with the recommendation that the counties cancel their HMSA contracts. The maker of the motion accepted the amendment and the motion was passed as amended.

Dr. Lum was commended on the fine job he had done.

* * *

Dr. O. D. Pinkerton presented the motions relating to

the resolution and the Medical Practice Act Study Committee report. The Secretary read a letter from the President of the Kauai County Medical Society in which he stated "We are in favor with doing away with the residency clause."

RESOLUTION NO. 1
RE: SCIENTIFIC MEETINGS

WHEREAS, There were certain scientific medical meetings during 1964 which overlapped or conflicted in dates and time; and

WHEREAS, These conflicts resulted in poor attendance at the separate meetings; and

WHEREAS, Such poor attendance may lead to poor or less than enthusiastic financial support from the various sponsoring organizations, therefore be it

Resolved, That all medical scientific programs be cleared, at least as to time and dates, through some committee or individuals as designated by the officers of the Hawaii Medical Association; and be it further

Resolved, That a copy of this Resolution be sent to all county societies, all specialty societies, all teaching hospitals, the University of Hawaii, and the Department of Health.

Submitted by ROBERT P. C. HO, M.D.
Chairman, Scientific Program Committee

ACTION:

It was voted that the House of Delegates adopt the resolution in its entirety.

MEDICAL PRACTICE ACT AD HOC STUDY

Recommendation for consideration and instructions:

1. There should be no change in the definition of the practice of medicine and its exclusions except that the following phrase shall be deleted from Chapter 64, Section 1, of the RLH: provided that nothing herein contained shall forbid any person from the practice of any method, or the application of any remedial agent or measure under the direction of a licensed physician.

2. There should be no change in the qualifications for eligibility to be licensed except that section 64-3 (f) shall be changed to read:

Diplomates of the national board of medical examiners who meet the requirements of subparagraphs (a), (b), (c), (d), (e) and (f) above, shall be licensed without the necessity of a further written examination provided that such appointment as diplomate shall have been granted within a period of ten years prior to applicant's request for licensure in Hawaii.

3. The provisions for limited and temporary licenses shall be for applicants who are qualified in every way for licensure except that they have not fulfilled the one-year residence requirement. The fee for such license shall be $25 and the license shall set forth the conditions and limitations on which it is issued.

(a) Upon the written recommendation of the Board of Medical Examiners that there is an absence or a shortage of licensed physicians in a particular locality, and that the applicant has been duly licensed as a physician by written examination under the laws of another state or territory of the United States. A limited and temporary license issued hereunder shall permit the practice of medicien and surgery by the applicant only in the particular locality and no other, as shall be set forth in the license issued to him. In no case shall such license be valid for a period in excess of eighteen (18) months from the date of issuance; or

(b) Upon written recommendation of the Board of Medical Examiners that the applicant is to be employed by an agency or department of the state or county government, and that the applicant has been duly licensed as a physician by written examination under the laws of another state or territory of the United States. A limited and temporary license issued hereunder shall only be valid for the practice of medicine and surgery while the applicant is in the employ of such governmental agency or department. In no case shall such license be valid for a period in excess of eighteen (18 months) from the date of issuance; or

(c) Upon the written recommendation of the Board of Medical Examiners that the applicant shall be permitted to practice medicine and surgery only while under the sponsorship of one or more physicians regularly licensed in the State of Hawaii other than as permitted in this section, and that the applicant intends to take the regular licensing examination conducted by the Board of Medical Examiners within the next eighteen (18) months. In no case shall such license be valid for a period in excess of eighteen (18) months from the date of issuance; or

(d) Upon the written recommendation of the Board of Medical Examiners that the applicant has been appointed as an intern or accepted for specialty or resident training in a hospital approved by the Board, and that the applicant shall be limited in the practice of medicine and surgery to the extent required by the duties of his position or by his program of training while at such hospital, a limited and temporary license hereunder will be issued without regard to the requirement of Section 64-3 (e) relative to internship. Such license shall be valid during the period in which the applicant remains an intern or a resident in training, and may be renewed from year to year during said period.

Every applicant who has been issued a limited and temporary license under this section shall register immediately with the Board of Medical Examiners upon such form or forms as may be prescribed by the Board. Failure to register shall be grounds for revocation of such limited and temporary license. Within forty-five (45) days of the effective date of this Act, all persons presently permitted to practice medicine or surgery in the State of Hawaii without a regular license, except commissioned military officers under Section 64-2, shall register with the Board of Medical Examiners, and shall thereafter be permitted to continue the practice of medicine and surgery upon obtaining a limited and temporary license as herein provided.

Nothing herein shall be construed to require the registration or licensing of nurses, or other similar persons, acting under the direction and control of a licensed physician.

* * *

It should be noted that the funds that would be obtained from issuing limited and temporary licenses would be more than adequate to pay for the additional expenses involved in administering the program.

In addition to the above, the Committee spent considerable time discussing the merits of combining the examining function of the Board of Medical Examiners and the responsibilities of the State Department of Health for issuing licenses and providing policing powers and functions. To the best of our knowledge, Hawaii is the only State in which these functions are separated; in all other states the Board of Medical Examiners has examining, licensing, and disciplinary powers.

Realizing that the present situation has existed for a long time in this State and realizing also that the present moment might not be propitious for changing the status quo, nevertheless your Committee recommends that the functions noted above be combined under the powers or supervision of the Board of Medical Examiners.

ACTION:

It was moved that the present Medical Practice Act be left as it now stands in its entirety and the proviso be added that unlicensed physicians be registered by the Board of Medical Examiners and that the citizenship proviso not apply to interns and residents, and that the fee for the reg-

istration of interns and residents be $5.00. The motion was thought to be unclear and was not seconded. The chair interpreted the motion to be that it recommends that there be certain amendments to the Act, which takes positive action, and the report is being rejected, which takes negative action. Dr. Chinn said that at the conference discussion it was voted to move that the Medical Practice Act be left alone and that the unlicensed physicians be registered, period. It was pointed out that if the house staff is not to be licensed, then there is no need for the instruction that the citizenship proviso not apply and that the registration fee be $5.00. Dr. Moore asked how it was proposed to carry out the registration and under what law; that there is nothing in the present law that states that anybody has to be registered.

Dr. Tomita spoke as the Chairman of the Legislative Committee. He said he saw the intent of both the *ad hoc* and the reference committees, and if a motion were made that this matter be referred to the Legislative Committee for further consideration, he thought it would solve all the problems for the delegates. Dr. Hanlon said he sat on the committee and he thought they had rejected the *ad hoc* committee report and that they proposed that the current Medical Practice Act be retained and that the Legislative Committee be instructed to strive to add to the Medical Practice Act registration of all unlicensed physicians. It had nothing to do with temporary licensure. Dr. Wong said he concurred with this statement.

The motion was repeated. The chair ruled that there was no second and he asked that the motion be restated.

It was moved and seconded that the Medical Practice Act be left alone and all unlicensed physicians be registered by the Board of Medical Examiners. Dr. Quisenberry said that as far as the Department of Health is concerned, they see no need for change in the Act. Dr. Nishijima said that he felt that the argument centered around item No. 1, and so it was decided to leave the whole thing *status quo*.

It was moved that the whole thing be tabled until the officers could get together and decide what they are going to talk about. The motion died for a lack of a second. Dr. Nishijima questioned the motion. He said that if they had come up with that in the beginning the whole meeting could have been finished in two minutes. There was an argument, but there was agreement on many of the things that were in the report, then they decided to delete many of the things. Dr. Moore said that he gathered from the confused remarks that nobdoy knew what was going on but that what they objected to was Paragraph C, and the proposal was to change from "limited and temporary licensure" to "registration." He asked about National Boards or about combining the present licensing and examining powers under the Board of Medical Examiners. Dr. Nishijima explained that the discussion group feared that if changes in this law are introduced, there may be other changes introduced by the politicians. If the proposed changes could be made without any other changes, most of the group would have gone along with them. Dr. Moore asked how they proposed to institute the registration of unlicensed physicians without changing the law.

Dr. Allison stepped down from the podium and while Dr. Pinkerton presided stated that he thought that in this particular problem, without regard to how we vote, the Legislative Committee should be given some rather specific instruction as to what they should do in certain areas if a bill is introduced. He did not think that we are mandated by the Medical Association to push the introduction of an Act to change the existing law. He did think that this House of Delegates should rather clearly decide how they would like to act if certain of these situations did arise, which he was reasonably certain would arise, whether we introduce them or someone else introduces them. He did not think it was our purpose necessarily to introduce legislation but it was to get some answers to certain problems. He thought we should discuss this very carefully and instruct our Legislative Committee in essence how they should act if these things should come up in the Legislature. He moved that the last motion be tabled. The motion was seconded and passed. Dr. Allison resumed the chair.

Dr. Tomita said he had been in the Legislative Committee either as chairman or member for the last twelve years. If the Legislative Committee is hamstrung with certain proposals and cannot play it by ear, its position will be indefensible. To have the delegates mandate the Legislative Committee to do certain things would prevent the committee from functioning the way it wants to function. He said he knew the intent of the outside island delegates. He could see their problems. The Legislative Committee should be given a free hand.

Dr. Pinkerton spoke of the seriousness of the situation and moved that the whole matter be referred to the Legislative Committee with the sense of the House of Delegates being transmitted to them as heard tonight. The motion was seconded and passed.

* * *

Dr. Allison spoke for a few minutes of the AMA fund-matching program and asked for informal advice. There being no firm advice, he said the officers would deal with the matter later on. He thanked the delegates for the work done and for staying so late in the day.

The meeting adjourned at 6:55 P.M. ■

RANDAL A. NISHIJIMA, M.D.
Secretary

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1. Welch, C. E., Diverticula of the Alimentary Tract, in Conn, H. (editor): Current Therapy—1961, Philadelphia, W. B. Saunders Company, 1961, pp. 224-225.

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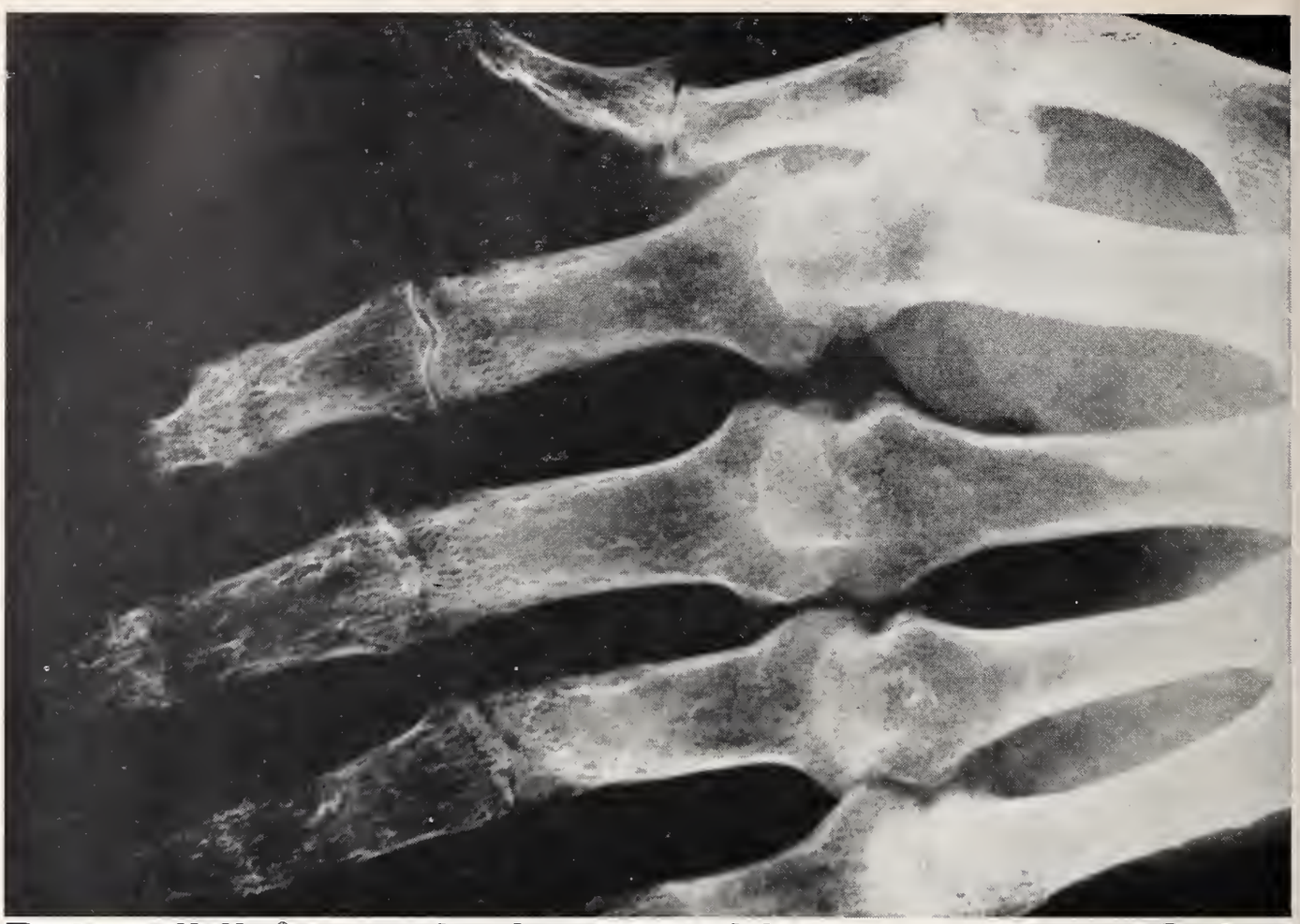

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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: JAMES YANO, Kaiser Foundation Hospital

The Future of Medical Technology Program in Hawaii

Prompted by the logical fact that a more knowledgeable medical technologist would improve the professional services rendered in a clinical laboratory, many scientific surveys, special studies, seminars, and panel discussions were conducted on this important subject throughout the country. The recommendations of the majority of participants were that the areas of improvement must be instituted in the preclinical years of schooling and during the clinical year of internship. A most interesting and noteworthy comment was that "the training of technologists should also be interrelated to a greater extent with training of physicians so that the technologist himself can gain a true awareness of the service he is providing as well as develop a mature method of coping with the physician who is not completely familiar with laboratory work and is somewhat critical of the laboratory facilities."

With this current trend of emphasis on improvement of standards of education in the field of medical technology, what are some of the projected plans at our own University of Hawaii?

A curriculum committee was recently organized at the University of Hawaii to study and propose recommendations or revisions to our present program in the medical technology course. Serving on the committee are Dr. A. Benedict, Chairman of the Department of Microbiology; Dr. David Contois, Assistant Dean of the College of Arts and Science; Dr. Richard Lockwood, Project Director of the Medical Education Study of the Pacific Biomedical Research Center; Dr. Grant Stemmermann, pathologist in charge of the Schools of Medical Technology in Hawaii; Dean Virginia Jones, Dean of the College of Nurses; Mrs. Louise Wulff, Chairman of the Department of Medical Technology; Miss Ann Stegmaier, Chairman of the Education Committee of the HSMT; and Mrs. Alice Tonchon, Chief Technologist representing the teaching supervisors in the Schools of Medical Technology in Hawaii.

The most dramatic and controversial decision proposed by the committee to date is the recommendation of a four-year academic program leading to a Bachelor of Science degree in Medical Technology. An additional year of internship in an approved school will still be necessary in order to become eligible to take examination by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists. It is expected, however, that with the acceptance of the extended program, the approved AMA schools will offer stipends to the interning students during the fifth year, which is an internship. Already, certain schools in California—University of Southern California, San Jose State College, and San Diego State College—are offering this four-year program before internship.

Although this proposed curriculum change must first be approved by the College of Nursing Senate and by the Faculty College of Deans, the effective date of this change will not be for at least two years. At this time, the proposed two-year medical school may become a reality at the Biomedical Research Center. It will be logical, then, that the Department of Medical Technology will be transferred from the College of Nursing to the Department of Pathology at the Biomedical Research Center.

There are several definite advantages in this proposed change in the curriculum for the Medical Technology program.

(1) It allows for a more comprehensive schedule of courses in medical technology. Two full semesters of physics and organic chemistry will be included; into the three-year program, it was impossible to include the physics course and time only allowed one semester of organic chemistry. With the adoption of the new program, courses in hematology, instrumentation, basic electronics, and other related subjects will be offered. It is interesting to note that although courses in medical mycology, virology, genetics, and advanced microbiology are now being offered by the University of Hawaii faculty staff, the present students were unable to take any of these courses during their three-year program (plus one year internship) be-

Pertinent information related in this article were obtained through the courtesy and help of Mrs. Louise Wulff, Chairman of the Department of Medical Technology at the University of Hawaii.

cause of the stringent course requirements essential as prerequisites for each of these subjects. Besides, many of the courses can only be taken during the senior year.

(2) It will allow more flexibility in arranging required courses along with elective courses during the freshman and sophomore years. Not only would this opportunity motivate the students to seek a more liberal education, but in addition, it would accommodate any student who would like to transfer into the course of Medical Technology without much loss of credits or time. In general, it will offer the students more freedom of choice of subjects.

(3) It will be considerably easier for any aspirant to seek graduate study for advanced degrees with this proposed extended program without requiring too many undergraduate courses.

In order to be objective in our discussion of this proposed four-year technology program with one year of internship, let us present some of the past objections. To some candidates, five years may seem too long and expensive a period of time in order to attain a profession; therefore, rather than the new proposal becoming an incentive, it may become a deterring factor for more future candidates. Also, is it necessary and essential for a future technologist to attend classes at a university for four years and then serve a year of internship, with or without stipends, in order to have adequate knowledge and training and ability to perform the duties of a registered medical technologist? Wouldn't our present three-year program with one year of internship suffice to fulfill our requirements? If we are interested in improving the educational aspects of our program, would it be more practical to scrutinize and introduce higher standards of scientific teaching during the internship year rather than adding another academic year of learning?

Since the decision for the proposed change is a most important one, the curriculum committee is examining the issue from all sides. They are even considering the idea of a four-year program leading to a Bachelor of Arts degree in Medical Technology instead of the Bachelor of Science degree. Will this contemplated change make much difference to the over-all objectivity of educating better medical technologists? Would there be any advantages or disadvantages if the program were altered to lead to a Bachelor of Arts degree in one of sciences—chemistry, microbiology, biology, zoology, etc.? Granted that a four-year program is ideal, is there a possibility of reducing the internship period from a year to six months?

Whatever the future of medical technology holds for us in Hawaii, we can rest assured that the current trend of events will, without any doubt, enhance the educational standards and scientific techniques in this field of technology. At the same time, the prestige, the importance, and the increased salary will attract more qualified candidates so that we may be able to meet the critical demands put upon us in this advanced age of medicine.

HSMT Convention in May

The Sixteenth Annual Convention of the Hawaii Society of Medical Technologists will be held on May 20, 21, and 22 at The Queen's Hospital. Convention chairman, Mrs. Grace Kagawa, has a wonderful and exciting program which will include a workshop on Quality Control in a Clinical Laboratory. The entire workshop, supervised by Dr. Thomas Asher and his competent staff members of the Hyland Laboratories of California, will include the quality control program in the fields of not only chemistry, but also hematology, blood banking, microbiology, serology, immunology, and urinalysis.

The tentative outline of the schedule of events is as follows:

May 20—Thursday
- 6:00 PM– 7:00 PM—Registration
- 7:00 PM– 8:30 PM—Lecture by Hyland staff
- 8:30 PM– 9:00 PM—Scientific Products
- 9:00 PM–10:00 PM—Exhibits, Demonstrations, and Refreshments

May 21—Friday
- 8:30 AM– 3:30 PM—1st Workshop in Quality Control at School of Nursing Laboratory
- 5:30 PM– 6:30 PM—Important Annual Meeting of HSMT
- 6:30 PM– 7:00 PM—Registration
- 7:00 PM– 8:30 PM—*Clinical Cytogenetics* by Dr. James Smith, Geneticist at Pineapple Research Institute
- 8:30 PM– 9:00 PM—Exhibits, Demonstrations, and Refreshments
- 9:00 PM–10:00 PM—*Clinical Cytogenetics* (Continued)

May 22, Saturday
- 8:30 AM– 3:30 PM—2d Workshop in Quality Control at School of Nursing Laboratory
- 6:00 PM– 7:30 PM—Cocktails at Ala Moana Banquet Hall
- 7:30 PM–10:00 PM—Convention Banquet

Members of the HSMT are asked to participate in this educational convention and to give it their fullest support. All inquiries concerning the convention should be directed to Mrs. Grace Kagawa, 510-111, extension 228. Other members of the committee are Mrs. Alice Tonchon, exhibits; Mrs. Dorothy Matsuo, banquet; and Anne Stegmaier, Elaine Chang, Takeo Saito, Masaji Nakagawa, and Kaname Saito, arrangements. Workshop registration deadline is May 12 and will be limited to 25 HSMT members each session.

Neighbor island delegates should direct their reservations and inquiries to Mr. Kaname Saito, 888 So. King St., Honolulu, Hawaii 96813. ■

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Correspondence *continued from 247*

playground area with flowers lawn and sun. When this discussion took place, several interested individuals lost patience including myself.

At that time I had been in Hawaii some thirty-seven years, had treated hundreds of patients at Children's Hospital, had visited the hospital at all hours of the day and night, including holidays, Saturdays and Sundays and never in my experience or memory had I ever seen even one child patient out on the lawn with permission.

All the above may seem hard to believe, but they were facts as of the time of the "lasting discredit" referred to. If and when the discussion comes up again I hope that there will be much more realistic and less emotional discussion than was the case more than ten years ago.

In future discussions, economic consideration is paramount and improved service to the patient with greater efficiency at less cost can be realized by realistic and sincere effort.

Moving Children's to Queen's and including all the top staff of administrators, assistant administrators and on down the line would only defeat the real purpose of consolidation by not assuring improved patient care, hospital efficiency and reduced patient costs.

Administration costs have proved to be killers in hospital overhead. Hospitals everywhere need revision in personnel attitudes and administrative techniques.

As a member of the Queen's Board I am familiar with the Stokes report and the opinions of several individual members of each board. Dr. Stokes, a very capable individual in the hospital field, has made observations and solid recommendations which should receive consideration not only by the whole community but by the medical profession and the members of the three governing boards.

continued page 316

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Correspondence *continued from 314*

Whether or not the University of Hawaii establishes a two year biomedical school or a full four year medical school, consolidation of the three hospitals seems very desirable and necessary. Present discussions from many qualified sources indicate overwhelming opinion in favor of enlargement of Queen's grounds and building the complex there. From cost angles this is far more economical and logical with a central location and not so far from the present university area as to be impractical. Many millions of dollars of extra expense should be a convincing argument to keep the complex in the present Queen's area.

F. J. PINKERTON, M.D.

February 23, 1965

Maternal Death Study *continued from 288*

until she told the nurse that she was dying, the physician who was assigned to her did not examine her. The attending physician should have been in continuous attendance of this patient and he should have been at the bedside giving instructions to the nurses as to therapy.

4. Even though the death occurred on a Sunday, when availability of physicians may have been somewhat limited, the hospital should have made some provision to adequately take care of emergencies of this type.

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STUDY COMMITTEE

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SIDE EFFECTS, PRECAUTIONS, CONTRAINDICATIONS: As used for anxiety and tension, side effects are unlikely. Reversible extrapyramidal reactions may develop occasionally. In higher doses for psychotic disorders, patients may experience excessive drowsiness, visual blurring, dizziness, insomnia (rare), allergic skin reactions, nausea, anorexia, salivation, edema, perspiration, dry mouth, polyuria, hypotension. Jaundice has been exceedingly rare. Photo-sensitivity has not been reported. Blood dyscrasias occur with phenothiazines; routine blood counts are recommended. If symptoms of upper respiratory infection occur, discontinue the drug and institute appropriate treatment. Do not use epinephrine for hypotension which may appear in patients on large doses undergoing surgery. Effects of atropine may be potentiated. Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use cautiously in convulsive disorders.

AVAILABLE: 1 mg. tablets. Bottles of 50 and 500.

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SQUIBB Squibb Quality—the Priceless Ingredient

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Book Reviews *continued from 294*

lems as erythema infectiosum, diphtheria, and rickettsial infections.

Several chapters will be of special interest and value to the practitioner, including those on measles, smallpox, and the acute respiratory diseases. The latter rapidly changing and complex field, often confusing to the clinician, is presented here in two lucid chapters, one dealing with etiology and including an excellent classification of the many viruses involved (Table 16). In conclusion, this is a good, but not definitive, reference book dealing with common infectious diseases, whether in children or in adults.

JOSEPH OREN, M.D.

★Surgery of the Breast

By Louis H. Jorstad, M.D., F.A.C.S., F.I.C.S., and Meredith Jorstad Payne, M.D., F.A.C.S., 220 pp., $15.00, The C. V. Mosby Company, 1964.

THIS BOOK will be a welcome addition to the library of all interested in surgical diseases of the breast, from the medical student to the practicing surgeon. It is very complete and touches on all aspects of the subject: anatomy, physical examination; surgical, x-ray, and hormonal treatment of breast cancer; plastic reconstruction after mastectomy. All will not agree with the authors' viewpoints but they do speak out frankly on many controversial subjects such as "needle biopsy," etc. The book is weak in its coverage of the pathology and treatment of certain specific lesions, however.

The format of the book is attractive and the binding, paper, printing, and photographs are all of first quality. I recommend this book to all as an excellent current review of the subject.

ROY IRITANI, M.D.

Experience in Renal Transplantation

By Thomas E. Starzl., Ph.D., M.D., 383 pp., $17.00, W. B. Saunders Company, 1964.

AN EXCITING LOOK at the rapidly enlarging field of homotransplantation, this book carefully describes extensive experience with kidney transplants at the University of Colorado Medical Center, one of the leaders in this field at the present. The critical analysis of their series of 75 patients will be of interest mostly to researchers and teachers. The description of the all-out effort required of all the many clinical and preclinical departments involved is staggering. The author warns in the preface that the procedure still remains fundamentally experimental with a distressingly high failure rate even under ideal conditions, but in spite of this warning the reader can't help but feel that the future will yield success.

WALTER S. STRODE, M.D.

Atlas of Pulmonary Resections

By Buford H. Burch, M.A., M.D., F.A.C.S., and Arthur C. Miller, M.S., M.D., F.A.C.S., 163 pp., $12.50, Charles C. Thomas, 1965.

PURELY A BOOK of illustrations of technique presented as eighty-some full-page black and white drawings, usually numerous on each page, plainly and simply labeled, and briefly explained in quarter to one-half pages of large print opposite the illustrations. Practically identical drawings appear many times because, in addition to twelve techniques, nineteen resectional procedures are presented in their entirety as they are indexed.

Despite the authors' attempt to avoid "technical hair-splitting," it is deemed inadvisable to publicize the gen-

continued page 322

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first from Ross Laboratories

Book Reviews *continued from 318*

cles with single continuous sutures, the use of lung clamps with their microscopic dispersal of material to the left heart; and the use of water to reveal small air leaks on the raw lung surface, which inhibits the natural sealing qualities of a mixture of blood and pulmonary media.

In the copy reviewed, illustrations and printing frequently show through the paper. In the surgical treatment of giant emphysematous blebs parietal pleurectomy, possibly the most physiologically beneficial part of the procedure, is not even mentioned.

PAUL W. GEBAUER, M.D.

Bahama International Conference on Burns

By Colonial Research Institute, 209 pp., $12.50, Dorrance & Company, 1964.

THIS EXCELLENT MONOGRAPH covers all aspects of the burn injury and burns in general. This is a result of a truly international symposium of burn specialists who convened in the Bahamas in 1963.

All aspects of burn therapy are covered, from the classical, time-honored burn concepts to new, modern approaches to the management of these injuries. New concepts—treatment by flowing oxygen, support of circumferential burn patients by air, and new type skin homografts—are included. Old problems such as continued mortality from infection after the shock phase of burns, and the continued search for plasma substitutes, are also discussed.

Pertinent discussions from the sociological psychological, and prevention aspects of the burn problem are also included, and all combine to make this monograph an excellent summary of burns to date.

VERNON K. S. JIM, M.D.

Neurological and Electroencephalographic Correlative Studies in Infancy

Edited by Peter Kellaway and Ingemar Petersen, 364 pp., $14.75, Grune and Stratton, 1964.

THIS BOOK is a record of a conference concerned with the ontogenetic evolution of the electrical activity of the brain and the correlation of this evolution with morphological and behavioral development. Twenty papers were presented, each followed by a discussion. Some should be of interest to the pediatrician and neurologist as they deal with clinical problems in the infant. Others will be of interest chiefly to the neurophysiologist. All are well-written and filled with illustrations. The type is clear and the paper of excellent quality.

YAN TIM WONG, M.D.

Also Received

Case Capsules

By Arnold Lieberman, M.D., Ph.D., 341 pp., $9.50, Charles C. Thomas, 1964.

INTERESTING, luminous, and instructive reading for a quiet evening. Written by a physician who was in an accident and who found creative writing a means of rehabilitation.

Sudden Cardiac Death

Edited by Borys Surawicz, M.D., and E. D. Pellegrino, M.D., 222 pp., $9.50, Grune & Stratton, 1964.

AN INTERESTING SYMPOSIUM on one of the most dramatic and disturbing events seen in clinical practice, with contributions by many outstanding cardiologists.

In Memoriam *continued from 286*

Dr. Joses entered the Medical Corps of the regular U. S. Navy on October 19, 1921. In 1923 he was stationed at Washington, D. C., and held the rank of Lieutenant. By 1931 he was at Keyport, Washington, at the Pacific Coast Torpedo Station. In 1934 he was a Lieutenant Commander serving aboard the USS Dobbin, whose home port was New York. Four years later he was at the Naval Air Station at San Diego, California, where he remained until 1942 when he was ordered to Washington, D. C.

Commander Joses was killed in action aboard a Japanese prison ship off Luzon, Philippine Islands, on December 15, 1944, at the age of 53.

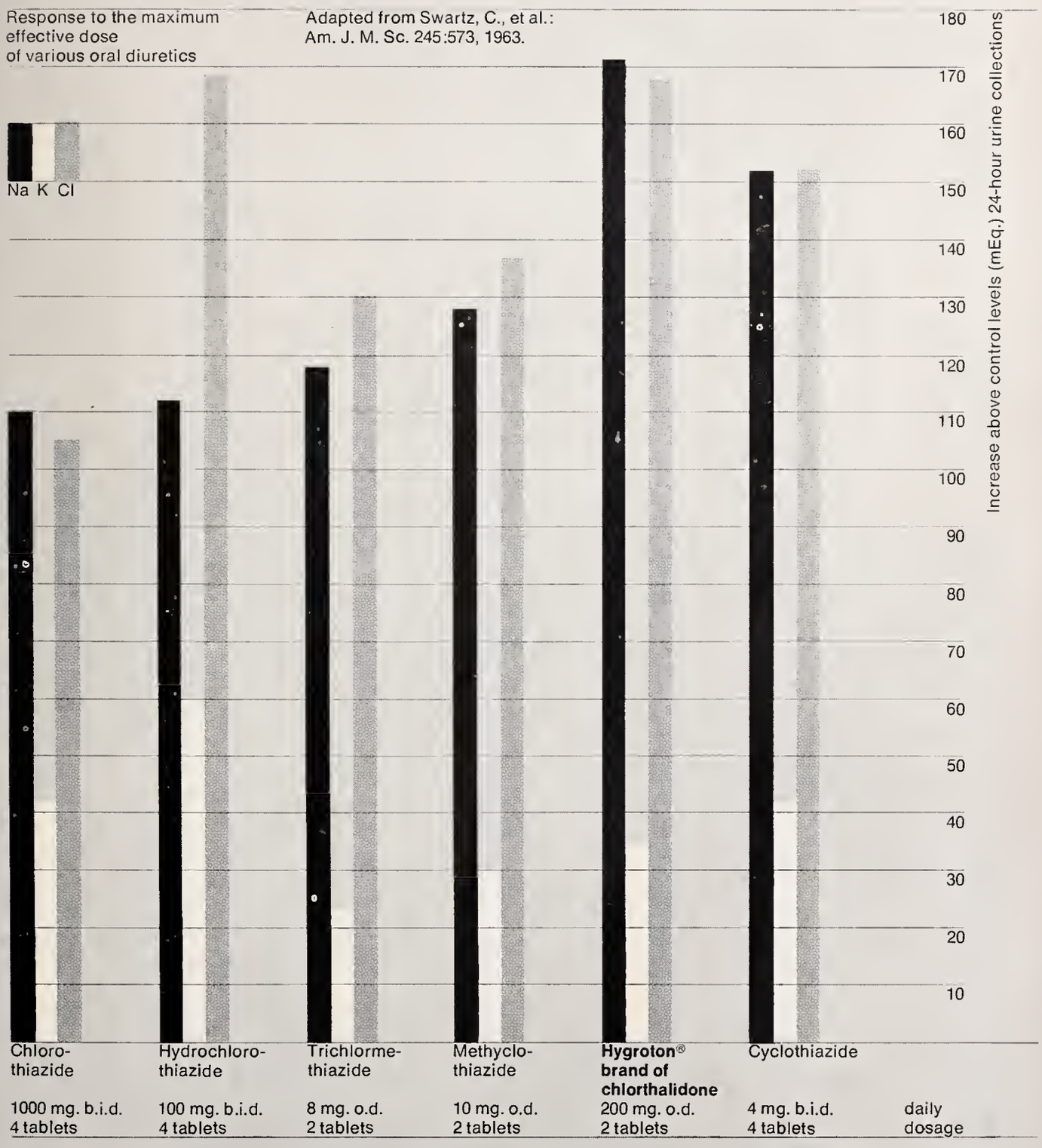
He was a member of both the Hawaii and Washington State Medical Associations. ◻

County Society News *continued from 293*

The coming special meeting of the HMA House of Delegates was noted and the Secretary was asked to advise that no one from Kauai would be able to attend. Dr. Boyden noted that Hawaii is not listed as contributing to the AMA-ERF fund. It was voted that members continue to send in their contributions individually. It was voted to meet with the legislators before the next session. No action was taken on the request of the Hawaii Medical Library for a yearly contribution. ◻

How does your diuretic stack up against Hygroton?

brand of chlorthalidone



Our "Angels"

May-June, 1965

HAWAII MEDICAL JOURNAL

In this issue

VOLUME 24 • NUMBER 5

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(diphenhydramine hydrochloride)

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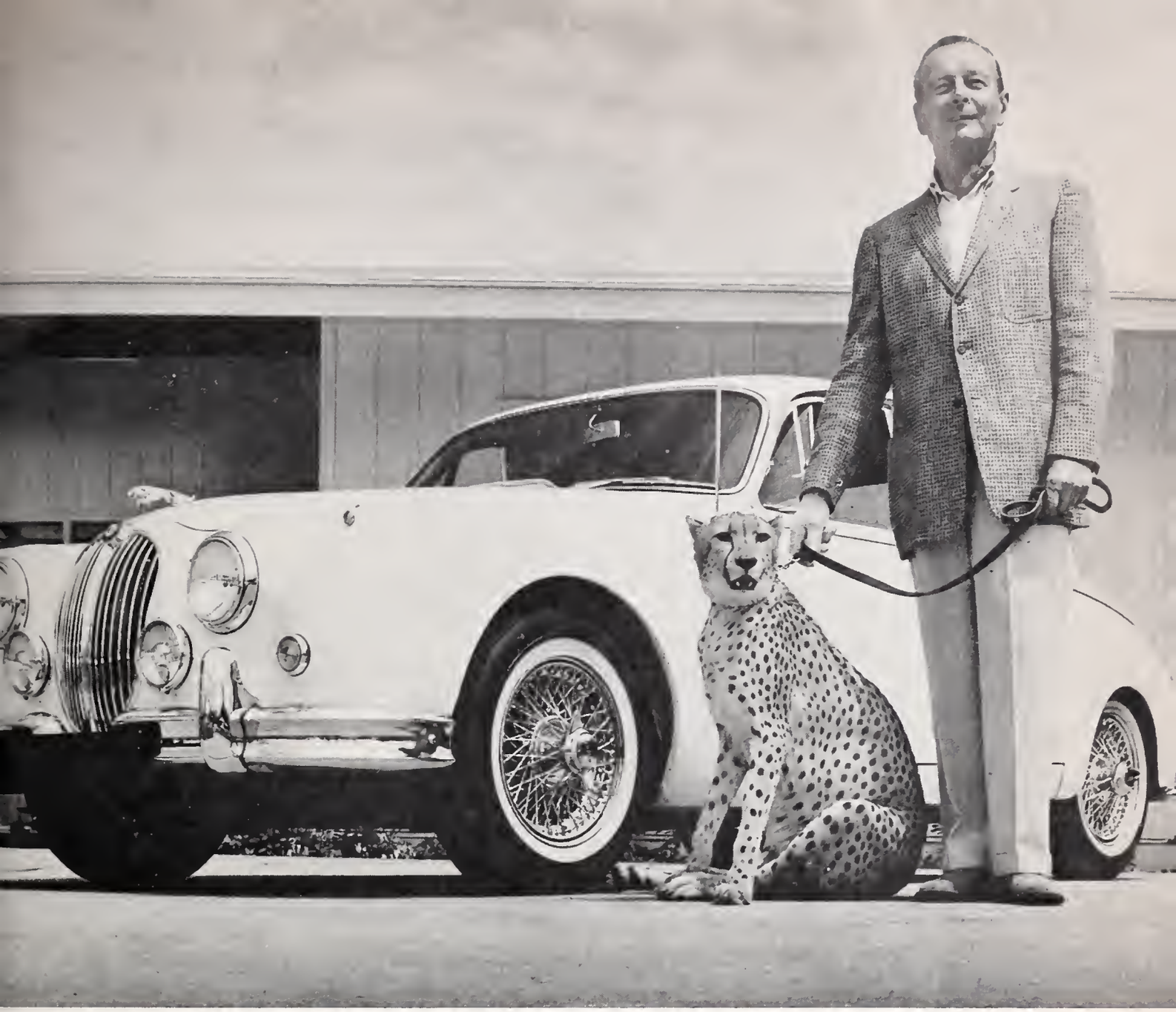

A Different Breed of Cat

These two cats are different, but have a number of things in common — like speed, power, performance, natural and sleek streamlining and acceleration that leaves the other cats behind.

It's the Jaguar we're talking about, of course, and these cats come in a variety of models and colors—the 3.8 family sedan, the new, sleek 3.8S, another superb sedan and the first of the fastbacks—the all new XKE roadster and coupe.

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HAWAII MEDICAL JOURNAL

Contents

Volume 24, Number 5, May-June, 1965

Articles

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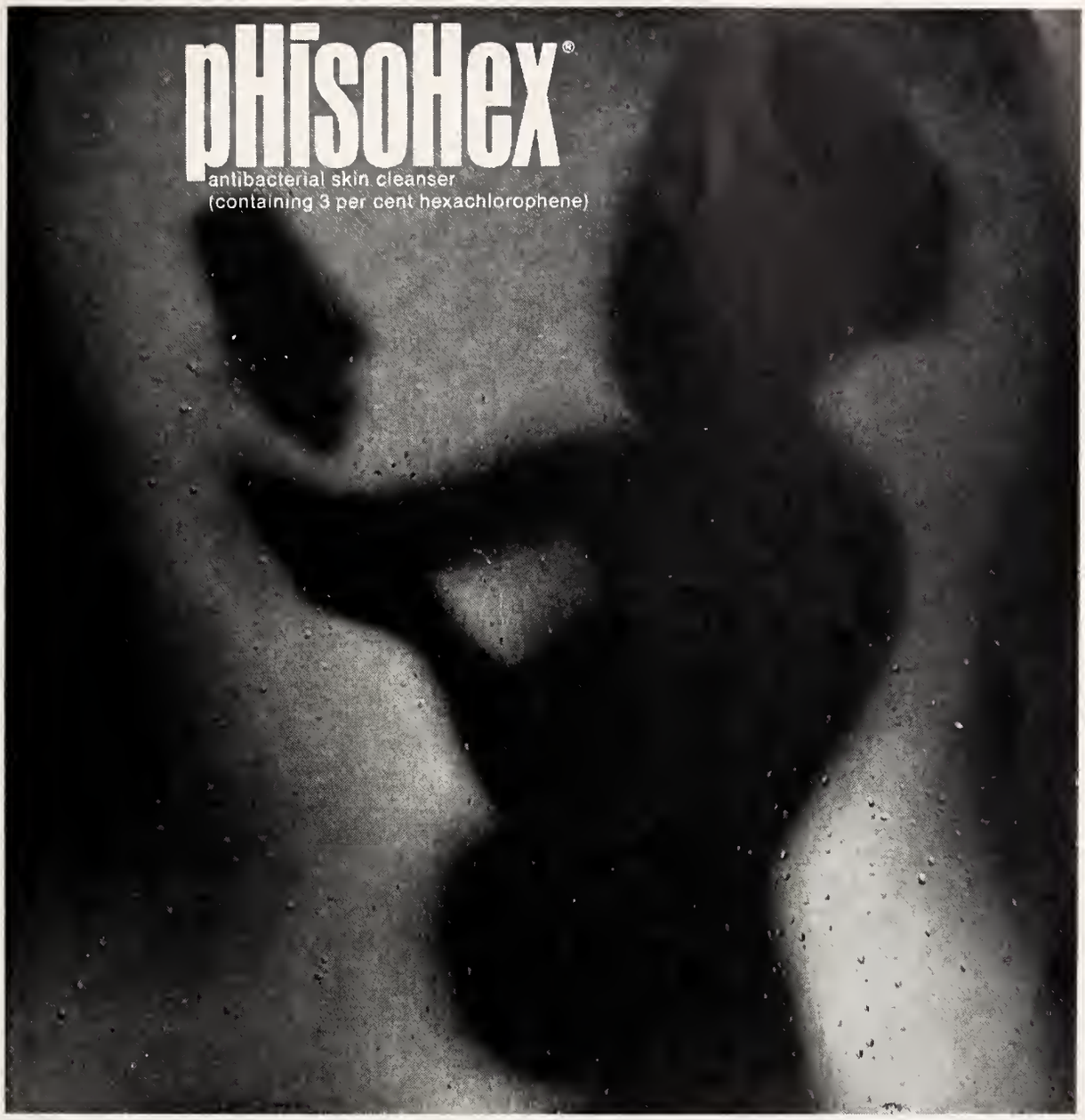
Hawaii Technologists' Bulletin

Antepartum precaution gives Postpartum protection



A simple antiseptic measure antepartum can help assure an infection-free delivery and postpartum. During the last trimester of pregnancy and certainly during the ninth month, have your patients wash and bathe regularly with pHisoHex—paying special attention to the perineum, the lower abdomen and thighs.

pHisoHex, antibacterial detergent, contains 3 per cent hexachlorophene. It deposits this powerful bacteriostatic agent "...as a semi-permanent film on the skin of frequent users."[1] The film acts as an antibacterial "...curtain between the reservoirs of bacteria in the deeper layers of the skin and environmental replenishment."[2] Thus, a surgically clean field for delivery is made more certain. The danger of "staph," "strep" and other postpartum infections is greatly lessened.

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pHisoHex is also useful for vaginal examinations during labor[3] and for perineal preparation and surgical scrub.[4] During the nursing months, pHisoHex baths can help guard mothers against furunculosis and breast abscess, while protecting infants against infection.

pHisoHex is nonalkaline, nonirritating and hypoallergenic. **It is available in unbreakable plastic squeeze bottles of 5 oz. and 16 oz., and in plastic bottles of 1 gal.**

References: 1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. **2.** Smylie, H. G., and Webster, C. U.: *Brit. M. J.* 1:201, Jan. 16, 1960. (Correspondence) **3.** Ostlund, J. A.: *Am. J. Obst. & Gynec.* 83:1099, April 15, 1962. **4.** Reid, D. E.; Walter, C. W., and Buck, Ann S.: *Surg. Gynec. & Obst.* 91:537, Nov., 1950.

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*Laureta, H. C.; Chou, C., and Texter, E. C., Jr.: Am. J. Clin. Nutrition *15*:211-217 (Oct.) 1964.

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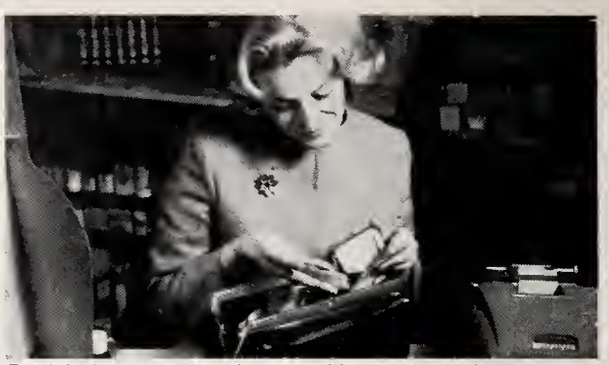

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AVAILABLE: 1 mg. tablets. Bottles of 50 and 500.

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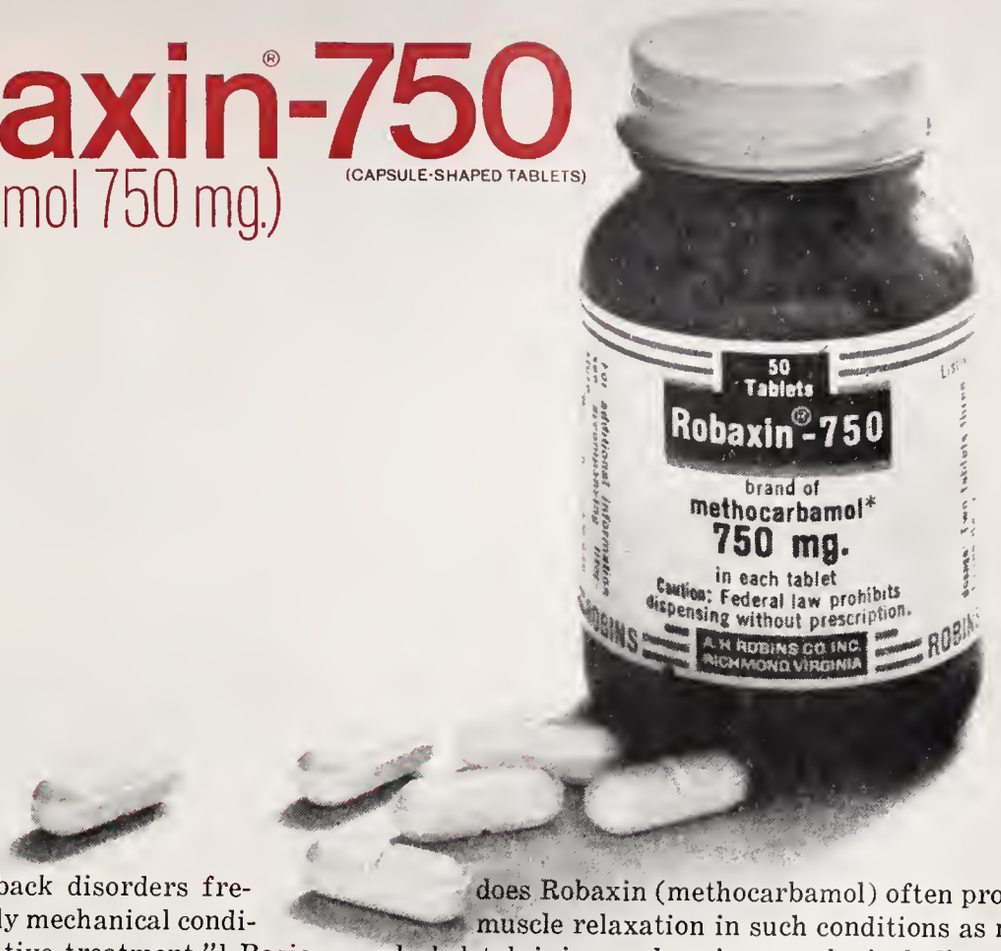

It has been noted that low-back disorders frequently "...are caused by truly mechanical conditions which yield to conservative treatment."[1] Basic to this conservative treatment are bed rest, a board for the bed, and applied heat. In addition, a good muscle relaxant is often helpful, as "...muscle relaxants are useful in chronic as well as acute low backaches."[4]

Robaxin (methocarbamol) has relieved spasm and pain in cases where the patient "had not responded to conservative measures prior to drug therapy."[6] A 100-patient study showed that Robaxin provided greater relief of muscle spasm for a longer period of time without adverse reactions "than any other commonly used relaxants...."[6]

A well-tolerated[7] skeletal muscle relaxant with "specificity of action,"[7] methocarbamol leaves normal muscle tone unaffected. Moreover, there is little likelihood of sedation[7]—a considerable advantage for the patient who must remain active and alert on his job.

Significantly, clinicians advise using a muscle relaxant "early and in adequate dosage."[8] In this regard, Robaxin (methocarbamol)—*particularly in the 750 mg. dosage (2 tabs. q.i.d.)*—offers optimal therapeutic benefits without a significantly increased incidence of side effects. And just as it works well as part of the basic regimen for low-back pain, so also does Robaxin (methocarbamol) often provide muscle relaxation in such conditions as musculoskeletal injury, chronic neurological disorders, and orthopedic situations.

BRIEF SUMMARY—Robaxin (methocarbamol) Tablets: Contraindicated in hypersensitive patients. Side effects (light-headedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear on reduced dosage. Hypersensitivity reactions develop infrequently.

ALSO AVAILABLE: Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.)
Robaxisal® (methocarbamol with aspirin) and Robaxisal-PH Tablets (methocarbamol with Phenaphen®).

REFERENCES: 1. Soto-Hall, R.: Med. Sci. *14*:23, 1963. 2. McCarrol, H.R.: Paper read at the Annual Meeting of the American Medical Association, Atlantic City, June 16-20, 1963. See Medical News: J.A.M.A. *185*:39 (July 13), 1963. 3. Gordon, E.J.: Med. World News *5*:54, 1964. 4. Cozen, L.: GP *26*:82, 1962. 5. Larson, C.B.: Postgrad. Med. *26*:142, 1959. 6. Forsyth, H.F.: J.A.M.A. *167*:163, 1958. 7. Weiss, M., and Weiss, S.: J. Amer. Osteopath. Ass. *62*:142, 1962. 8. Rowe, M.L.: J. Occup. Med. *2*:219, 1960.

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Reports & Snorts

What is yellow, smooth, and dangerous? According to Bennett Cerf, the answer is "shark-infested custard." Another possibility: a jaundiced call girl.

• • •

The National Science Foundation says that the pharmaceutical industry pays 98% of the cost of the research and development it conducts. The aggregate sum budgeted in 1964 was $313,000,000.

• • •

It's possible that a surgical scalpel which cuts with a flame of super-hot "plasma"—ionized gas, electromagnetically confined and directed—will be available soon. It's undergoing tests in a San Francisco laboratory now.

• • •

Smoking cigarettes sharply increases the quantity of carcinogenic ortho-aminophenols excreted in the urine. Another statistical relationship seems to be moving into the causal area.

• • •

Does painting intrigue you? Acrylic plastic art colors that mix with water but work and look like oil, dry in half an hour, and fade little in sunlight, are available in 2-ounce tubes from California Products, Dept. MWN (this is so *Medical World News* will get the credit for the inquiry: we lifted the item from them), 169 Waverly Street, Cambridge 39, Mass. Around a dollar a tube, according to the color.

• • •

Squibb, Geigy Chemical, "American Home Products," so help us! and three other pharmaceutical firms, are sponsoring tests of DMSO, dimethyl sulfoxide, which will be curing sprained ankles and lubricating arthritic joints, loosening tight kidneys, cleaning up Athlete's Foot, and tranquilizing the untranquil by, hopefully, 1966 or 1967.

• • •

Smith, Kline & French (1500 Spring Garden St., Philadelphia, Pa. 19101) will send you, if you ask them, a remarkable catalogue of available movie shorts on topics suitable for doctors, nurses, or lay groups; of booklets and pamphlets on medical topics; of resuscitation training materials; it tells of their speakers' bureau, and their medical color TV. No charge is made for these. Ask for SKF "Catalog of Services."

• • •

A job the AMA was invited to undertake a few years back—and one they refused to touch—has been started by the NAACP. They have charged 41 Southern hospitals with discrimination against Negro physicians, and if they can make the charges stick, HEW may withdraw federal financial support from the hospitals concerned.

• • •

If you haven't noticed the new gimmick in the Reference Directories of medical meetings in the front pages of *JAMA*, take a look. Each successive month in the roster is headed by a calendar page for that month, so you can tell at a glance what days of the week each meeting occupies. Orchids to Dr. John Talbott for this journalistic inspiration!

• • •

Beware of what seems like systemic LE if the patient has been given procainamide hydrochloride (Pronestyl). In the May 10 JAMA is a report that Pronestyl may produce this syndrome. You'll be getting your copy about June 5, no doubt, mail service from the West Coast being what it isn't.

• • •

The AMA meeting starts Monday, June 21, in New York City. Hope you're planning to go!

• • •

A new radioisotope, fluorine-18, has been used at the University of Michigan to study bone tumors and bone metastases. It gives a positive photoscan in about an hour. ■

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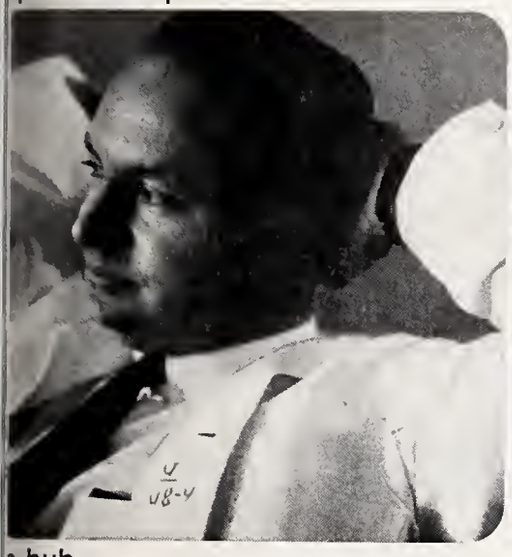

n-huh.

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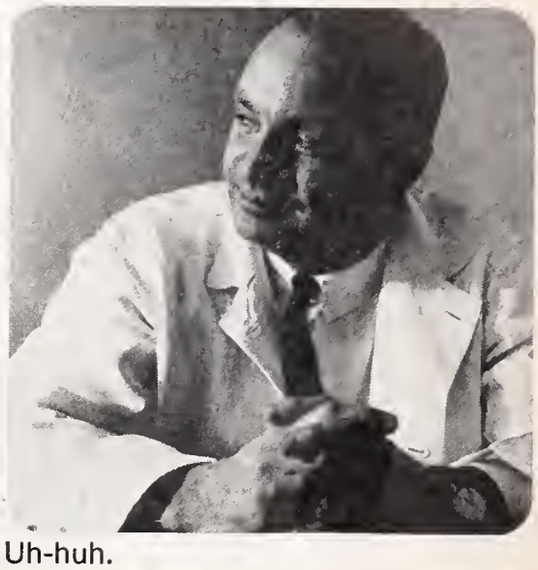
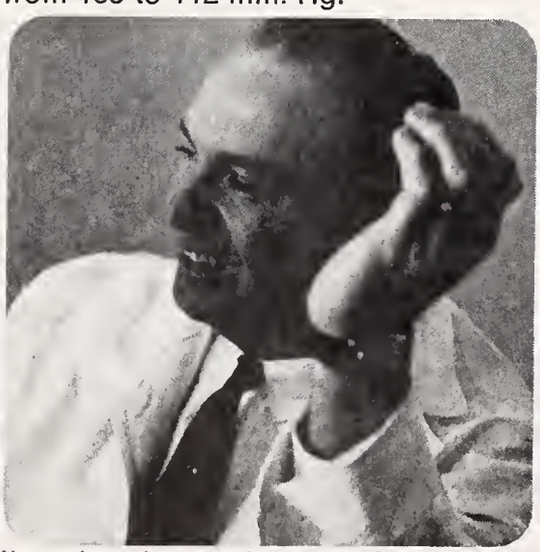


Uh-huh.

on't you even want to try it, Doctor?



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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montreal, June 14–19, 1964.

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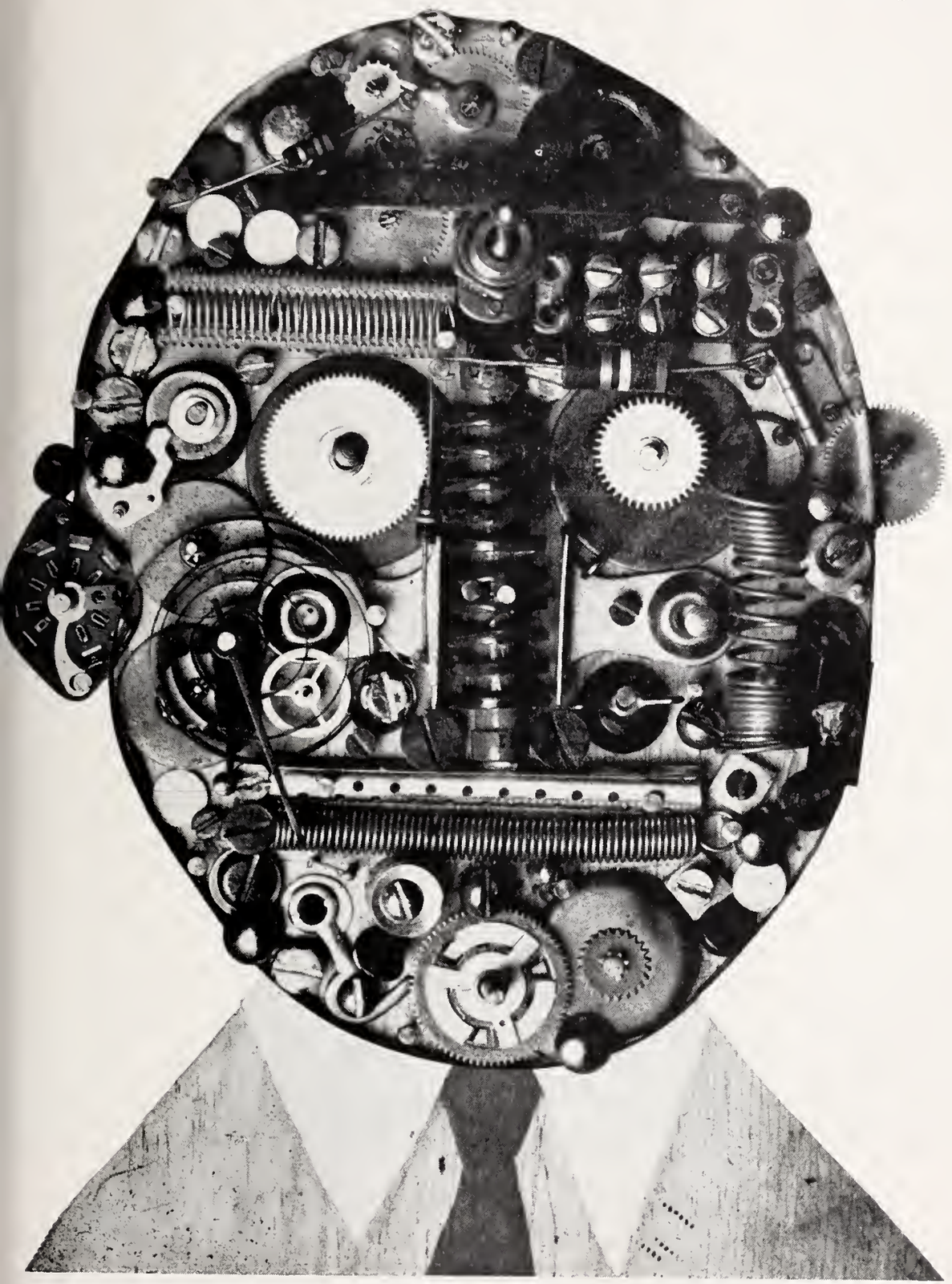

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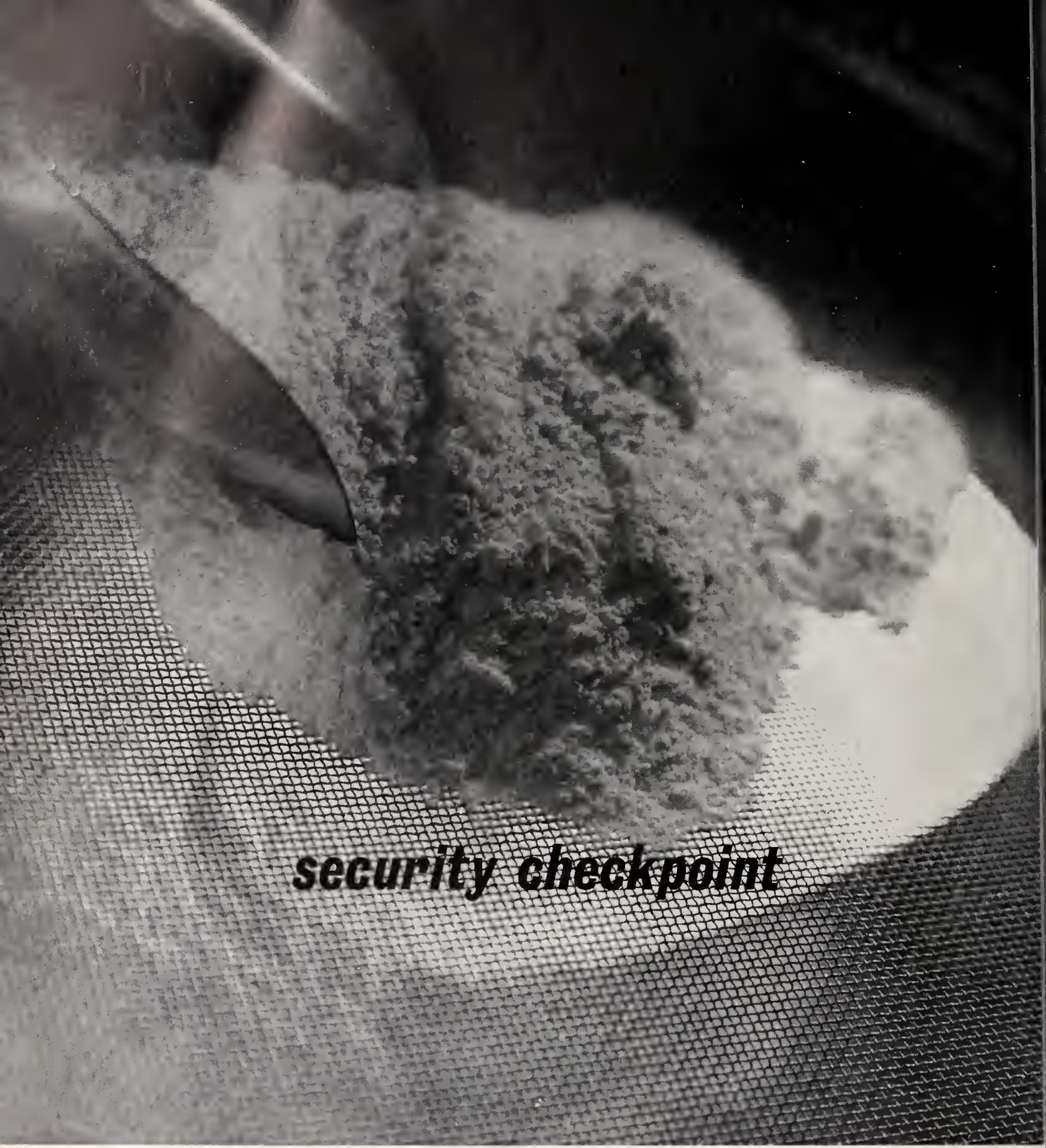

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guatera Fish Poisoning: a Symposium*

Ciguatera fish poisoning is a capricious and mysterious disease which has increased steadily in prevalence in Hawaii since 1956.

Ciguatera in the Pacific[1,2]

ALBERT H. BANNER,[3] Ph.D., *Honolulu*

• *Reef fish in Hawaii occasionally cause ciguatera poisoning when eaten, especially if the viscera are ingested. The toxin is believed to be a small-molecular phosphatide with powerful anticholinesterase activity. The first cases occurring in Hawaii were identified in 1956 and there has been a steady annual increase in incidence since that date. Experience with the disease in the South Pacific does not permit any prediction—or optimism—about its future behavior here.*

THE DISEASE known as ciguatera or ciguatera fish poisoning has been long known in the tropical Pacific. Captain Cook and members of his crew were acutely poisoned by fish, probably red snappers, in the New Hebrides in 1774. In a recent survey we found that ciguatera is a problem of varying intensity in almost all of the archipelagoes of the central Pacific, but it does not appear to extend to the Philippines or Indonesia.

Not all poisoning by fish is the same. In addition to the obvious reaction to histamine formed by the bacterial spoilage of certain fish, there are several other types of fish toxicity, including that from puffers, from certain herrings in the South Pacific, and from various other fish and invertebrates. Ciguatera is produced by one, and perhaps more, specific toxins carried in the flesh and viscera of a variety of fish.

The disease is caused by fish found in narrow geographic ranges. Within these areas, seldom more than a few miles along the reefs of an island, many species of fish, from the smaller herbivores to the larger carnivores, are capable of causing the disease. In most islands for which adequate histories are available, when fish poisoning first appears it may suddenly spread to most of the fish in the affected region—"all of the fish," the natives report, obviously meaning most of those commonly caught and eaten. Fish from the high seas, like tuna and mahimahi, are not known to cause the disease, and it is seldom caused by the bottom detrital feeders, like the mullet.

The exact cause of toxicity is not known, but our biological investigations have supported the hypothesis advanced by Randall in 1958 that the toxin probably originates in some fine bottom growth such as a blue-green alga, and is passed to the large carnivores through the smaller herbivores. We have shown that the toxin is transmissible through diet to nontoxic fish, and that it may be stored, unmetabolized and not excreted, for as long as 30 months.

The studies at the Hawaii Marine Laboratory on the chemistry of the toxin, under the direction of Dr. Paul Scheuer of the University of Hawaii, have shown it to be soluble in various polar solvents such as acetone, diethyl ether, and the lower alcohols; it cannot be leached from the flesh with water, nor is it soluble in nonpolar solvents such as hexane. Further, it is stable at cooking temperatures and over long periods under refrigeration. Thus there is no ordinary method of preparation that will render the fish safe to eat.

The pure toxin occurs in extremely small amounts in the flesh of the toxic fish; in the most highly toxic fish we recover a maximum of 4 mgm per kilogram of fish. We do not yet have a complete elemental analysis of the molecule, but from indirect evidence we believe it to be of phosphatidic nature and of small molecular size. We

* Received for publication March 12, 1965.

[1] Contribution 226, Hawaii Marine Laboratory, University of Hawaii, Honolulu 96822.

[2] This review is presented in bare synopsis, without references; readers who are interested in greater detail are referred to our earlier papers, especially Banner *et al*, 1964, Proc. Gulf and Carib. Fish. Inst. (1964): 84-89 and Banner and Helfrich, 1964, Hawaii Mar. Lab. *Tech. Rept.* No. 3.

[3] Hawaii Marine Laboratory, University of Hawaii.

also now have fragmentary evidence, both from chemistry and from pharmacology, of the presence of more than one toxin in ciguateric fish.

Our studies have shown that the toxin in the viscera is many times, perhaps as much as 50 times, more concentrated than in the flesh. The flesh, however, may be sufficiently toxic to cause coma or death.

We have not been able to develop any simple test for the presence of the toxin in fish except by bioassay. In the laboratory we use mongooses for screening potentially toxic fish; cats would work almost as well except that they tend to regurgitate test meals so that they cannot be fed with quantitative control. We are now investigating the adaptation of conventional tests for anticholinesterase activity to measure the content of ciguatera toxin in fish.

From the evidence we have accumulated, and from the September, 1964, outbreak at Haleiwa, Oahu, ciguatera poses a potential threat to public health in Hawaii. In some islands, such as Majuro in the Marshalls, within a year or two most of the fish became toxic in certain areas; in other islands, the increase of toxicity was more gradual, as in the Marquesas, where the toxicity in fish spread slowly along the coast at the rate of a mile or two a year. In other islands, as in parts of Fiji, the fish have remained at only a low level of toxicity for many years. Thus we cannot predict the conditions that may develop following this outbreak. It is worthy of note, however, that the number of recorded cases of ciguatera has been increasing in Hawaii every year since the initial outbreak from Hawaiian fish in 1956. ■

If your patient with a GI upset is sweating profusely, don't forget to ask him if he's eaten any reef fish!

Ciguatera Fish Poisoning with Cholinesterase Inhibition

Report of a Case

M. M. OKIHIRO, M.D., J. P. KEENAN, M.D., and A. C. IVY, JR., M.D., *Honolulu*

• *An intestinal upset after eating reef fish should be suspected of being due to ciguatera fish poisoning. If restlessness, apprehension, sweating, and muscle fasciculations occur, the further symptoms of tetany, areflexia, and constricted pupils should not be waited for; 2-PAM—2-pyridine aldoxime methochloride —should be started immediately, since after 24 hours it may be ineffective. Atropine, magnesium sulfate, and methylphenidate may also be useful in the management of poisoning by this stubborn and potentially fatal anticholinesterase poison.*

IN A RECENT outbreak of fish poisoning in Hawaii, two persons died of the acute illness. We had the opportunity to treat a third acutely and severely ill man from the same outbreak who fortunately managed to survive. The interesting clinical manifestations exhibited by this patient, which appeared to be those of cholinesterase inhibition, and the pharmacotherapy used in his case, are herein reported.

CASE REPORT

A 49-year-old Filipino man walked into The Queen's Hospital Emergency Room at 5 P.M. on September 7, 1964, complaining of severe diarrhea and abdominal cramps. These symptoms had begun a few hours earlier after dining at a noon party which consisted mainly of a stew containing several types of fish, including the entrails and livers. These fish, which had been caught on the reef outside Haleiwa, Oahu, were later learned to have included one "uhu" (Scarus species), one large and several small "palani" (Acanthurus dussumieri) or "puala" (A. xanthopterus or A. mata) and some "kala" (Naso unicornis). The patient had prior admissions to the hospital in 1949 and 1963 for beef tapeworm infestation, and in 1955 for left-sided optic neuritis.

The initial examination showed a well-built man who appeared restless and apprehensive and was sweating profusely. The blood pressure was 180/103, temperature 98.6°F. and pulse rate 96 per minute. The abdomen was rigid, and there was moderate epigastric tenderness, but bowel sounds were present. Initial laboratory studies included a white blood cell count of 13,900 with 87 per cent polymorphonuclear cells; serum amylase was normal; an x-ray of the abdomen showed a few loops of gas-filled small bowel, suggesting ileus.

The diagnosis of gastroenteritis was made and the patient was treated with atropine 0.65 mg, promethazine hydrochloride 25 mg, and meperidine hydrochloride 50 mg, every four hours, along with intravenous fluids. He had no further diarrhea but his general condition deteriorated, with increasing restlessness, apprehension, and marked diaphoresis. About 12 hours after admission he developed muscle fasciculations and intermittent twitching of his extremities. Twenty-four hours after admission he was dyspneic and developed respiratory wheezing and carpopedal spasm. The fasciculations were now very marked and seemed to involve every muscle of his body. Deep tendon reflexes were absent. The pupils were 2 mm in diameter, but reacted to light. The patient became stuporous; at times he could obey simple commands and mutter a few intelligible words, but for the greater part his speech was incoherent.

Shortly after this it was learned that two of the patient's friends, who had eaten the same fish at the same party, had died at other hospitals. The doctor of one of these patients alerted us to the possibility of fish poisoning. One of us had been superficially acquainted with the work that had been going on at the Hawaii Marine Laboratory showing that the ciguatera fish toxin was a cholinesterase inhibitor. After a call to Dr. A. H. Banner and Kwan-Ming Li of the University of Hawaii it was decided to try 2-pyridine aldoxime methochloride.

Accordingly, some 29 hours after admission, the patient was given one gram of 2-pyridine aldoxime methochloride intravenously over a period of about five minutes. The results were startling, unexpected, and almost disastrous. The patient became acutely restless and nauseated, and began to retch. He became cyanotic, and tried to sit up in bed to catch his breath; auscultation revealed marked bronchoconstriction. In a few minutes he lapsed into coma. His blood pressure shot up to 200/120 and the pulse rate to 180 per minute. An attempt to pass an endotracheal tube was unsuccessful because of laryngospasm. A bedside tracheostomy was performed, and with assisted respirations and oxygen therapy his color improved. During this period he exhibited a rapid diuresis (1,200 cc in three hours).

At this point the dosage of atropine was increased to 2 mg at intervals of 30 to 60 minutes. The muscarinic manifestations seemed well controlled, but the patient continued to fasciculate profusely and had frequent generalized twitching. Two further but smaller 250 mg doses of 2-pyridine aldoxime methochloride were given slowly at half-hour intervals without significant beneficial effect, and in view of what happened with the larger dose, it was decided to abandon this course of therapy. Perhaps there may have been a slight, transient decrease in the intensity of the fasciculations, but this effect was certainly minimal.

Thirty-two hours after admission the use of magnesium sulfate was proposed, and 10 cc of the 25 per cent solution was given intravenously. There was an immediate marked decrease in the fasciculations; the blood pressure fell to normal and the pulse slowed down. This favorable response lasted for about 45 minutes. The patient was still unresponsive but after this initial encouraging response he was given 5 to 10 cc of 25 per cent magnesium sulfate intramuscularly almost hourly, titrating this drug against the severity of the fasciculations.

Thirty-six hours after admission a trial of 7.5 mg of tubocurarine chloride was given. This drug also resulted in a satisfactory decrease in fasciculations but in view of the possibility of the paralytic effects of d-tubocurarine, no further doses were administered. It was decided to continue with the combined atropine and magnesium sulfate therapy.

At 40 hours after admission the patient showed some atropine effect, with a full, bounding pulse, hot dry skin, and moderate dilatation (4 mm) of his pupils. He remained unresponsive and had bilateral extensor plantar signs. The atropine was temporarily decreased to 0.65 mg every four hours.

Forty-eight hours after admission his level of consciousness had improved, and he opened his eyes and protruded his tongue on command. However, he again became restless and diaphoretic, and started to hyperventilate, so that the atropine and magnesium sulfate was increased. The patient became deeply comatose again, and his temperature rose to 106°F. rectally. Measures to cool the patient were successfully initiated but there was no change in the level of consciousness.

Fifty-six hours after admission he was given 5 cc of ten per cent calcium gluconate intravenously. There was no immediate change, so 45 minutes later 20 mg of methylphenidate hydrochloride was given intravenously, with dramatic

results. From a deeply comatose state the patient rapidly regained consciousness; he commenced swallowing, responded to questions, and began to follow directions.

From this point on the patient recovered uneventfully. He continued to have some fasciculations, primarily in the quadriceps and calves, and the deep tendon reflexes were still hypoactive. A serum cholinesterase level taken on the fifth day was 39 pH units (normal=50 to 100 pH units). On the seventh hospital day, for the first time, no muscle fasciculations were evident, the deep tendon reflexes were normal, and the patient was ambulatory. A week later the serum cholinesterase level was 77 pH units. The tracheostomy tube was removed, and he was discharged on September 19, 1964.

During the acute illness the patient received 33.60 mg of atropine and 20.25 gm of magnesium sulfate.

DISCUSSION

The clinical manifestations of ciguatera poisoning have been recently discussed by Helfrich.[1] The recent work done by Li[2] at the Hawaii Marine Laboratory of the University of Hawaii has convincingly shown that the ciguatera fish poison is a potent cholinesterase inhibitor.

The signs and symptoms exhibited by our patient were certainly compatible with those of anticholinesterase toxicity, such as is seen in the "cholinergic crisis" of overtreated myasthenic patients[3, 4] and in toxicity due to organophosphate ester poisoning.[5] The muscarinic signs and symptoms shown by our patient included profuse diaphoresis, nausea, vomiting, diarrhea, abdominal cramps, and respiratory wheezing. The nicotinic manifestations included muscle fasciculations, weakness, and absent deep tendon reflexes. The central nervous system manifestations included restlessness, stupor, and finally coma.

Another factor suggesting that this fish poisoning was due to an anticholinesterase is the great tolerance exhibited by our patient to large doses of atropine. This has been noted in patients who have been poisoned by the organophosphate esters.[5, 6] Doses as high as 50 mg of atropine per day have been used.[7]

Unfortunately we did not get a serum cholinesterase level on our patient until the fifth day of his illness. By this time the patient was well on the road to recovery, and only exhibited a few spontaneous fasciculations in his calves. Nevertheless, the serum cholinesterase level was still depressed, and only returned to normal a week later.

Except for the chloride radical 2-pyridinealdoxime methochloride is similar to pyridine-2-aldoxime methiodide (2-PAM), which is one of the safest and one of the most effective of a group of drugs called the oximes, known as cholinesterase regenerators. It was introduced by Wilson and Ginsburg[8] as a specific antidote for the toxic effects of anticholinesterase compounds, and it has been successfully used in the treatment of organophosphate poisoning in many instances[7] since the first case reports by Namba and Hiraki in 1958.[9] Its effectiveness is enhanced several fold when it is used in combination with atropine.[10] Li[2] found 2-PAM to be very effective in protecting the experimental animal from the ciguatera fish poison. This drug is said to be quite free of serious side effects.[11] However, as noted in the case report, our experience with this drug was quite disturbing. Certainly, 2-PAM had no beneficial effect; it even seemed as though it had aggravated the toxic state.

However, the drug was not used until about 34 hours after the ingestion of the toxic fish, and there is evidence to show that 2-PAM is ineffective unless administered early in the course of the poisoning. Hobbiger[12] first noted this, and theorized that after a period of time the cholinesterase enzyme is phosphorylated in such a way that it cannot be regenerated. This has been termed his "transphosphorylation theory." O'Brien[13] has referred to this as the phenomenon of aging.

It is quite probable that the sudden collapse following the administration of 2-PAM in our patient may have been due to the anticholinesterase activity of 2-PAM itself. Loomis[14] showed that 2-PAM in large doses can inhibit serum cholinesterase. Bergner and Wagley[15] noted that 2-PAM would reactivate cholinesterase, but if allowed to remain in contact, it inhibited the reactivated enzyme. Grob and Johns[16] showed that 2-PAM can produce neuromuscular block if given in large doses, and this effect was enhanced by the prior administration of cholinesterase inhibitors.

It does appear, then, that the factor of timing is important, and that a delay in diagnosis may preclude the use of this valuable antidote. If the diagnosis of anticholinesterase poisoning cannot be made in the initial 24 hours, great caution should be exercised in using 2-PAM. If an early diagnosis of ciguatera fish poisoning can be made, we would certainly advocate using this drug.

As noted in the case report, one dose of d-tubocurarine was given, with temporary relief of the nicotinic signs and symptoms. This drug, which acts competitively with acetylcholine for the receptor protein of the neuromuscular endplate, has been used by others in similar situations.[17] However, it is felt that the use of this substance is too hazardous in view of the fact that

the difference between the effective dose and the dose which produces paralysis is quite small.[16]

After our almost disastrous result with 2-PAM we decided to try magnesium sulfate. By this time the muscarinic signs and symptoms had been well controlled with atropine, but the patient continued to twitch and fasciculate all over. As noted in the case report, the parenteral use of magnesium sulfate resulted in a satisfactory response which lasted for approximately 45 minutes when it was administered intravenously and almost twice as long when it was administered intramuscularly.

The main effect of magnesium is to decrease the amount of acetylcholine liberated from the nerve ending.[18] Katz[19] stated that the calcium ion is required as a co-factor in the enzymatic release of acetylcholine, and it is antagonized by the magnesium ion. Magnesium sulfate has been found to effectively prevent the nicotinic effects of anticholinesterase compounds in experimental animals, and this effect is much greater if it is used in combination with atropine.[20] Apparently magnesium sulfate has been used in combination with atropine for the clinical treatment of organophosphate poisoning such as that produced by nerve gases.[20]

This drug is rapidly excreted through the kidneys, and its main effect is peripheral. The dosage of this substance can easily be titrated against the patient's fasciculations; and if there is any question of central nervous system depression from excessive magnesium, this can promptly be counteracted by the use of intravenous calcium. We feel that magnesium sulfate played an important role in tiding our patient over until he was able to regenerate or re-form more cholinesterase on his own.

Although the central nervous system depression was initiated by the fish poisoning and aggravated by the administration of 2-pyridine-aldoxime methochloride, the final comatose state may well have been the added result of the overzealous administration of atropine or magnesium sulfate, or both. Our own opinions are divided on this final point. While the cumulative effect of magnesium sulfate may have played a part in the CNS depression, the patient had a good urinary output at all times and he did not respond immediately to calcium gluconate. One of us feels that this was more likely due to the cumulative effect of atropine.

SUMMARY

The case report of a 49-year-old Filipino man with severe ciguatera fish poisoning has been presented. Two of his friends who ate the same fish died. The clinical manifestations exhibited by this patient were those of cholinesterase inhibition with muscarinic, nicotinic, and central nervous system signs and symptoms.

A cholinesterase regenerator, 2-pyridine-aldoxime methochloride, was used, with unexpected aggravation of the toxic state. It is felt that this was the result of a combination of the "aging phenomenon" and the anticholinesterase activity of 2-pyridine-aldoxime methochloride itself.

Finally, we were able to tide the patient over by titrating the muscarinic manifestations with atropine and the nicotinic manifestations with magnesium sulfate, and combatting the coma with methylphenidate.

Generic and Trade Names of Drugs:

Promethazine hydrochloride, Phenergan; meperidine hydrochloride, Demerol; 2-pyridine aldoxime methochloride, Protopam chloride; methylphenidate hydrochloride, Ritalin. ■

Dr. Okihiro's address is 888 So. King St., Dr. Ivy's address is 835 So. Beretania St., and Dr. Keenan is a Resident at The Queen's Hospital.

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Anticholinesterase poisoning is highly lethal at best.
In ciguatera fish poisoning, it may quickly become irreversible.

A Note on Ciguatera Fish Poison and Action of Its Proposed Antidotes*

KWAN-MING LI, B.S.,† *Honolulu*

• *Ciguatera fish poisoning is probably caused by a cholinesterase inhibitor of great potency and persistence. Atropine does not relieve its nicotine-like effects, and since the poison cannot be removed by dialysis, it is by definition an "irreversible" anticholinesterase. Administration of 2-pyridine aldoxime methochloride (protopam chloride) protects rats if it is done within an hour. It seems likely that it will prove a valuable supplement to oxygen, atropine, fluids, and supportive measures in the management of ciguatera poisoning in humans.*

IN VIEW OF a recent outbreak of ciguatera fish poisoning on the Island of Oahu on Labor Day, September 7, 1964, it appears desirable for the Hawaii Marine Laboratory, which has been undertaking a broad program of research on fish poisonings, to report recent findings and a possible antidote against the poison. Early knowledge concerning the history, distribution, biology, chemistry, possible origin, and some pharmacologic properties of the ciguatera fish poison may be found in articles by Banner *et al*[1, 2] and Helfrich.[3]

In this present note, the identification of the ciguatera fish poison as a cholinesterase (ChE) inhibitor, the mechanism of action of the antidote, the unique phenomena produced by this "irreversible" anticholinesterase, and some notes of medical interest are reported. Actual clinical experience in diagnosis and therapy of ciguatera fish poisoned patients has been reported by physicians in Honolulu.

CIGUATERA POISON: AN ANTICHOLINESTERASE

Ciguatera fish poison (CFP), which causes ciguatera, was proved to be an anticholinesterase (Li[4]). Evidence of this, as provided from experimental results, is briefly described as follows:

General effects in intact animals: Most of the muscarine-like and nicotine-like effects due to acetylcholine (ACh) excess were observed in rats and mice after poisoning. Miosis was also observed in rabbits when CFP was applied topically to the eyes, and in mongooses fed with toxic fish flesh.

Further muscarine-like effects, such as brachycardia, ventricular block, arrhythmic heart beats, and hypotension, as well as nicotine-like effects, such as an initial rise of blood pressure, displacement of the ST segment, and an initial increase in respiration followed by gasping and a more or less Cheyne-Stokes type of respiration, were also observed in the rat from Grass polygraph recordings.

Pharmacologic assays: When a small piece of rabbit intestine was suspended in warm Tyrode's solution, the resulting contractions of the intestine, after addition of ACh and blood, were smaller than that of blood primed with CFP. Much greater contractions of the intestine were obtained when the muscle was sensitized by CFP as compared with those caused by ACh alone in the same concentration. CFP alone, in the same concentration, caused no contractions.

Biochemical assays: Both the electrometric method of Michel[5] and the colorimetric method of Ellman *et al*[6] were used to assay the acetylcholinesterase (AChE) inhibitory action. The inhibitions at a very low concentration, i.e., 0.4 μg/ml or 2 μg/ml, were found to be 26 per cent and 48 per cent, respectively.

THE ACTIONS OF ANTIDOTES

Nonspecific antidotes: During and after World War II, atropine was used extensively as the sole antidote against anticholinesterase compounds of nerve gas and insecticide poisons. Atropine can ameliorate the muscarine-like effects, and to a lesser extent the central neural effects, especially

* Hawaii Marine Laboratory Contribution No. 227.
Acknowledgments: Work accomplished primarily under U.S.P.H.S. Grant EF 216, aided by P.H.S. grants EF 224 and EF 260, National Science Foundation Grant *GB404*, Office of Naval Research Contract No. 2289(00) NR 107-405, Atomic Energy Commission Contract No. AT (04-3)235. Thanks are due to Drs. A. H. Banner, H. H. Anderson and P. Helfrich for their valuable advice.
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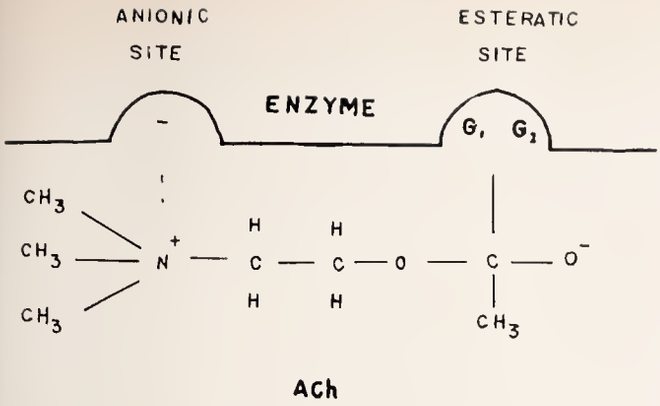

FIG. 1.—*Hypothetical picture of interaction between the active groups of acetylcholinesterase and acetylcholine.*

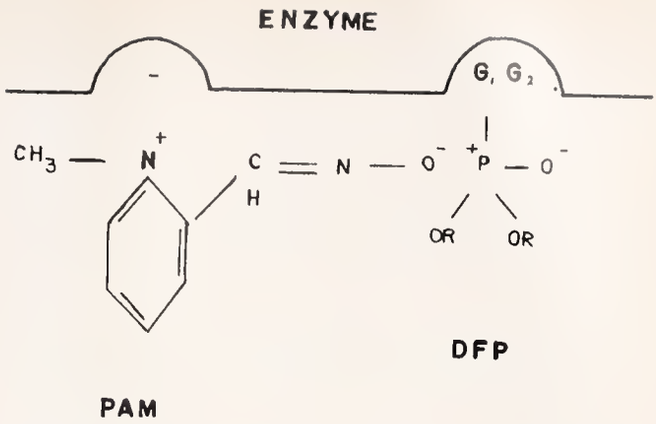

FIG. 2.—*Schematic inhibitory action of an alkyl phosphate with acetylcholinesterase and presentation of the spatial fit of 2-PAM.*

by stimulating the central respiratory center; but it has no influence on the nicotine-like effects, which cause a block at the neuromuscular junctions and ganglionic synapses. As mentioned in the preceding section, ciguatera fish poison has been described as an "irreversible" anticholinesterase. By definition, the enzyme inhibitor cannot be removed by dialysis; therefore, when the dosage of CFP is given within the fatal range, treatment with atropine can hardly save the life of an animal.

Magnesium sulfate can abolish the nicotine-like effects,[7] but it is usually not recommended because it will produce further muscular weakness resulting from decreased muscle excitability and contractility, reduction in blood pressure resulting from vasodilation, and depression of the central nervous system.[8] Tests with various synthetic parasympatholytic agents have not shown any of these compounds to be significantly more effective than atropine.[9]

Specific antidotes: During the past several years, many investigators of nerve gases and insecticides have demonstrated that cholinesterase may be reactivated by derivatives of hydroxamine acid [R–C(=O)–R], and to a greater extent by a number of oximes [R–C(=NOH)–R], with a reduction in lethal effects, although species differences in response occur.

The mode of inhibitory action of an "irreversible" anticholinesterase may be illustrated with an alkyl phosphate reacting with acetylcholinesterase. After splitting, the resulting phosphonium ion $[(RO)_2PO]^+$ combines irreversibly with the enzyme (at the esteratic site) to form a phosphorylated enzyme (Fig. 2). Since the acid group (G_1) is inactive, the combining rate is slow; but once combined it becomes "irreversible." In this way the active center of the enzyme is "permanently" inactivated through covalent bonding of the dialkyl phosphate radical.

Since the anionic site in the phosphorylated enzyme is more or less free, Wilson[10] believed an agent such as hydroxylamine linked to a cationic nitrogen group might be able to greatly promote the reaction, just as the methylated nitrogen in ACh makes this ester a many thousands of times better substrate of the enzyme than ethyl acetate. His hypothesis was first proved by synthesizing a quaternary nitrogen group to a hydroxamic acid.

Wilson and Meislich[11] conducted further investigations and developed a highly powerful reactivator called 2-PAM (2-pyridine aldoxime methiodide), which was synthesized early in 1955 (Wilson and Ginsburg).[12] The spatial arrangement of the molecule enables the nucleophilic oxygen of the 2-PAM to be directed against the electrophilic P atom of the inhibitor attached to the enzyme. A schematic presentation of the spatial arrangement according to Wilson is shown in Fig. 2.

At present, protopam chloride is preferred to 2-PAM because it avoids certain side effects in clinical use due to the iodide ion. It also has an excellent water solubility at all temperatures and a high potency per gram dose due to its low molecular weight.

UNIQUE PHARMACOLOGIC PHENOMENA PRODUCED BY "IRREVERSIBLE" ANTICHOLINESTERASE COMPOUNDS

Many unique pharmacologic properties of the organophosphorus anticholinesterase compounds are reported by various investigators. Most of them are also noted in ciguatera fish poison.

"Aging" phenomenon: Grob[8] pointed out that reactivation of the inhibited enzyme becomes less after prolonged exposure to anticholinesterase compounds. O'Brien[13] explained that this could be due to the phenomenon of aging in which phosphorylation first forms phosphorylated enzyme I, which gradually changes to a second form,

phosphorylated enzyme II. Type I, but not Type II, can readily be dephosphorylated by appropriate nucleophilic agents. Experiments using nicotinhydroxamic acid methiodide showed that after a 10-minute contact of plasma cholinesterase with diisopropylfluorophosphate (DFP), 20 per cent of the phosphorylated enzyme was not restorable. This increased to 40 per cent after 30 minutes' contact.

Data accumulated thus far indicate a similar irreversible reaction takes place with ciguatera fish poison (CFP). Preliminary experiments with rats showed that protopam chloride could safeguard the animal's life from twice the lethal dose of CFP, if given intravenously within a two-minute period. If protopam chloride was given an hour after the administration of CFP, it could only protect the animal from one lethal dose; after two hours, it could hardly protect the animal at all.

The mechanism of this aging phenomenon still remains unexplored.

Residual effects: Heath[14] reported that demyelination of axon sheaths and degeneration of the axons have been observed in the peripheral nerve and spinal cord in experimental animals following the administration of DFP. A few instances of persistent paralysis of the extremities, with muscle atrophy and loss of tendon reflexes, have occurred following exposure to parathion, mipafox, malathion, and EPN (O-ethyl-O[4-nitrophenyl] phenylphosphonothioate). Electromyographic studies have shown no evidence of a neuromuscular block, but have revealed changes similar to those seen in peripheral neuritis. This disorder resembles the peripheral neuritis and demyelination that occurs with frequency after acute or chronic exposure to triorthocresylphosphate.[8]

During an outbreak of moray eel poisoning in Saipan in 1950,[15] several patients after recovery had alopecia, foot drop, tongue deviation, and atrophy, as well as an ulnar palsy, which developed later. These sequelae are believed to be due to the residual effects of the CFP, which causes demyelination of axon sheaths and subsequent axon degeneration.

Somesthetic sensation alterations: Many somesthetic sensation alterations are experienced by ciguatera poisoned patients, such as itching, muscular pain, tingling, numbness, dysesthesia, and confusion of temperature sensations. Since the mechanism of impulse transmission is more or less the same in sensory endings as in motor endings, with the exception that the system is entirely intracellular, most of these sensations can be attributed to interferences with the ACh system.

Ciguatera-poisoned patients present a special problem in that few personal descriptions of temperature confusion are precise. To adequately explain this symptom, more thorough neurophysiologic examinations than have been done so far would be required; however, Wright's[16] explanations of this phenomenon are applicable to these patients. Since ciguatera-poisoned patients are often in a state of dysesthesia, where even a gentle touch causes pain, temperature confusion may occur, the touch of a warm object at 45-50°C giving a sensation of biting cold. This would result from the discharge of both "cool" and "pain" receptors. When the object is cold (below 10°C), however, there are few or no discharges from the "cool" receptors but many from pain receptors, and the object is felt as burning hot.

Biphasic neuromuscular block: Grob[8] reported that the characteristics of the neuromuscular block produced by most depolarizing agents depend on the degree and duration of the block. In most instances, signs of stimulation, such as muscular fasciculations, occur first. This is followed by the usual manifestations of a depolarizing block. When the block is of a severe degree or prolonged duration, the depolarizing block may change to that of the nondepolarizing type: progressive depression of successively evoked potentials, inhibition of the depolarizing action of acetylcholine, and reversal of the block by acetylcholine or anticholinesterase compounds.

The second phase of the block may be similar in mechanism to the "desensitization" block produced by acetylcholine, although the latter is not reversible by acetylcholine or anticholinesterase compounds. In both instances, prolonged or intensive exposure of the end-plate receptors to the depolarizing agents appears to result in altered sensitivity of these receptors to the physiologic transmitter.

There is some evidence that the excitation mechanism of the entire muscle membrane may be interfered with, and that the membrane-contractile link may be blocked.[17] Nachmansohn[18] also suggested that DFP may react directly on the receptor membrane in addition to cholinesterase inhibition, thereby causing block without depolarization. Miguel[19] observed that DFP in doses over 1.5 mg/ml can evoke contractions of the isolated frog rectus muscle while a dose of 1 mg/ml or less is far in excess of that necessary to inactivate the cholinesterase of the muscle completely. Taylor[20] found some evidence that a Phase II block by depolarization is due in part to penetration of the muscle fibers by the drug. Preliminary studies show that this Phase II block can also be produced by ciguatera fish poison.

CLINICAL REMARKS

The suggestions for diagnosis and therapy in

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Radioiodinated rose bengal can be followed from the blood stream through the liver into the gut, and it tells a lot!

The Radioactive Rose Bengal Test – Its Use in the Diagnosis of Liver Disease

RICHARD R. KELLEY, M.D.,* *Honolulu*

• *Rose bengal dye labelled with I-131 is abstracted rapidly from the blood stream—half of it in 20 minutes—by the liver cells, and its removal from the blood, and subsequent passage through patent bile ducts into the intestine, can easily be followed by external scintillation counters. The method is extremely trustworthy in the diagnosis of hepatocellular dysfunction and biliary obstruction.*

THE detection of liver disease and the differentiation between primary parenchymal damage and that secondary to extrahepatic biliary obstruction has long been a clinical and laboratory problem. None of the laboratory tests developed has been entirely satisfactory. This has led to the use of multiple tests or "liver panels" using dyes, protein precipitations, and determinations of the serum levels of the various metabolic products of this organ. Both sensitivity and specificity have been variable and none has been entirely reliable in the diagnosis of extrahepatic biliary obstruction according to many authorities.[4, 5, 19]

Rose bengal is a dye which is rapidly removed from the blood stream by the liver and the percentage retention in the serum at eight minutes has been commonly used as an indicator of hepatic parenchymal disease.[1, 2, 4, 7, 15, 21] The results are approximate to the sulfobromphthalein (Bromsulphalein) or (BSP) excretion although some have felt the BSP test to be more sensitive than the rose bengal test, especially when using a 5 mg/kg body weight dose of BSP.[15]

The introduction of radioactive iodine (I-131) into the rose bengal molecule by Taplin *et al* in 1955 permitted the use of very small doses and allowed one to trace the flow of the excreted dye down the biliary tree into the intestine by external scintillation monitoring.[22] In this way, an ordinary dye test immediately became one which could be used in jaundiced patients and which could also document the patency of the biliary tract. Reports to date have generally confirmed the initial expectations[8, 9, 16, 17] although some have been less enthusiastic, depending on the method employed.[14]

This communication will describe the radioactive rose bengal test method used at The Queen's Hospital and present the results of its use in 35 patients.

METHODS AND MATERIALS

Rose bengal (Fig. 1), a fluorane derivative of a xanthine dye is, like BSP, rapidly and almost selectively removed from the blood by the polygonal cells of the liver. It is excreted into the bile and flows into the gallbladder and the duodenum. There is little, if any reabsorption by the intestine. It may be recovered in the stool in quantitative amounts. In the rat, as has been shown by paper chromatography and electrophoresis, the dye is carried initially almost entirely by the plasma, with

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Received for publication April 16, 1964.

about 75 per cent found in the albumin and the rest distributed evenly among the globulin fractions. Less than one per cent enters the red cells. Radioautography of the liver has shown a high concentration in the vicinity of the central veins. Small amounts are found in the kidney cortex and a variable amount is secreted by the stomach and intestinal mucosa.[13]

In the present study all patients were treated at least two hours postprandially. Where possible, the patient had fasted overnight. Forty to seventy microcuries of radioactive-iodine-labeled rose bengal in a volume of less than 2 cc was rapidly injected into an antecubital vein. The total amount of rose bengal injected varied from approximately 0.1 to 1.0 mg. At least 24 hours were allowed between a BSP test and a rose bengal test. The BSP test at this hospital is done using a modified method of Mateer *et al.*[11] A 5 mg/kg body weight dose is given and the sample of blood is drawn at 30 minutes. Normal BSP retention is less than 10 per cent in this hospital.

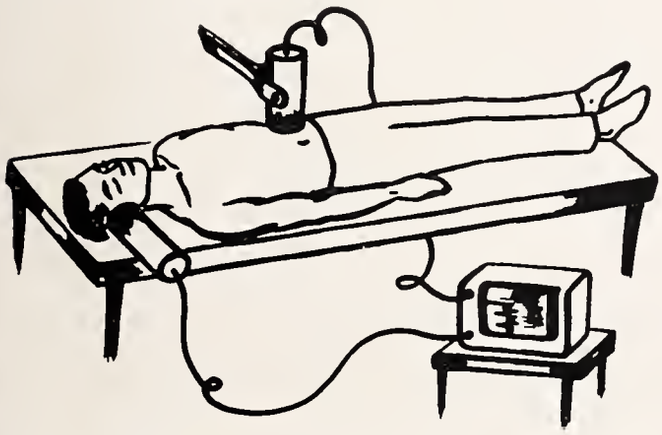

FIG. 2. *Placement of scintillation detectors over ear and left mid-abdomen.*

External scintillation recording was done as illustrated in Figure 2. One shielded crystal was placed over the lateral aspect of the head at the level of the ear to record the disappearance rate of the dye from the blood stream. Two cubic centimeters of oxylated blood were taken from the first 19 patients at five- to ten-minute intervals to correlate these head curves and blood levels. Head counts were recorded every one to two minutes and the results were plotted on semi-log paper. The counts at five minutes were taken as 100 per cent and the 20-minute count was compared to this figure to give a "per cent retention" figure. Nordyke[16] has established a retention of less than 51 per cent as normal.

A second shielded crystal was placed over the left side of the abdomen at the level of the umbilicus to record the entry of the dye into the intestines. At 30 minutes, if there was no increase in abdominal radioactivity, 25 Ivy dog units[6] of

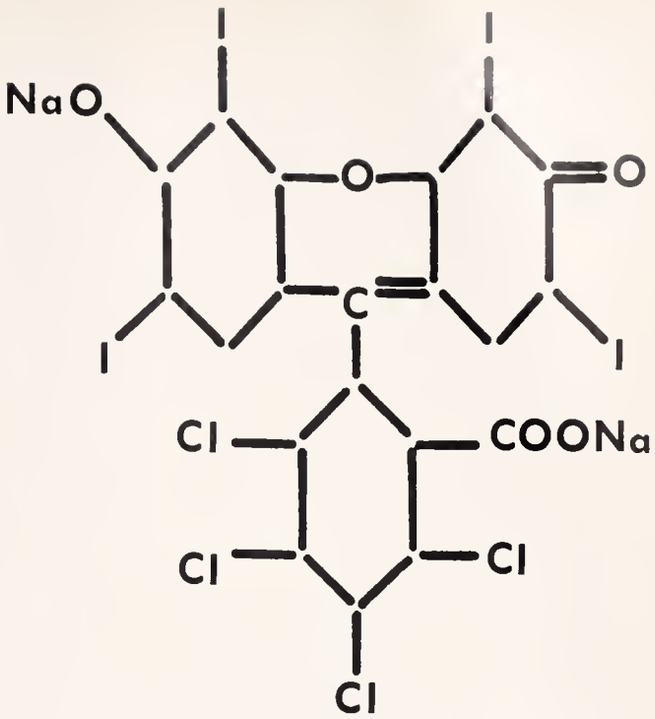

FIG. 1. *Rose bengal disodium salt. Mol. Wt. 1017.7.*

cholecystokinin* was injected intravenously. This preparation, obtained from hog duodenal-jejunal mucosa, causes contraction of the gallbladder and expulsion of its contents down the common duct into the duodenum.[3, 6] If still no increase occurred, the injection was repeated in 15 minutes followed by 200 cc of milk by mouth if possible. In a few cases where hepatic uptake was markedly decreased or if the patient had received certain drugs which close the biliary tract, it was necessary to allow the patient to return in two to four hours before the patency of the bile ducts could definitely be established. If there was still no evidence

* As Cecekin, manufactured by Vitrum, Stockholm, Sweden.

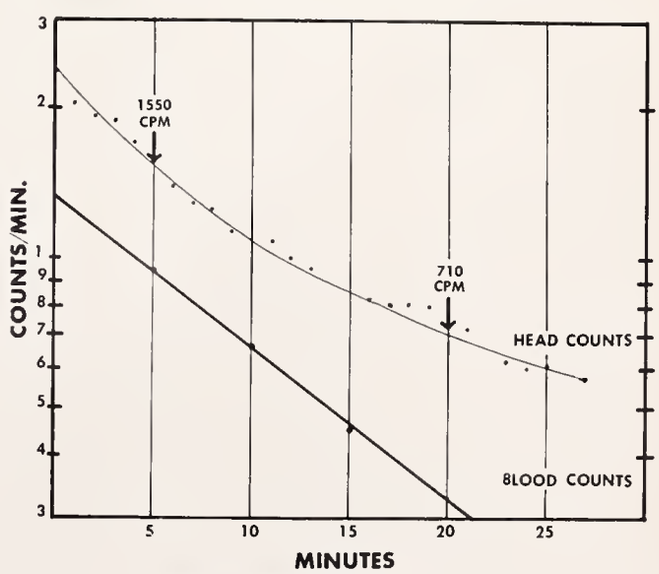

FIG. 3. *Normal radioactive rose bengal blood disappearance curves as recorded by external ear monitoring and direct blood samples. Percentage retention = 20 minute/5 minute ratio × 100.*

of rose bengal in the abdomen at this point the patient was said to have biliary obstruction.

RESULTS

The typical response is shown in Figure 3. The blood levels and head counts fall rapidly, with the curves roughly paralleling each other. The head curve shows a decreasing rate of descent while the blood curve maintains a straight-line exponential course. This difference, thought to be due to tissue-binding of the dye, is constant enough so that external scintillation counting is a satisfactory reflection of blood disappearance and multiple venipunctures can be avoided.[16]

The abdominal probe recorded the appearance of radioactivity in the intestines (Fig. 4). The initial decrease in activity represents the disappearance of the dye from the blood in the area of the abdomen under the probe. When bile containing the radioisotope is secreted into the intestines, there is a sharp increase in the rate of counting. Most patients with patent biliary tracts responded within 15 minutes to the cholecystokinin, but some required a second dose, or milk. In some patients merely mentioning food caused bile flow adequate to be picked up by the counters. In one patient with severe hepatocellular damage and an 87 per cent rose bengal retention by head counting, there was no flow after two injections of cholecystokinin. When a third injection was given, 3½ hours later, there was a prompt excretion of rose bengal into the intestines. Presumably the first two attempts failed because the liver had not yet secreted enough dye into the gallbladder to be recorded.

The results of the 35 cases are summarized in Figure 5 and Table 1. There were four cases with extrahepatic biliary obstruction including one common duct stone, one carcinoma of the ampulla, and one carcinoma of the pancreas. The fourth case had a duodenal ulcer which obstructed the common duct with presumed edema and inflammatory reaction. A repeat examination one week later showed no evidence of obstruction and a normal 20-minute retention.

There were 16 patients with a history or laboratory findings strongly suggestive of liver damage associated with excessive alcohol intake. All except three had an abnormal rose bengal retention. Tissue obtained from two of these showed a normal liver in one and fatty metamorphosis in the other. Seven were icteric at the time of examination. None showed obstruction to rose bengal.

The four patients with hepatitis were well within the abnormal range. Two had acute and two chronic hepatitis.

Three of the cases listed under miscellaneous liver damage were found to have carcinoma involving the liver. One was diagnosed as biliary cirrhosis. Three were felt to have chronic passive congestion of the liver secondary to cardiac failure.

Two of the typical case histories are presented as an illustration of the use of the rose bengal test. Exploratory laparotomy later proved the rose bengal test correct in each case.

CASE HISTORIES

CASE 1.—A 62-year-old Filipino man was found to be icteric during a routine physical examination. There were no symptoms except a low backache

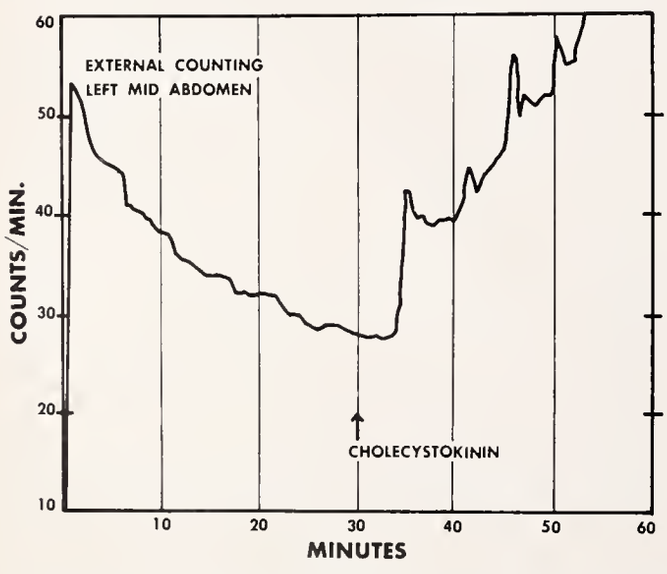

FIG. 4. *Radioactivity in left mid-abdomen falls, paralleling blood disappearance, and then rises as the radioactive rose bengal is excreted into the intestines.*

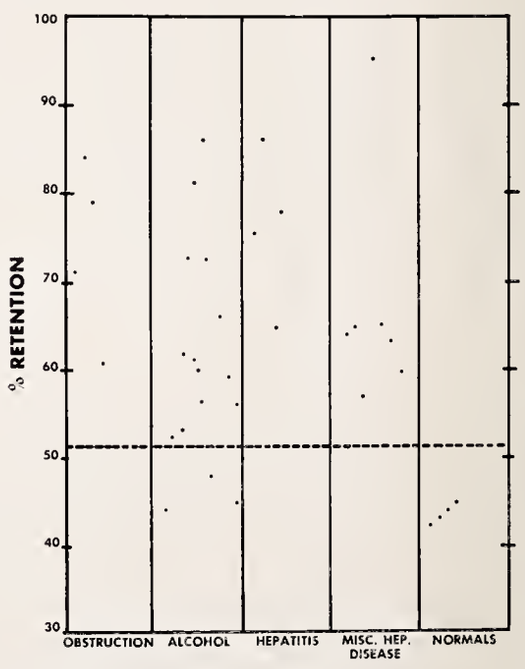

FIG. 5. *Rose bengal retention in 35 patients recorded by external ear monitoring. (20 minute ratio times 100).*

TABLE 1.—*Radioactive rose bengal blood retention in 35 patients.*

	CASE NO.	CLINICAL DIAGNOSIS	ROSE BENGAL % RETENTION	REMARKS
PARENCHYMAL DAMAGE *** NOT OBSTRUCTED	4	Chronic Alcoholism	44	Prothrombin 100% Kunkle 7.7 Albumin 4.5 gm% Globulin 2.8 gm%
	5	" "	53	
	7	" "	63	BSP 25%
	8	" "	52	BSP 6%
	11	" "	62	BSP 14%
	12	" "	56	BSP 21%
	13	" "	48	BSP 5% Bx: "Fatty metamorphosis"
	19	" "	67	BSP 27%
	22	" "	60	BSP 29%
	23	" "	45	Liver normal at autopsy
	25	" "	56	BSP 13%
	28	" "	87	
	29	" "	73	BSP 44%
	30	" "	73	
	31	" "	81	
	32	" "	59	
	9	Hepatitis, Chronic	86	
	20	" Chronic	64	
	21	" Acute	75	
	35	" Acute	73	
	6	Cong. Heart Failure	60	
	14	Carcinoma of Breast	65	Hepatic Metastasis
	15	Biliary Cirrhosis	95	
	16	Carcinoma of Stomach	57	Hepatic Metastasis
	26	Hepatoma	64	BSP 31%
	32	Cong. Heart Failure	60	
	34	Cong. Heart Failure	73	
EXTRA HEPATIC OBSTRUCTION	2	Duodenal Ulcer	71	Patent on repeat 1 week later
	3	Carcinoma of Pancreas	84	
	17	Carcinoma of Ampulla	79	
	18	Common Duct Stone	61	
NORMALS	1	Pyelonephritis	48	
	10	Psychoneurosis	44	
	24	Pyelonephritis	46	
	27	Cholecystitis	43	

which radiated down the left leg. On physical examination, he had scleral icterus. The liver was felt two finger-breadths below the right costal margin and was not tender. No masses were felt. The left lower leg was hypesthetic and the left ankle jerk was decreased. On the right there was an extensor plantar reflex and unsustained ankle clonus.

Laboratory work included the following: a normal urinalysis except for a positive test for bile (Harrison-Fouchet method) and a negative test for urobilinogen (Wallace-Diamond method), thymol turbidity 6.5 units (N=0-5), alkaline phosphatase 4.5 Bodansky units (N=1-4), total bilirubin 12.0 mg%, direct bilirubin 7.0 mg%, prothrombin activity 100%, packed cell volume 30%, WBC 11,200 with a normal differential.

The radioactive rose bengal test showed a 79 per cent retention with no evidence of excretion into the intestines after two doses of cholecystokinin. (Fig. 6, A & B).

At surgery, a grade II adenocarcinoma of the ampulla of Vater was found obstructing the biliary tract.

CASE 2.—A 60-year-old Caucasian man complained of fatigue of approximately six months' duration. There had been a gradual decrease in appetite, the appearance of a bitter taste in the mouth, and a weight loss of 10 to 14 pounds. His urine had become slightly darker and there was some abdominal distention and flatulence. He denied pain, fever, chills, clay-colored stools, excessive alcoholic intake, injections, or blood transfusion. His only medications were vitamin pills.

On physical examination, he had icteric sclera. There were no angiomata. The liver, felt 3 finger-breadths below the right costal margin, was described as "firm and nodular." No ascites was present and the spleen was not felt.

An oral cholecystogram showed a "poorly visualized" gallbladder. A GI series and barium enema were negative except for diverticulosis of the colon.

Laboratory studies showed a total bilirubin of 6.9 mg%, direct bilirubin 2.4 mg%, indirect bilirubin 4.5 mg%, alkaline phosphatase 6.1 Sigma units (N=0.8-2.3), cholesterol 297 mg%, serum glutamic-oxaloacetic transaminase 202 units, serum glutamic-pyruvic transaminase 176 units, thymol turbidity 7.4 units, total protein 8.3 gm%, albumin 3.0 gm%, globulin 5.3 gm%, prothrombin activity 56% after vitamin K injection.

The rose bengal retention was 86 per cent and the dye flowed promptly into the intestines after cholecystokinin (Fig. 7, A & B).

The jaundice persisted with fluctuation of the total bilirubin between 4.7 and 6.9 mg% for a two-month period. Laparotomy at that time showed a grossly nodular liver. The gallbladder, common duct, and hepatic radicles were found to be free of stones. The ampulla appeared normal. Microscopic sections of the liver showed a chronic hepatitis and posthepatitic type of cirrhosis.

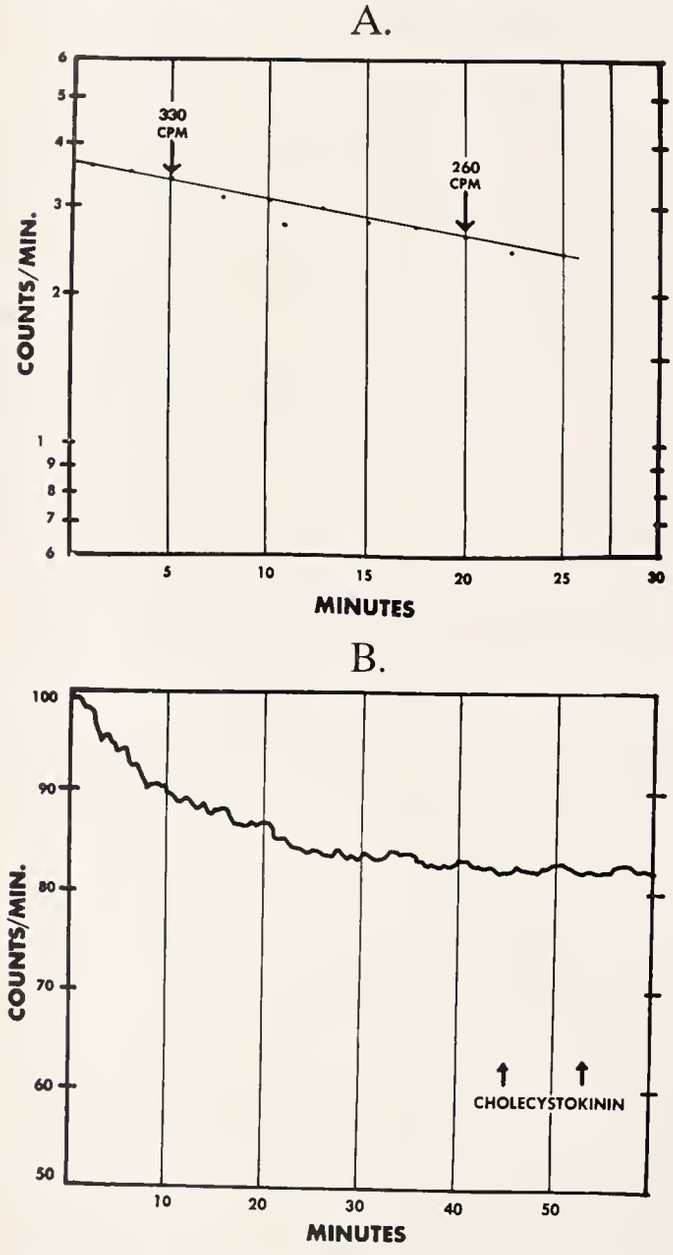

FIG. 6. *Case 1—Extrahepatic obstruction. A. Rose bengal blood disappearance curve showing increased retention at 20 minutes (79 per cent). B. There is no evidence of excretion of rose bengal into the intestines.*

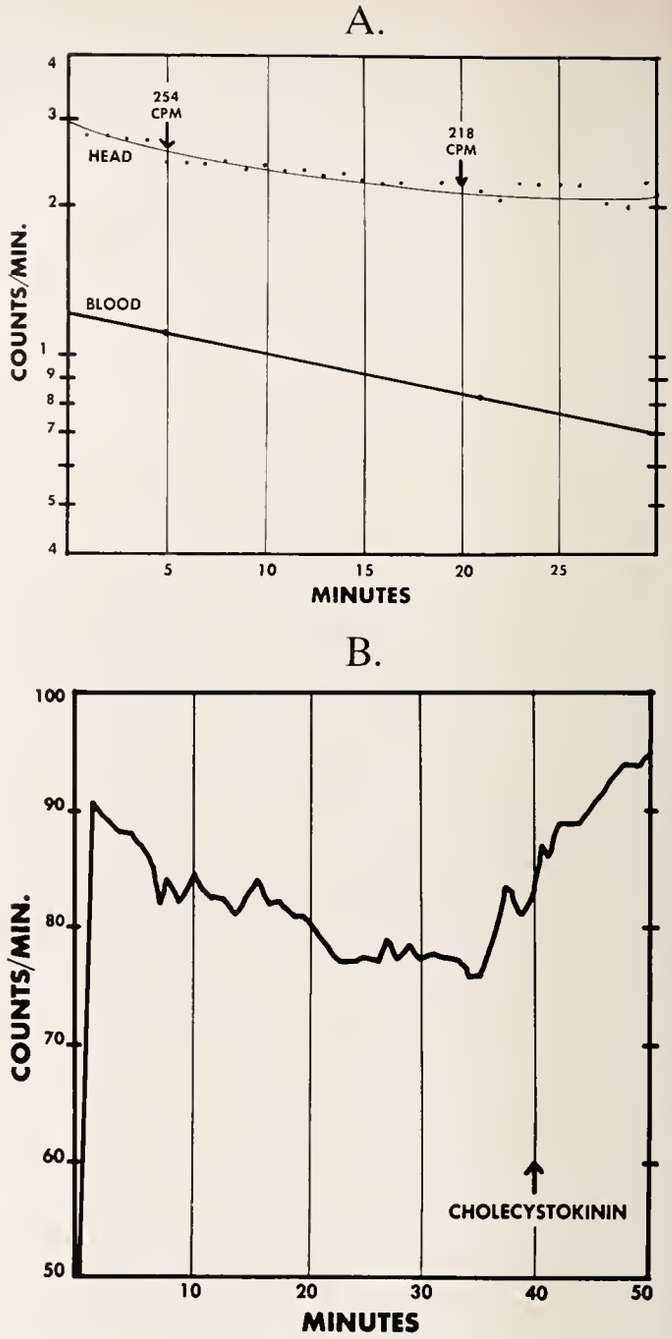

FIG. 7. *Case 2—Chronic hepatitis. A. Rose bengal blood disappearance curve showing markedly increased retention at 20 minutes (86 per cent). B. Prompt rise in radioactivity over left mid-abdomen documents biliary tract patency.*

DISCUSSION

The results in this laboratory confirm the findings in larger series and illustrate that the rose bengal test is both sensitive and reliable in the diagnosis of hepatocellular dysfunction and biliary obstruction. The documentation of biliary obstruction or patency has been most valuable in difficult cases.

Theoretically there are two areas where the information obtained from the rose bengal test might not be conclusive:

1) In patients in the obstructive phase of acute hepatitis rose bengal will not flow into the intestines. This is thought to be due to edema and obstruction of the intrahepatic cholangioles. In these cases, if the rose bengal retention is greater than 90 per cent, this is virtually diagnostic of primary hepatic parenchymal damage.[16] If the retention is below 90 per cent, a repeat examination later will demonstrate biliary flow if or when the edema subsides.

2) In cases where there is partial obstruction due to extrinsic biliary tree pressure or a "ball valve" common duct stone, there may be a flow of small amounts of rose bengal into the intestines. Difficulties in collimation make it impossible to quantitate the rise of activity in the abdomen. The most practical approach has been to report the presence or absence of radioactive material in the abdomen. In questionable cases, a repeat test later will often show complete obstruction or may show patency associated with a falling bilirubin.

Greater accuracy and a certain degree of quantitation of bile flow can be expected from photoscanning the abdomen after rose bengal. One can then "see" the amount and location of the excreted radioactive dye. The experience with this method to date is limited but the initial findings are promising.

The use of the head curve to measure blood retention of rose bengal seems to be superior to using liver uptake curves. Collimation, probe placement, and the patient position are less critical and the curves are easier to interpret. It also makes the results more comparable to the BSP retention rest.

The radioactive rose bengal test offers some definite advantages over the BSP test in jaundiced patients. Probably the most important is the additional data obtained concerning the patency of the biliary tree. Radioactive rose bengal is not dependent upon colorimetric methods and can be used at any level of jaundice. A continuously monitored head curve offers definite technical improvements over the single 45 minute or 30 minute sample drawn for a BSP retention. The latter result is expressed as a percentage retention of an assumed initial concentration of 0.1 mg per ml of plasma. This concentration is often not attained because of variations in the relationship between a patient's weight (upon which the BSP dose is based) and his plasma volume. The reported result may deviate from the true value by many percentage points.[12] The radioactive rose bengal test, by comparing a 20-minute with a 5-minute level, is independent of dosage and the use of external scintillation counting and recording makes this possible without any additional venipunctures.

The radioactive rose bengal test has been a safe procedure in this laboratory and in others. The radiation received by the patient is minimal. Since rose bengal has a photodynamic action and will lyse red cells in vitro when exposed to light[15] it has been common to guard against photosensitivity in vivo by having the patients remain in subdued light after a test.[20] Marshall[10] described an eczematous rash related to rose bengal and Biskind *et al*[1] reported transient edema of the face in two patients who went directly into the sunlight following injection of rose bengal. Generally it has been found to be nontoxic even in the large doses (5-10 cc of a 1-2% solution) given for the nonradioactive rose bengal test.[1, 2, 15, 21]

If rose bengal is extravasated, it does not cause a chemical cellulitis. The introduction of radioactivity permits the use of one hundredth or less of the nonradioactive dose and neither photosensitivity nor reaction has been encountered in this laboratory.

SUMMARY

The radioactive rose bengal test is a simple, sensitive, and reliable test useful in the detection of liver disease and in the differential diagnosis of jaundice.

External counting of radioactivity over the ear reflects the removal of radioactive rose bengal by the liver from the blood. The 20-minute percentage retention figure obtained from these counts indicates hepatic parenchymal function.

The appearance of radioactive rose bengal in the abdomen documents biliary tract patency.

In 35 patients there was excellent correlation with other liver tests and with the final diagnosis. Biliary tract patency or obstruction was diagnosed in each case without error.

ACKNOWLEDGMENTS

Ruth Tan, M.T. (ASCP) supplied technical assistance in the study.

Paula Hawkins, M.T. (ASCP) kindly prepared Figure 2.

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Please!

Turn to the questionnaire now, check the proper spaces, and mail it in.

Mahalo!

Rheumatic fever does occur in Hawaii, and produces more carditis here than on the mainland. Hawaiians and part-Hawaiians appear to be particularly susceptible.

Clinical Manifestations of Acute Rheumatic Fever in Hawaii

GERALD ROSENBLATT, M.D., M.P.H.,* *Honolulu*

• *In 190 patients with rheumatic fever followed for an average of 3.2 years, in Hawaii, the acute episode began between the ages of 4 and 19 (average, 10.3). Hawaiian and part-Hawaiian children predominated among the ethnic groups, and the discrepancy was not explainable on a statistical or socioeconomic basis. Two patients without demonstrable carditis initially developed valvular lesions during recurrences, suggesting that prophylaxis is important even in this group. The effectiveness of prophylactic treatment was reaffirmed.*

ALTHOUGH mortality rates from rheumatic fever and rheumatic heart disease have steadily declined during the past several decades throughout the United States,[1] there is evidence that these conditions remain significant medical and public health problems in Hawaii.[2] Surveys of hospital and clinic populations,[3, 4, 5] military inductees,[6] and university students[7] have indicated that both acute rheumatic fever and rheumatic heart disease occur as frequently in Hawaii as in many areas on the mainland and may present similar clinical manifestations.

The clinical patterns of acute rheumatic fever as it is experienced today, in contrast to the past, are probably a reflection of changes in the standard of living, child-care programs, therapy, and perhaps the degree of virulence and epidemicity of Group A beta-hemolytic streptococci.[8, 9] The following study was designed to define more clearly the clinical manifestations of acute rheumatic fever as it has appeared in Hawaii during the past decade. Although the surveyed population is a selected one composed of indigent patients, reliable clinical descriptions of initial attacks and subsequent follow-up are available on a large enough group to justify the analysis. The use of prophylactic therapy among the patients was evaluated, but no attempt was made to determine the effectiveness of different therapeutic regimens used during the acute attack.

METHODS

Inactive and active case records of the Crippled Children's Section of the Hawaii State Department of Health from January, 1954, to June, 1963, were reviewed during the last four months of 1963. Patients were referred to the Section because of financial indigency by private physicians, hospitals, and several state agencies. Any case was included that met all of the following criteria: (1) the initial attack of acute rheumatic fever occurred in Hawaii; (2) a definite diagnosis of rheumatic fever was made and sufficiently detailed descriptions of both the initial attack and subsequent follow-up were available to confirm the diagnosis in retrospect using the modified Jones diagnostic criteria;[10] and (3) follow-up information for a minimum of one year was provided. All clinical records on file at the State Department of Health or in hospital record rooms were examined personally by the author. Of the 483 charts screened, 190 (39 per cent) fulfilled the above conditions for inclusion in the tabulations. The average follow-up of patients was 3.2

From the Hawaii State Department of Health, Chronic Disease Branch; Hawaii Cardiovascular Study, The Queen's Hospital; and Heart Disease Control Program, United States Public Health Service.

Received for publication May 18, 1964.

TABLE 1.—*Distributions by Race.*

RACE	STUDY CASES *Number*	STUDY CASES *Per Cent*	WELFARE APPLICANTS* *Per Cent*
Hawaiian and Part-Hawaiian	91	48	28
Filipino	37	20	27
Japanese	29	15	9
Caucasian	20	10	21
Chinese	3	2	2
Others	10	5	13
Total	190	100	100

* Source: 1958 welfare applicants as recorded by State of Hawaii, Department of Social Services.[12]

years from the onset of the initial attack. Over 90 per cent of the excluded charts were rejected because of insufficient data concerning the initial attack or lack of one year of follow-up, while the remaining cases had questionable or wrong diagnoses. Demographic characteristics (age, sex, race) of excluded cases were similar in general to the cases studied.

The criteria for the diagnosis of acute rheumatic fever, first described by Jones[11] and later modified by the American Heart Association,[10] provided a uniform and helpful guide for the diagnosis of the disease, and when used together with clinical judgment allowed for the exclusion of many nonspecific illnesses. The criteria were satisfied when at least two of the major, or one of the major and two of the minor, manifestations were present.

RESULTS

The average age of onset of the acute rheumatic episode was 10.3 years, with an age range of 4-19 years. The proportion of males to females was approximately equal except in the 10-12 age group in which there were more females. The racial distribution was composed predominantly of Hawaiians and part-Hawaiians (48 per cent) with Filipino and Japanese patients second and third in order of representation (Table 1). Incidence among the Hawaiians was disproportionately high and cannot be explained on the basis of the racial distribution of welfare applicants to the State of Hawaii[12] since the Hawaiian and part-Hawaiian group represents only 29 per cent of that population. Furthermore, Hawaiians and part-Hawaiians furnish only 21 per cent of the population under 21 years old,[13] and only 28 per cent of the occupants of lower-income housing projects,[14] where the highest incidence of rheumatic fever might be expected to occur. A similar racial distribution was noted among the excluded patients which also contained a majority of Hawaiians (46 per cent).

The patterns of the initial acute attacks in the 190 patients according to the modified Jones criteria are presented in Table 2. The most common combination of manifestations meeting the criteria, observed in 115 (61 per cent) patients, included the presence of (a) carditis; (b) fever; and (c) increased erythrocyte sedimentation rate, presence of C-reactive protein, or leukocytosis. Carditis plus polyarthritis fulfilled the criteria in 87 patients, or 46 per cent.

The incidence of carditis (76 per cent) was found to be in accord with that reported by Yim in his study of patients at Kauikeolani Children's Hospital in Honolulu,[3] but was higher than reported in Boston,[15] Louisiana,[16] and New York[17] (Table 3). The Boston–New York series included arthralgia under the heading of polyarthritis, making comparisons of the incidence of this manifestation difficult. Chorea and subcutaneous nodules were observed infrequently in Hawaii. Erythema marginatum was found in only four patients (2 per cent), a much lower incidence than observed in the Children's Hospital series.

Except in the unusual "chronic cases" where symptoms remained for several months to years, acute attacks were generally considered over in five to seven weeks. However, it was not uncommon to find elevated sedimentation rates in the absence of fever, suggesting continuing activity, for up to five months following the onset of the attack.

TABLE 2.—*Manifestations of Initial Acute Attack According to Modified Jones Criteria.*

AGE GROUP (YEARS)	NO. OF PATIENTS	M	F	PER CENT WITH MAJOR CRITERIA *Carditis*	*Polyarthritis*	*Chorea*	*Subcut. nodules*	*Erythema marginatum*	PER CENT WITH MINOR CRITERIA *Fever*	*Arthralgia*	*Incr. P-R*	*Incr. Sed. rate c-reactive protein leukocyt.*	*Previous B. Strep.*
Total	190	88	102	76	61	4	0.5	2	99	33	21	93	12
4-6	32	15	17	63	44	3	3	3	99	22	6	83	9
7-9	44	22	22	68	59	5	0	0	100	30	16	94	7
10-12	64	27	37	84	66	6	0	3	100	38	25	90	14
13-15	41	19	22	85	73	0	0	2	100	34	32	98	15
16-19	9	5	4	56	44	0	0	0	100	44	22	100	22

TABLE 3.—*Incidence of Major Manifestations in Other Series.*

LOCATION	NO. OF CASES	PER CENT WITH MANIFESTATIONS				
		Acute Carditis	*Poly-arthritis*	*Chorea*	*Subcu-taneous nodules*	*Erythe-ma mar-ginatum*
Hawaii (present study)	190	76	61	4	0.5	2
Hawaii (Yim[3])	91	82	46	3	0	11
Boston (Massel et al[16])	457	67*	90†	13	12	11
Louisiana (Lieber and Holoubek[10])	162	56	64	9	3	0.6
New York (Feinstein and Spagnuolo[17])	275	42	76†	7	1	5

* Excludes pure chorea.
† Includes arthralgia.

MAJOR MANIFESTATIONS

Carditis: Carditis, as defined by the modified Jones criteria,[10] was diagnosed when one or more of the following was present:

a. "A significant apical systolic murmur, apical mid-diastolic murmur, or basal diastolic murmur in an individual without previous rheumatic fever or in whom there is no good evidence of pre-existing rheumatic heart disease. . . ."*

b. "Obviously increasing cardiac enlargement by x-ray."

c. "Pericarditis manifested by a friction rub, pericardial effusion, or definite electrocardiographic evidence."

d. "Congestive heart failure (in a child or young adult under 25 years) in the absence of other causes."

One hundred and twenty-one patients (64 per cent), or 84 per cent of those demonstrating carditis, developed significant murmurs during the first few weeks of the attack, while three additional patients developed murmurs several weeks to months after the acute attack had subsided. During the first year of follow-up, murmurs disappeared in two patients who demonstrated significant murmurs initially.

A total of 149 murmurs were observed among the 121 patients who manifested murmurs during the acute attack (Table 4). The most commonly involved valve at all age groups was the mitral, with insufficiency the most prominent defect noted. The pulmonic valve was the least involved with only six patients affected and no case of tricuspid valve disease was noted.

Thirteen of the patients studied (7 per cent) had cardiac enlargement and seven of these patients were in congestive heart failure. There were five cases (3 per cent) with pericarditis noted at some time during the course of the acute attack. The latter findings were not invariably associated with severe valvular involvement or poor prognosis.

Polyarthritis: The polyarthritis of acute rheumatic fever is migratory and characterized by pain and limitation of active motion, or by tenderness, heat, redness, or swelling of two or more joints. Arthralgia alone without objective evidence of joint involvement was not considered a major manifestation.

One hundred and sixteen patients (61 per cent) had migratory joint pain. The usual clinical description was of tender, hot, and slightly swollen joints with redness rarely described. Because of the transient nature of the episode, it was not possible to document accurately the frequency of specific joint involvement during the course of polyarthritis. In general, however, the knees, ankles, elbows, and wrist, in that order, were more commonly involved than shoulder joints or small joints of the feet or hands.

Chorea: True chorea, differentiated from habit spasm, athetosis, and cerebellar ataxia, and presenting with involuntary movements of moderate severity, was found in six girls and one boy during the initial attack. The latter finding is in accord with predominant female incidence of chorea reported in several other studies. Three of the seven choreic patients developed carditis during the attack, but in only one instance could the carditis be considered severe. The lack of severe carditis in choreic patients is generally considered to be characteristic.[17]

Subcutaneous nodules: Subcutaneous nodules were reported present in only one patient in this series and in this case was not associated with severe carditis, in contrast to the severe cardiac involvement which others have reported in pa-

TABLE 4.—*Distribution of Valvular Involvement by Age.**

AGE GROUP	TOTAL NO. OF PATIENTS	TYPE OF VALVULAR INVOLVEMENT				
		Mitral Re-gurg.	*Mitral Ste-nosis*	*Aortic Re-gurg.*	*Aortic Ste-nosis*	*Pul-monary Ste-nosis*
Total	190	96	25	17	5	6
4-6	32	13	6	2	1	0
7-9	44	26	6	5	2	0
10-12	64	31	6	7	2	2
13-15	41	22	6	3	0	4
16-19	9	4	1	0	0	0

* Reported as number of cases in each age group.

* This criterion also includes, "a change in the character of any of these murmurs under observation in an individual with a previous history of rheumatic fever or rheumatic heart disease." The latter was not included in the present study since only initial attacks were under consideration.

tients with subcutaneous nodules. The latter patient demonstrated the shot-like, hard nodules found over the extensor surfaces of elbows and knees.

Erythema marginatum: The evanescent skin rash characteristic of rheumatic fever, erythema marginatum, is pink with a sharp scalloped edge and found almost invariably over the trunk. Four patients (2 per cent) in this series demonstrated the rash, an incidence similar to that found by others. The finding of erythema marginatum was not in itself of real diagnostic importance since other major criteria were present in all four patients in whom it was demonstrated. Erythema nodosum, which occasionally occurs during acute rheumatic fever, was not present in these patients.

MINOR DIAGNOSTIC MANIFESTATIONS

Fever: An elevation of temperature exceeding the normal diurnal fluctuation, and therefore considered significant, was present at some time during the acute illness in all except one patient (99 per cent). The latter case is of interest since it occurred in a patient where the chief manifestation of the acute attack was chorea. Lack of fever with chorea is not an uncommon finding.

Arthralgia: Pain in a joint, specifically localized and without objective findings, was present in 62 (33 per cent) of the patients. Arthralgia could not be used as a minor criterion when polyarthritis was present as a major criterion.

The distribution of arthralgia according to frequency of involved joint was as follows: ankle, 40 per cent; knee, 26 per cent; hip, 22 per cent; and the wrist, elbow, and toe 3 per cent each. Typically, the arthralgia disappeared in two to three weeks and did not leave residual deformity.

Prolonged P-R Intervals: Prolonged P-R intervals were found in 40 (21 per cent) of cases. Of these, 12 patients (30 per cent) did not develop murmurs or other significant cardiac disease. According to the modified Jones criteria, prolongation of P-R intervals is not diagnostic of carditis. When carditis was used as a major manifestation, increased P-R interval was not used as a minor criterion.

INCREASED ERYTHROCYTE SEDIMENTATION RATE, PRESENCE OF C-REACTIVE PROTEIN, OR LEUKOCYTOSIS

Since no one specific laboratory procedure establishes the diagnosis of rheumatic fever, a number of tests were usually used in combination. The white cell count was generally elevated (12,000-20,000 per mm^3) and a moderate increase in polymorphonuclear cells was found during the first two weeks of the illness. The hemoglobin levels were usually within normal range, except in several cases of prolonged illness when a normochromic normocytic anemia developed during the course of the disease. An occasional case presented with a normochromic normocytic, or hypochromic microcytic, anemia.

In our series the erythrocyte sedimentation rate was elevated early, remained at high levels until the active process subsided, and, in general, was the best single laboratory test for following the course of the disease. The C-reactive and mucoprotein tests added little to the diagnosis since their elevation was invariably accompanied by an elevated sedimentation rate. However, an elevated sedimentation rate was occasionally present despite a normal C-reactive or mucoprotein test. The finding that only 93 per cent of patients fulfilled this criterion may be partly explained by the several patients where C-reactive or mucoprotein tests were negative and sedimentation rates were not reported.

Elevation of antistreptolysin titers (over 200 Todd units), indicating a previous streptococcal infection, was present in 37 out of 40 cases where proof existed that this test was carried out. Positive beta-hemolytic streptococcus cultures, positive fluorescent antibody smears, or a documented history of preceding beta-hemolytic streptococcal infection was found in only 24 patients (13 per cent), reflecting the fact that these procedures were performed only sporadically among the patients studied.

OTHER MANIFESTATIONS

A number of miscellaneous signs and symptoms are oecasionally observed in patients with rheumatic fever but are not considered either major or minor criteria. Epistaxis, which has been variously reported to be present during acute rheumatic fever, was found in only three patients (2 per cent). Abdominal pain, presumably on the basis of mesenteric adenitis, was present in only one patient, whereas several patients with congestive heart failure complained of abdominal distress. Dyspnea was found without exception in patients experiencing congestive failure. Two paticnts experienced coincident glomerulonephritis.

Excessive diaphoresis, nausea, vomiting, and anorexia were commonly found during the acute attacks and were felt to be nonspecific reactions.

SEVERITY

A subjective evaluation of severity of acute attacks was made on each patient based on degree of illness, duration, and subsequent disability. The data are suggestive of a relationship of severity to age grouping, that is, episodes occurring in the four to six age range were generally milder than those occurring in older children. The most severe

cases, as might be expected, were found among children with carditis with or without joint symptoms. The maxim that when rheumatic fever bites the heart it licks, or spares, the joints was borne out in this series, and also the converse, when the acute episode primarily bites the joints, it licks, or spares, the heart.

PROPHYLAXIS

To evaluate the effectiveness of prophylactic therapy, a comparison was made of recurrences among those receiving and those not receiving continuous medications in the form of penicillin or other acceptable substitute.[9] Of the 113 patients receiving prophylaxis following the initial attack, seven had recurrences, whereas among 77 individuals not receiving therapy there were 18 reeurrences. Both groups were followed for an average of approximately 2.5 years. The differences observed between the two groups were highly significant ($p = < 0.01$) and confirms the findings of others[18] that prophylaxis is of value in preventing recurrences of rheumatic fever.

RECURRENCES

There were one or more recurrences* in 25 patients (13 per cent) followed for one or more years (average 3.2 years). Although several studies have indicated that patients without evidence of carditis during the initial attack escape residual rheumatic heart disease in subsequent attacks,[19] two patients in our series not demonstrating carditis initially and not put on prophylactic therapy developed significant valvular disease during subsequent episodes of rheumatic fever. This finding suggests that prophylaxis for the prevention of recurrences may be important even in the absence of carditis during the initial attack.

SUMMARY

The clinical manifestations of initial attacks of acute rheumatic fever were reviewed in 190 patients followed for an average of 3.2 years by the Crippled Children's Section of the Hawaii State Department of Health. The average age of onset of the acute episode was 10.3 years with a range of 4-19 years. The Hawaiian and part-Hawaiian racial predominance could not be explained on the basis of the racial distribution of State of Hawaii welfare applicants or by other measures of socioeconomic inequality.

The most eommon combination of manifestations fulfilling the modified Jones criteria were either (1) carditis, fever and increased erythrocyte sedimentation rate, presence of C-reactive protein or leukocytosis; or (2) carditis plus polyarthritis.

A higher incidence of carditis was recorded in this series compared to reports from other parts of the United States. Chorea, subcutaneous nodules, and erythema marginatum were in general less frequently observed in Hawaii than elsewhere.

The most severe cases, in terms of degree of illness, duration, and subscquent disability, occurred among children manifesting carditis initially. Episodes occurring among children in the four to six age range were generally milder than attacks in older children.

A significantly higher recurrence rate was found among those patients not on prophylaxis compared to those on aetive therapy. Two patients without demonstrable carditis during the initial attack developed significant valvular disease during subsequent episodes of rheumatic fever, a finding which suggests that prophylaxis for the prevention of recurrences may be important even when carditis is absent initially. ■

* A recurrence was defined as a true second episode and not "chronic" rheumatic fever which is observed in a small minority of patients.

ACKNOWLEDGMENT

I am grateful to Mr. Donald Greenberg, Statistician, Heart Disease Control Program, USPHS. for his statistical advice, and to Dr. Joseph Stokes, III and Dr. David Bassett for their helpful encouragement.

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The effectiveness of vaccination against measles is reaffirmed by a study done in Hawaii last year.

Immunization with Live Measles Vaccine
Report of a Field Trial in Hawaii

ALEXANDER ROTH, M.D., *Honolulu*

• *Measles vaccination was performed on 550 children, and 508 of them were studied four weeks later for complement fixation and neutralizing antibody titers. Of those receiving measles vaccine only, 99 per cent developed seroconversion, and of those receiving gamma globulin in addition, 96 per cent converted. Oral temperatures over 101° after vaccination were three times commoner in the group not receiving gamma globulin. The procedure appeared to be safe and effective.*

IN 1958 Enders developed and successfully tested a live, attenuated measles vaccine. This was followed by attempts to further weaken the virus in an effort to make it safer. Both physicians and the public eagerly awaited release of the vaccine for general use, but before it could be licensed it had to be shown that several lots of vaccine from standard production lines were both safe and effective. It was for this purpose that field trials with measles vaccine were carried out on the mainland as well as in Hawaii. In addition, information about simultaneous administration of gamma globulin, and its effect on immune response and side effects, was desired.

This study was supported by a grant from Merck, Sharp and Dohme Laboratories. Received for publication May 14, 1964.

CLINICAL STUDY

Of 700 children who volunteered for the study, 550 aged nine months to 15 years participated in Phase I of the program. This consisted of a short introductory talk about the vaccine, a question-and-answer period, and the registration of the children. The parents were given cards and asked to keep records of temperatures, rashes, or other reactions. The children were weighed, 5 cc of venous blood was drawn, and the measles vaccine was administered. The first group of 200 also received .01 ml gamma globulin per pound of body weight. In the second group of 350, half received measles vaccine and gamma globulin, while the other half received measles vaccine only. Only those without history of rubeola or rubeola-like illness were considered.

TABLE 1.—*Incidence of fever (maximal oral temperature).*

	Over 101° F	Over 103° F
Nonimmune patients		
With gamma globulin	20%	5%
Without gamma globulin	47%	15%
Immune patients		
With gamma globulin	5%	0%
Without gamma globulin	8%	4%

Phase II of the program took place four weeks later. Five hundred and eight children, or 92 per cent of those immunized, returned for the second bleeding, and turned in their history cards.

VACCINE AND GAMMA GLOBULIN

Five lots of live measles vaccine were used.* The lyophilized vaccine was shipped by air freight and kept at 5° C. until used. Before injection, 0.7

TABLE 2.—*Incidence of rash.*

Nonimmune patients	
With gamma globulin	12%
Without gamma globulin	16%
Immune patients	
With gamma globulin	2%
Without gamma globulin	12%

cc of sterile diluent was added with a disposable syringe, and 1000 $TCID_{50}$ injected subcutaneously into the upper arm. The gamma globulin used was specially standardized for its rubeola neutralizing antibody content.† It was injected into the deltoid muscle of the opposite arm in the amount of 0.01 ml per pound body weight.

SEROLOGIC RESPONSE

The paired sera were analyzed for complement fixation (CF) and neutralizing antibody (NA) titers.‡ In interpreting the data, any child with a CF titer of $<1:4$ or a NA titer $<1:1$ was considered to be nonimmune. A fourfold increase in either titer was considered to be evidence of seroconversion. By these standards, 99 per cent of patients receiving measles vaccine only, and 96 per cent of those receiving both vaccine and gamma globulin, developed seroconversion (Table 3). Only 22 originally nonimmune children and three immunes were less than one year old. This was considered too small a sample to judge the

TABLE 3.—*Seroconversion rates.*

With gamma globulin	96%
Without gamma globulin	99%

efficiency of the vaccine separately in this age group.

REACTIONS

Almost half the children who did not receive gamma globulin had oral temperatures over 101°, three times as many as those in the gamma globulin group (Table 1). The appearance of a rash varied from lot to lot and did not appear to be related to gamma globulin administration (Table 2).

CONCLUSION

Seroconversion was satisfactory with all five lots of vaccine. It varied from 90 to 100 per cent in the group with gamma globulin and from 96 to 100 per cent in the group receiving vaccine only. More than three times as many children developed temperatures over 101° orally in the non-gamma globulin, as in the control group. However, the parents were told of the likelihood of fever occurring and accepted this well. It would seem that gamma globulin could be reserved for debilitated children or those with a history of febrile convulsions. ■

ACKNOWLEDGMENT

I would like to thank Doctors Edna Schrick, Maria Patuleia, Martha Freeman, Dempsey Huitt, and John Clarkin for their help during this study.

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* Prepared by Merck, Sharp and Dohme Laboratories.
† Gamma Gee (Merck, Sharp and Dohme).
‡ Serological studies performed by Merck, Sharp and Dohme Research Laboratories.

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Pacemakers have come a long way since Hyman invented the first one in 1932.

Standstill and fibrillation are the major indications.

Clinical Application of Cardiac Pacemakers

FRANK S. AKAMINE, M.D., *Honolulu*

• *Heart block is not an indication of itself for implantation of an artificial cardiac pacemaker. If it results in Stokes-Adams attacks due to periodic asystole, however, or in ventricular tachycardia or arrhythmia, a pacemaker is indicated. Two illustrative cases of the use of the instrument are reported.*

ACCORDING to Glenn,[4] the use of electricity as a means of resuscitation was utilized in 1774, and reported by John Aldini. He may have been the first to apply an electrode directly on the heart. Callaghan and Bigelow,[1] Chardack,[3] Lillehei,[11] and Zoll[13] have made significant contributions in the applications of cardiac pacemakers. The following are examples of clinical uses of cardiac pacemakers as encountered at Kuakini Hospital.

CASE REPORTS

CASE 1. An 80-year-old Japanese woman was admitted to Kuakini Hospital because of severe weakness on April 7, 1964. She had recently returned from Japan where she had been hospitalized because of weakness and lightheadedness. There was no history of outright Stokes-Adams attacks. Prior to her present illness, she had been very active, and the relatives had noted no mental deterioration. An electrocardiogram taken in 1957 revealed a right bundle branch block.

Physical examination revealed an elderly lady who appeared to be somewhat mentally obtunded. She could not adequately recall recent past events. The lungs were clear and resonant. The heart tones were full. An electrocardiogram (Fig. 1-a) taken on admission revealed a complete atrioventricular block with an atrial rate of 58/min and a ventricular rate of 22/min. On April 9, she was placed on 25 mg of ephedrine three times a day. Thereafter the apical beat varied from 20-44/min. She appeared to improve mentally to a moderate degree.

At 1:20 A.M. of the third hospital day, the patient developed a Stokes-Adams episode. She was in the intensive care unit at this time, and because of the prolonged asystole, external cardiac massage was done. Mouth-to-mouth resuscitation was performed, and in about three minutes, a slow cardiac rate was again present. The patient was confused and wildly thrashing about. Because of the prolonged history of disability, and failure to control the situation by sympathomimetic drugs, it was

Received for publication July 27, 1964.
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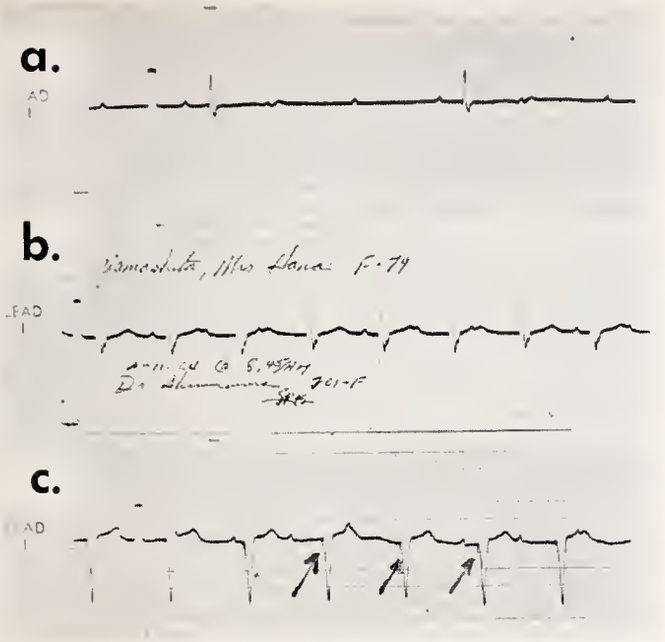

FIG. 1-*a*, *b* AND *c*.—*The preoperative EKG (a) shows complete A-V dissociation. The postoperative EKG (b) shows the increased cardiac rate with the external pacing. The last tracing (c) with the implantable pacemaker. The arrows indicate the constant deflection made by the pacemaker just before the ventricular response.*

decided to pace her heart until a permanent internal pacemaker unit could be obtained. External pacing was carried out by placing subcutaneous electrode leads. There was minimal activity of the pectoral muscles, and the induction of anesthesia was quite smooth. A left antero-lateral thoracotomy through the fifth interspace was done. After the opening of the pericardium, it was at once apparent that the electrodes could not be implanted onto the myocardium since the entire surface of the heart was covered with a layer of fat. It was decided to place the leads onto the pericardium over the left ventricle. The Teflon-covered Gardlock* wires were led out through a separate stab wound, and the indifferent electrode was placed subcutaneously in the left anterior axillary fold by a 23-gauge needle. The heart was paced at 70/min (Fig. 1-b), and the previously wide pulse pressure now narrowed with a fall in the systolic pressure. The blood pressure was now 140/100. The ventricular response was most consistent at 6-7 volts. Postoperatively, there was a striking improvement in her mental status.

Four days later, on April 15, a Chardack-Greatbatch (Medtronic†) (Fig. 2) implantable pacemaker was placed in the patient. The pacemaker kept a constant cardiac rate of 62/min (Fig. 1-c). She recovered from her second operation quite well, and approximately ten days after the second procedure, she was ambulatory and discharged. Subsequent follow-up visits revealed that

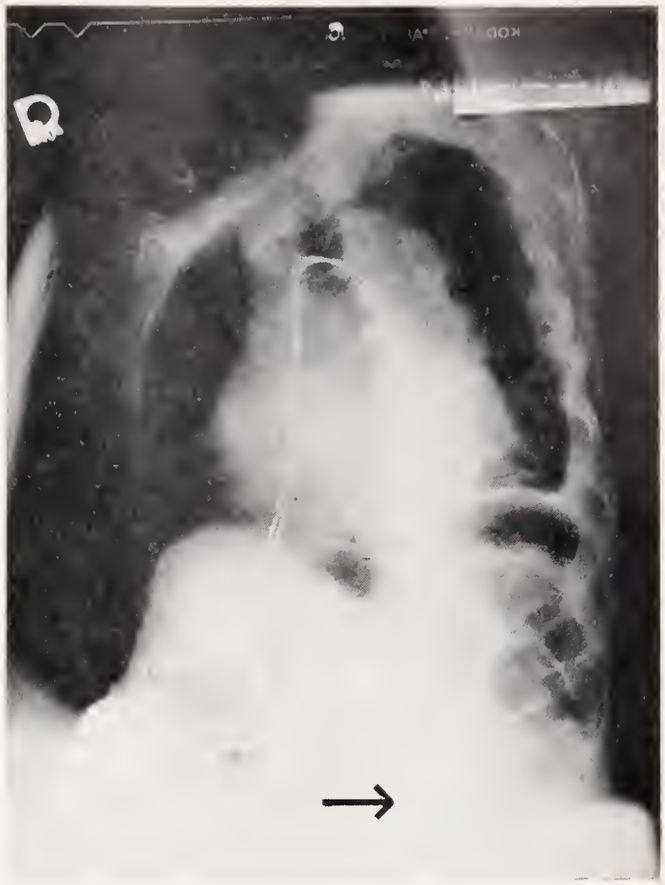

FIG. 2.—*Oblique view of chest showing electrode leads on the heart. The arrow points to the pacemaker battery unit.*

she was making satisfactory progress. She was able to resume her active status once more.

CASE 2. A 73-year-old Japanese man was admitted to Kuakini Hospital on May 19, because of dysphagia. In 1958, he had had a subtotal gastrectomy for ulcerative carcinoma of the stomach. He had been known to have a third-degree heart block that was apparently asymptomatic. An electrocardiogram (Fig. 3-a) taken on admission revealed complete atrioventricular dissociation with a ventricular rate that varied from 28 to 46/minute.

Because of suspicion of recurrent carcinoma, a laparotomy was done on May 26. There was no evidence of metastases, so a thoracic extension of the laparatomy incision was done. The patient was paced externally with subcutaneous electrodes prior to induction of anesthesia, and there was no difficulty with intubation.

As soon as pacing was begun, his pulse pressure narrowed and his preoperative blood pressure of 180/70 fell to 120/90. The negative electrode was placed on a small pericardial flap fashioned over the left ventricle. This was done to prevent myocardial irritability on removal of the electrodes. The surgery was prolonged because of the extensive adhesions around the previous operative site. Troublesome bleeding from the abdominal

* American Silk Sutures, Inc., Roslyn Heights, New York.
† Medtronic, Inc., Minneapolis, Minnesota.

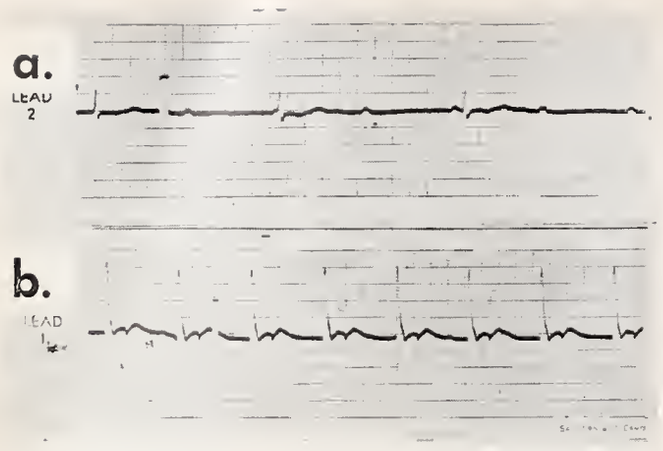

FIG. 3-*a* AND *b*.—*The preoperative EKG (a) showing complete A-V block. The EKG (b) shows ventricular complexes with the heart paced.*

wound, diaphragm, and the liver and pancreatic beds necessitated a total operating time of approximately eight hours. All during this time there was no difficulty encountered with the pacing.

In the Intensive Care Unit, the threshold of resistance gradually increased, and the initial voltage of seven was increased over the next few days to 14. The heart rate (Fig. 3-b) could be varied at will while being connected to the external pacemaking unit, but the rate was generally around 72-74/min. After the first week, the threshold varied according to the accumulation of pleural fluid (Fig. 4) and the patient's position. An attempt was made to wean him from the pacemaker on the twelfth postoperative day, since he was eating and doing well generally. His pulse rate promptly fell to 40/min and he later developed several Stokes-Adams episodes. He was finally taken off the pacemaking unit after he was started on 25 mg of ephedrine three times a day. Thereafter, he was able to maintain a pulse rate of about 54/min and subsequently had no more attacks.

DISCUSSION

Nearly 150 years ago, the Stokes-Adams syndrome was described. In 1932, Hyman[6] advocated the use of artificial pacemakers. His bulky eight-pound apparatus is in contrast to the five-ounce units that are currently in use. With the application of pacing in open-heart surgery cases by Weirich, Gott, and Lillehei,[12] there began the wider use of implantable pacemakers. Furman and Schwedel's[4] transvenous endocardial electrode has, to a degree, obviated the need for external pacing and emergency thoracotomy in some cases.

It is now recognized that the symptom complex of the Stokes-Adams syndrome is quite variable. In our two patients the extremes of clinical states were present, one having severe disability culminating in asystole, and the other being asymptomatic until after a very extensive surgical procedure. The heart under idioventricular regulation is much more sensitive to any irritable focus, so that not only standstill, but tachycardia and fibrillation may occur. Standstill may be brief and may mimic a petit mal seizure, ended by spontaneous resumption of idioventricular activity. Standstill may be prolonged; convulsive seizures may occur, and external cardiac massage and assisted respiration may be required.

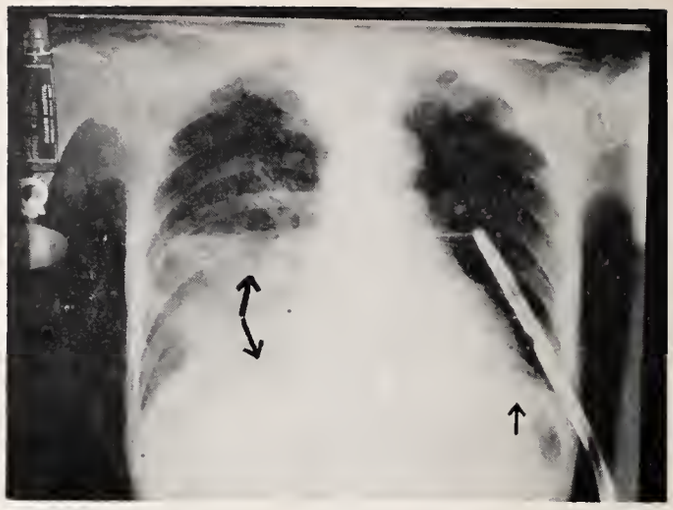

FIG. 4.—*Single arrow indicates position of the pericardial flap negative electrode attachment. The double arrows show the monopolar leads.*

Penton's[9] review of 224 cases of complete heart block has pointed out the capricious nature of this condition. The course is variable and events are often unpredictable. Although modern drugs have considerably improved the medical management of the patient with Stokes-Adams syndrome, the long-term results of drug therapy and the prognosis are still disappointing. In Penton's[9] series, the average duration of life after the first syncopal attack was about three years, and after the first appearance of complete heart block, about two years. About 43 per cent of those in whom the mechanism of death was known died suddenly. Therefore, in attempting to evaluate a course of treatment for complete heart block, the unpredictability before treatment and even under it must be taken into consideration.

With more long-term survivors now with the implantable pacemakers, the indications for pacing have become more numerous. The following are advised by Parsonnet *et al.*[8] Pacing should be done in:

1) Any patient in whom a major Stokes-Adams attack or recurrent attacks have occurred, or
2) Patients with ventricular rates below 40 despite adequate drug therapy, particularly when faintness or recurrent blackouts occur.
3) Patients with atrioventricular block and congestive heart failure.

There are several types of pacemakers, but the one most in use has been the Chardack-

Greatbatch model No. 5860. This pacemaker weighs five ounces and is about two inches in diameter. The assembly consists of six transistorized mercury cells and two electrode leads enclosed in silicone rubber sleeves. The "safety extension" opposite the electrode leads is directly connected to it, so that in the event of "power" failure, the extension can be quickly attached to an external current source. The change of the battery unit is performed when there are signs of cell failure as indicated by an increase in the pulse rate over 10 per cent. The useful life of the pacemaker battery is about five years. It can be changed under local anesthesia, since the unit is buried subcutaneously below the left costal margin.

Some recent work[2] has been done on electrical pacing with a synchronous implantable pacemaker. It has the same frequency band as the P-wave, which is 20 to 200 cycles per second. The activation of the atria is detected by the atrial pickup electrode; after the P-wave is received and amplified, it is transmitted to the left ventricular electrode following a time delay equal to the normal P-R interval. A number of safeguards are built into the synchronous pacer which make it a more physiological unit than heretofore was possible. Samet and colleagues[10] have called attention to the hemodynamic alteration with the fixed-rate pacemakers. Because at times the auricle must work under pressure against a closed tricuspid valve, the irregular filling of the ventricle may cause an intermittent drop in the systemic pressure. Whether this affects the cardiac output is not known.

In another innovation described by Parsonnet, *et al.*,[8] the pacemaker is controlled by a pulse generator activated by a biologic energy source. The mechanical pulsatile expansion of the aorta is transformed into electric energy by bending piezoelectric ceramic bimorph transducers. The crystals have produced up to 12 volts in some cases. With this type of pacing, the only restrictive factor would be the myocardium. Otherwise, it could drive the heart for a very extended period.

SUMMARY

Two cases of electrical pacemaking of the heart are presented. Use of implantable pacemakers should be seriously considered for any patient symptomatic under medical management or for those who are in heart failure. Further experimental work will undoubtedly bring into clinical use more physiological and longer-lasting pacemakers. ■

1010 So. King St.

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HAWAII MEDICAL JOURNAL

Editorials

Dear Reader: PLEASE Kokua!

The difference between what you pay for this magazine and what it costs to produce it—and it's plenty—is borne by our advertisers.

To keep the advertisers we have, and to get more, we are reliably informed that we must be able to show them some evidence that doctors do open the magazine and read it, occasionally.

Since there is no direct evidence of this—praise and blame being equally lacking, year in and year out—we are compelled to ask you—to ask you most urgently—to please cooperate with us by checking the appropriate places on the questionnaire, and returning it to us.

Please do it right NOW—not in a few minutes, when you may have been distracted by something more interesting, but right NOW. . . . . there! Many, many thanks!

Robins Egg Blues

We have to sing the blues this month. The Robins egg blues. The A. H. Robins egg blues. And this is why.

Our usually ept and attentive printer laid the egg, in our March-April issue, right between pages 256 and 257. We urge you to get out your copy now, and turn to those pages. Between them, where it did not belong, is an insert you should separate gently from the magazine and have framed. It depicts the imprisonment of the Successful Executive in the trappings of his success. It is a fine and funny piece of satire, so good that it's worth keeping.

On the other side is a colorful and amusing advertisement for Dimetapp (Robins's combination of Dimetane (brompheniramine maleate) with phenylephrine and phenylpropanolamine hydrochloride) Extentabs. *This* advertisement could have been put anywhere in the magazine, but the other—entitled The Ulcer Life—was supposed to face the ad on page 255, for Robinul-Forte glycopyrrolate and Robinul-PH (with phenobarbital) Forte, which are the A. H. Robins Company's favorite anticholinergics for use in the management of peptic ulcer.

But it got glued onto the wrong page, too securely to be removed, and too late to send for new inserts and do it over. We're sorry it happened, especially to one of our most faithful advertisers and to one of the most amusing and effective advertisements we've ever had.

How to Kill a Medical Society

The following thoughts on "How to Kill a Medical Society" caught our eye, and we pass them along to you for your consideration.

1. Refuse to serve on any committee or enter into any and all activities, business or social.
2. If you are appointed to a committee, don't attend the meetings. Should you decide to attend, be sure to be late.
3. Don't go to any of the Society meetings.
4. If you do attend, go late.
5. When you learn at the meeting that others are working hard, giving of time and energy in an unselfish manner, don't join them, but rather loudly cry that your Society is being run by a clique.
6. During the meeting and at other times, be sure to find fault with the other members and all the officers of your Society.
7. When you have a definite opinion and should present it to the Society, or if called upon by the chairman for some remarks and discussion, tell the chairman you have nothing to say. After the meeting is over, tell everyone what mistakes have been made and what course of action should have been taken.

A. A. Thurlow, Jr., M.D.
Sonoma County Medical Society Bulletin

One Step Closer

It seems certain that H.R. 6675—the "three-layer cake" of Social Security medicine passed by the House of Representatives—will pass the Senate with only minor modifications. Mr. Wilbur J. Cohen's career-long dream of national socialization of medicine will take a long step toward coming true.

The bill as it stands provides about the same hospital and nursing home care as King-Anderson did, plus two additions: a voluntary supplemental plan allowing persons over 65 to buy (for $3 a month) a $50 deductible, plus 20 per cent deductible, multi-benefit plan including medical and surgical services, diagnostic tests, mental hospital care, home health services, and others—up to $312 or 62½ per cent of the expenses, whichever is smaller. Costs (government matches individual payments) are expected to be around a billion a year in 1967. The second addition is a beefed-up version of the Kerr-Mills program, at an estimated increase of $200,000,000 a year.

Another item is that doctors will come under the Social Security program, and therefore will be covered by H.R. 6675.

HMSA actuaries reported in March that the King-Anderson benefits in Hawaii would amount to $7.81 per month, per person. This could be covered by a total revenue of $3,127,400. The amount actually collected here to finance this program would be $4,729,800. The difference, $1,600,000, is the amount that will stick to Uncle Sam's fingers in administering this program: roughly 30 per cent, or four times HMSA's costs.

The House Ways and Means Committee refused to hold public hearings on the bill, and gave scant, if any, consideration to Eldercare. The Senate so far is being equally uncooperative, but at least hearings are anticipated there. We can hope that the Senate will bend its talents to an objective analysis of the House-passed bill, along with existing programs already providing financing for medical care for those who need assistance.

They might even take note of the fact that the British Labour Government announced in February that consideration was being given to a means test, so that those citizens who did not *need* financial help would not receive it.

Let us hope that an unneeded additional burden will not be imposed on the already heavily taxed American public by abandoning the fundamental principle of using tax funds only to aid those who need to be aided.

Please keep your national congressional representatives informed of your views!

Maybe

If the U.S. Senate is to maintain its reputation as the greatest deliberative body in the world, it will take a careful look at the amendment proposed by Senator Russell B. Long of Louisiana, the Democratic whip.

Senator Long's amendment calls for a series of deductibles, similar to the deductible provisions in an automobile insurance policy.

The so-called "medicare" bill doesn't allow for the difference between individuals who need medical help, some of whom can pay readily and some of whom can't meet their needs without real hardship. Neither does "medicare" protect any individual against the ravages of a catastrophic financially-exhausting illness.

The Long amendment takes care of this through the deductible provision and by providing for up to three years of continuous hospitalization, if necessary, instead of cutting off the aged after 60 days of hospital treatment. This refreshing proposal would leave with the individual the responsibility of meeting expenses he could afford from his own resources or from private insurance. But if he really needed protection against catastrophe, all the resources of the medical profession would be at his command.

Long feels that the government should bear full responsibility for the medical bills of persons of very low income, a sentiment which many physicians, who now bear most of that responsibility, will agree. Not that any legislation will free physicians from compassionate care when indicated.

The minimum deductible would be $40 a year, while the maximum would be $1,000. This would be decided on the basis of the recipient's income for the previous year. Those on public assistance wouldn't pay anything.

The Long proposal, in summary, would cover all persons aged 65 and over who are Social Security beneficiaries. It also would cover all other persons over 65 who are citizens or permanent residents of at least 10 years' duration. All non-insured persons would be covered in all future years, the cost being paid from general revenues. Otherwise the Social Security tax hike and attendant benefits are much as outlined in the House-passed bill.

It's to be hoped the Senate will listen to Long, who has said "medicare" as passed by the House is capable of breaking the poor old grandma that the measure's strongest backers keep citing as the person they want to protect against bankruptcy.

Hawaii Academy of General Practice

Welcome to the intelligent, informed patient!

Long gone are the days of the secret remedy and the mystic power of the private proprietary concoction.

Not only is the lay public being bombarded with medical display advertising in popular magazines, but also through the mass media of press, radio, and TV. The popularity of Aspirin, Geritol, Dristan, and Contac has superseded that of Lydia E. Pinkham's Vegetable Compound and Carter's Little Liver Pills.

Today's Health, the periodical output of the AMA, has to compete with regular articles in *Satevepost, Life, Look,* and *The Ladies' Home Journal,* to name but a few. The daily papers give increasing spread to name-physician columnists, and, lately, the medical associations and societies have been granted access to pages previously restricted to amateur (but quite expert!) advisers on mental health to the lovelorn.

However, basic intelligence and judgment along medical lines is sadly lacking in most of our patients.

The young marrieds, many of whom are so-called high school graduates, know next to nothing about the anatomy and physiology of the human body. When one also considers that nearly 50 per cent of these people are high school dropouts, one is faced with the realization, an appalling one, that the license to marry, unlike the driver's license, or any other license, is not granted on the basis of competence. This, the most important vocation-avocation of Man, is given relatively no consideration in the processes of education, both public and private.

During the recent local floods, a heated discussion was heard over the radio as to whether rainwater should be boiled 3½ minutes or 10 minutes in order to sterilize it and make it potable!

Fever—as an example—is more terrifying to young parents (and often to the old grandparents, too) than the probability of fallout after an atomic explosion. "The fever" must be brought down at all costs, even if it means torturing the child with plunges into ice water. Adults, themselves, don't want the sensitive hairs of the head touched when they are miserable and irritable and want to be let alone with the fever, malaise, and headache that are common to so many everyday illnesses; why is it that these same adults don't understand that an infant or child may be fretful for a like cause? Because they were never taught as youngsters in school the simple, understandable facts of rashes, fevers, aches, and all the other symptoms common to man as man is basically common.

The evanescent, useless dates of ancient history receive more attention than: "What to do for a convulsion," or "How to give a simple enema." Even the ancient Hawaiians were better educated as a people than we are to the necessities of life.

No intern is permitted to "practice" medicine without having gone to college and medical school, yet we allow a young man and young woman to proceed with marriage, procreation, gestation, and the rearing of their young without any requirement of education and training whatsoever.

EDUCATION OF THE PATIENT

The modern physician's answer to this is to spend more time with his patients to educate them.

The GP's find herein their forte. You will notice that a family that has a modern GP for its family physician, is usually well up on the symptomatology of a cold versus a pneumonia, or abdominal cramps of a dietary indiscretion versus the constant, throbbing, aching pain of an appendicitis. The established general practitioner has such good rapport with his family-patient, knows the members so well, that medical management of the problems attendant upon illness is easy and efficient, often by means of a telephone conversation. Expensive house and office calls can be avoided thereby, and even the more costly hospitalization forestalled.

Patient and doctor begin to speak in the same language. ■

(To be Continued)

J. I. Frederick Reppun, M.D.
Secretary

HAWAII MEDICAL JOURNAL

This Is What's New!

• The **tranquilizer Taractan** (chlorprothixene) might also be good for the **hyperuricemia of gout.** An oral dose of 50 to 200 mg daily increased the uric acid clearance from 50 to 100 per cent (*New Eng. J. Med.* [Mar. 11] 1965.)

• **Cushing's syndrome** is easy to suspect but hard to confirm, because of the complexity of the diagnostic procedures involved. University of California physicians, following a suggestion by Dr. Nugent of Salt Lake City, report a simple **screening test.** The patient takes one mg of dexamethasone at 11 P.M. the night before the test. The next morning, by a not too complex test, the plasma 17-hydroxycorticosteroids are determined. If the value is less than 5 mcg per cent, the patient does not have Cushing's syndrome. If it is **above 10 mcg per cent,** the patient **probably has Cushing's syndrome.** Principle: In the normal individual the dexamethasone inhibits the adrenal production of corticosteroids. This dose of dexamethasone in patients with Cushing's syndrome is not sufficient to significantly inhibit the production of corticosteroids. (*Internist Observer* [Apr.-May] 1965.)

• The **BSP test** can be very helpful in the diagnosis of liver disease. It should be used, however, only where it is essential for the diagnosis, for the eighth **fatality** following the use of this substance has recently been reported. At present there is no way to anticipate which patient may have a fatal reaction. (*Am. J. Med. Sci.* [Nov.] 1964.)

• The antimalarial drugs were once used for treatment of malaria. **Atabrine,** currently used for certain intestinal parasites, lupus erythematosus, and rheumatoid arthritis, now has been found to **prevent the emergence of antibiotic-resistant strains** of bacteria. When it was combined with streptomycin, sulfas, penicillin, tetracyclines, etc., the emergence of resistant strains was prevented. (*Arch. Biochem.* [Oct.] 1964.)

• Two separate studies carried out on women after sterilization by **tubal ligation** indicated that most women were **happier** after the ligation than before. If the woman was unhappy about having had the tubal ligation done, she was statistically likely to be Catholic, young, and indigent. (*Am. J. Ob. & Gyn.* [Oct. 15] 1964.)

• **Antiheart antibodies** in the **post-pericardotomy** syndrome and the **post-myocardial infarction** syndrome have been demonstrated in Amsterdam. Immunofluorescent techniques and antiglobulin tests in 15 patients with post-pericardotomy syndrome showed detectable antiheart antibodies in 13; however, these antibodies were also demonstrated in a few cases after cardiac surgery or myocardial infarction. (*Lancet* [Sept.] 1964.)

• At present there are some 500 **Poison Information Centers** throughout the United States. After reviewing experiences at Children's Hospital Poison Information Center in Los Angeles, the authors suggest fewer and better staffed centers than now exist throughout the country. They also advise close cooperation between **suicide prevention centers** and poison information centers, since approximately 50% of adult poisoning calls arise from suicidal attempts. (*Anesthesia-Analgesia* [Sept.-Oct.] 1964.)

• The English, who have no shortage of nontuberculous pulmonary disease, have found in review of the specialty of **chest medicine** that it is **reintegrating with general medicine.** The decline of tuberculosis is a major cause of this reintegration. Present plans call for all English chest clinics to be housed within general hospitals by 1975. (*British Med. J.* [Oct. 10] 1964.)

• Various **cytotoxic drugs** are being used with increased frequency in the treatment of **multiple myeloma.** A report from California indicates a clinical and laboratory remission following treatment with cyclophosphamide (Cytoxan). Lytic lesions of the skull showed distinct regression. Protein abnormalities and bone marrow were normal when this drug was used.

• **Darwin's** 50-year-long illness has been attributed to South American **trypanosomiasis,** contracted while on the voyage of HMS "Beagle." Now a more careful review of his symptoms indicates that his palpitations, headaches, insomnia, and tremulousness were brought on by **meeting people,** and appeared prior to his trip on the "Beagle." Would modern psychiatry have given us a calmer Darwin and no *Origin of Species?* (*Brit. Med. J.* [Mar. 20] 1965.) ■

FRED I. GILBERT, JR., M.D.

TELEPHONE 569-691

BUREAU OF MEDICAL ECONOMICS, LTD.

ESTABLISHED BY THE MEMBERS OF THE HONOLULU COUNTY MEDICAL SOCIETY

510 SOUTH BERETANIA STREET HONOLULU 13, HAWAII

Administration

May 3, 1965

Dear Doctor:

The Medical Assistants Annual Seminar which will be held in July will again incorporate "The Medical Assistants of the Year Award."

The inauguration of this commendable project in 1964 showed Honolulu to be first in the field of encouraging medical assistants to improve the scope of their knowledge through such an award.

Last year no less than 8 panels of doctors, and administrators in various departments of hospital, clinic and private practice activities gave their services in examining and judging the large number of entries who were intent on winning the "Presidents Award" trophy.

In the words of Dr. Annis who presented the trophy last year "This is a commendable undertaking, one that every member of the profession should encourage."

We solicit your aid in this matter by encouraging your medical assistants to enter and represent your office. They will learn much from the panels, all of which will enhance their ability to serve you with greater efficiency.

Sincerely yours,

Robert T. Wong, M.D.
President

HAWAII MEDICAL JOURNAL

In Memoriam—Doctors of Hawaii

This is the fifty-fifth installment of In Memoriam—Doctors of Hawaii.

Harry Hoagland Blodgett

Harry Hoagland Blodgett was born September 18, 1882, at Ida Grove, Iowa, the son of Oscar Jerome and Mary Viola (Hoagland) Blodgett.

DR. BLODGETT

He graduated from Indianola (Iowa) High School, attended Simpson College at Indianola, Iowa, for two years, and received his medical degree from Rush Medical College in Chicago in 1907. His internship was served at St. Joseph's Hospital in Chicago from 1907 to 1908.

On November 4, 1908, Dr. Blodgett married Miss Esther Lyons in Chicago. The Blodgetts had three sons: Harry Lyons, Julian Robert, and James Arthur. They had nine grandchildren.

From 1909 to 1910 Dr. Blodgett was surgeon for the Burlington Railroad with headquarters at Omaha, Nebraska. The following year he became a surgeon in the U. S. Army Medical Corps and was an honor graduate of the Army Medical School at Washington, D. C., in 1912. During his six years in the Army, he saw service at Fort Meade, South Dakota; Vera Cruz, Mexico; Galveston, Texas; and Honolulu, Hawaii. After being stationed at Schofield Barracks and Ft. Shafter, Dr. Blodgett left the Army with the rank of Captain and opened an office in Honolulu. In World War I (1918-1919), he returned to active duty and was assigned to Ft. Shafter.

On completion of his active duty, he again returned to private practice in Honolulu. In 1923 and 1924 Dr. Blodgett was associated with Dr. R. Nelson Hatt and assisted in operations performed at the Shriners' Hospital for Crippled Children. Leaving Honolulu in 1927, the doctor moved to Beverly Hills, California, where he opened an office. From 1936 to 1958 he was City Health Officer, and Director of the City First Aid Station from 1952 to 1958, when he retired.

Dr. Blodgett died December 28, 1961, at his home in Newport Beach, California, at the age of 79.

He was a member of the Honolulu County Medical Society, the Hawaii Medical Association (President in 1919), and the University and Oahu Country clubs. In California he was Past President of the Bay Medical Society in Santa Monica, Past President of the Beverly Hills Rotary Club, a Shriner, and a member of the American Legion. He was a member of the Bel Air Country Club and of the Beverly Hills Lawn Bowling Club. His college fraternities were Sigma Nu and Alpha Kappa Kappa.

Upon his retirement from medical practice in 1958, the City of Beverly Hills presented him with a plaque with the following inscription: "In recognition and appreciation of the efficient manner in which he discharged his duties during his term of office with this City. The high standards in which he discharged his duties in his practice of medicine and his administration of the City Health Department and First Aid Station. The kindly and understanding manner in which he dealt with all who sought his aid and comfort. The City of Beverly Hills extends to Harry H. Blodgettt upon his retirement as Health Officer and First Aid Director the sincere thanks of a grateful community."

Eiji Yoshimura

Eiji Yoshimura was born in 1887 in Gifu Prefecture, Japan.

His medical education was received at the Aichi Prefecture Special Medical School at Nagoya, from which he graduated in 1914.

Coming to Hawaii in 1917, he established the Yoshimura Hospital in Hilo, which he operated until his death.

Dr. Yoshimura was connected with the Hilo Japanese Chamber of Commerce and the Hilo Japanese Association in which he served as vice-president. He also belonged to the Hilo Hongwanji Mission. On many occasions he served as leader of the Japanese community and was also interested in the welfare of the second generation Japanese in the Islands.

Dr. Yoshimura died in Hilo on July 19, 1938, at the age of 51. He was survived by his wife, Ume, and six children: George Hideo, Amy Emiko, Orion Jiro, Edward Ryozo, May Harue, and June Natsuho.

HAWAII MEDICAL JOURNAL

New Members

William H. Hindle, M.D.

888 South King Street
Honolulu, Hawaii 96813
OBSTETRICS-GYNECOLOGY
Yale University—1956
Internship—Los Angeles County
General Hospital—1956-57
Residency—U.C.L.A. Medical Center
1957-61

Herbert Y. K. Wong, M.D.

63 South Kukui Street
Honolulu, Hawaii 96813
INTERNAL MEDICINE
Marquette Medical School—1959
Internship—The Queen's Hospital
Residency—The Queen's Hospital
1960-61
University of Pennsylvania—1961-62
V.A. Hospital, Long Beach—1962-63
V.A. Hospital, San Francisco
1963-64

T. Roy Kaku, M.D.

888 South King Street
Honolulu, Hawaii 96813
OTOLARYNGOLOGY
Washington University—1956
Internship—Cincinnati
General Hospital—1956-57
Residency—Barnes Hospital,
St. Louis, Mo.—1957-61

Richard Roy Kelley, M.D.

The Queen's Hospital
Honolulu, Hawaii 96813
PATHOLOGY
Harvard Medical School—1960
Internship—University of California
(H. C. Moffitt Hospital)
Residency—San Francisco
County Hospital—1961-62
The Queen's Hospital—1962-64

Kazushi Tanaka, M.D.

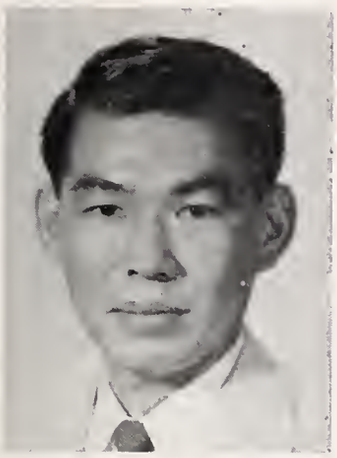
45-1048 Kamehameha Highway,
Room 205
Kaneohe, Hawaii 96744
GENERAL SURGERY
Keio-Gijuku University,
School of Medicine—1956
Internship—Keio-Gijuku
University Hospital—1956-57
Illinois Masonic Hospital—1958-59
Residency—St. Francis
Hospital—1959-61
Honolulu Integrated Surgical
Residency Program—1961-64

Hiroaki Tottori, M.D.

1024 Piikoi Street
Honolulu, Hawaii 96814
PEDIATRICS
Tulane University,
School of Medicine—1959
Internship—Southern Pacific
General Hospital, San Francisco,
California—1959-60
Residency—Children's Hospital of
Los Angeles—1960-62

HAWAII MEDICAL JOURNAL

County Society News



George Kimata, M.D.

1126 South King Street
Honolulu, Hawaii 96814
OTOLARYNGOLOGY
Tulane Medical School—1958
Internship—Cincinnati
General Hospital
Residency—Eye, Ear, Nose & Throat
Hospital, New Orleans, Louisiana

Roscoe S. Pebley, M.D.

Leeward Oahu Hospital
Aiea, Hawaii 96701
GENERAL PRACTICE
University of Kansas—1941
Internship—Highland-Alameda
County Hospitals—1941-42

Hawaii

One guest, Dr. Howard H. Peppel of Cleveland, attended the February 18 meeting. He represents the Accreditation Committee examining the Hilo Hospital. Reports were received from the Treasurer, Dr. Caldwell on the Water Safety Committee, Dr. Helms on Hilo High Careers Day, Dr. Bracher on the Scholarship Fund, Dr. Bracher on the Cancer Care Trust. Dr. Eklund asked for more active workers on committees. Announcements were made by Dr. Bracher relative to the availability of surgical books in the scrub room and by Dr. Matayoshi regarding a disaster drill planned for April. Dr. Woo was complimented on his fine articles in the local paper. Dr. Bergin suggested that when the Society has guests who talk on topics of general interest that the public be invited. He felt that the personal touch in public relations was more important than a large volume of printed material. Dr. Caldwell will circulate the membership to see who is willing to make talks to lay groups. Dr. Mitchel reported on HMSA activities. It was voted to write the Haili Church to advise that the Society will ccoperate in providing volunteer physician services during the Billy Graham Crusade. The Dental Society's oral cytology program was explained. The Society discussed supporting for one year a PKU testing program on the basis that it be a pilot study only, and approved the principle, but opposed the method, of the test program that is in the Department of Health's budget.

* * *

In December, instead of a business meeting, the annual party was held.

* * *

Ten members were present at the January 29 meeting. Guests were Mr. John Pompelli of the AMA, Mr. H. Tom Thorson of the Honolulu County Medical Society, the Reverend Dr. Paul McCleave of the AMA, and the following representatives of the local clergy: Revs. Collins, Grosh, Nakamura, Fisk, Kaneshiro, and Decker.

After reading of the Treasurer's Report, it was voted to set aside $1,500 for the Scholarship Fund. It was agreed to again conduct a Careers Day Program in Hawaii rather than to send students to Honolulu. An announcement was made that if sufficient interest is shown, Dr. Lawrence H. Snyder would conduct a three-week course in genetics. Mr. Thorson told the members about the Honolulu Foundation for Medical Care. Mr. Pompelli spoke briefly on the present national legislative action on medical care for the aged. Dr. McCleave spoke on the "Interdependence of the Two Professions—Clergy and Medicine" which was followed by a question-and-answer period.

* * *

Drs. Waldo Nelson and Paul Lee, plus 22 nurses from the Peace Corps, were guests at the March 18 meeting. A Diabetes Detection program sponsored by the Lions Club was announced for May or June. Members were advised that Mr. Tom Thorson of Honolulu County Medical Society would meet with any doctors interested in the Honolulu Foundation Plan at noon on March 25.

Dr. Oda advised that Hawaii was the only county to vote against the proposed PKU Testing program. Dr. Nelson was asked for his opinion. He said the Guthrie test is not the perfect answer, but it is the best that has been developed to date. In Pennsylvania the Pediatric

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HAWAII MEDICAL JOURNAL

Notes and News

Professional Moves

Tax time always has a sobering effect and perhaps stuns doctors into inaction, for there were few moves. **Catalino Cachero** joined **John Felix** at the Pali Medical Bldg. and **John Krieger,** Ob-Gyn man, joined the Alsup Clinic. Country mouse **Jim Mertz** returned to quieter Kailua after a brief stay in town. President **O. D. Pinkerton** moved to new quarters at the Investors Finance Building. Weary "Do It Yourselfers" **Vic Mori, Walt Chang, Ben Tom,** and **Francis Oda** spent weekends laying tile and painting their new quarters at the King-McKinley Bldg. **Phil Lee's** new bomb-proof quarters at 1507 So. King Street received its precious but lethal load of Cobalt 60, and fellow occupants promptly started carrying geiger counters around, fearful of spillage.

Elected, Appointed, and Honored

We note that **Bob Mookini** became full-time medical consultant in the State Social Services Department, replacing part-time consultant, **John Devereux.** He thus inherits the chronic headache of how to keep our enthusiastic residents and interns from spending this year's 3.5 million dollar medical care program in six months. Our versatile President **O. D. Pinkerton** was elected Second Vice-President of the Better Business Bureau of Hawaii. Amiable **Sam Yee** was reappointed to the Board of Medical Examiners and the trio, **George Suzuki, David Lee Pang,** and **Shoyei Yamauchi** were appointed to the Commission on Aging. Quiet, efficient **Philip Pharazyn,** Kauikeolani Children's Hospital Administrator, was elected Hawaii's first Regent to the American College of Hospital Administrators.

Sportsmen

Turf Diggers: **Walter Ozawa** hit a perfect 4 wood on the 191-yard 14th hole at the Mid Pac Country Club, but as he and his foursome walked up to the green, no ball could be seen. Three Filipino workers belabored the weeds around the green. After a fruitless search of the vicinity, Walter inquired of the workers, "You see golf ball come this way?" to which the matter-of-fact disinterested answer came back, "We see one ball go inside hole."

In March, **Duke Choy** and partner won the team tourney at Waialae and **Homer Izumi** tied for A flight honors. In April, **Al Ishii, Sam Yee, Kiku Kuramoto,** and **Homer** each won honors in either team match or individual stableford. At Ala Wai, **Wally Kawaoka** copped the Thursday Club's March-April Trophy. **Ike Nadamoto,** still a painful 8 handicapper, refused to give strokes based on actual handicap. Incidentally, the Ala Wai players are up in arms at Waialae golfer, **Sam Yee's** recent suggestion that the Ala Wai course be converted to a stadium site. They feel that Waialae with its excellent seascape is a far, far better site.

At the Country Club, the doctors must have fared poorly these past few months for **George Ewing** seems to be the only winner announced. George tied for C flight honors with a net 69.

Tennis: We found Straub Clinic to be well represented at the Ala Moana courts on Wednecday afternoons with **Ed Chesne, William Goebert, Fred Gilbert, Elmars Bitte, Donald Jones,** and **Eldon Dykes** swatting away their cholesterol levels.

Sailors: **Ells Harris** is a perennial winner in the PC class at the Waikiki Yacht Club while **Fred Shepard** repeatedly paces the Cal 20 class.

SAMUEL RITTY BROWN
1881-1965

My first contact with Sam Brown was in 1927 when I called him from Pahala in regard to a patient on whom he had done a gastric resection for carcinoma, a formidable procedure in those days. My respect for his surgical ability began at that time and continued to grow with the years of association, during which time I was exposed to his proficiency in all fields of medicine, his alert powers of observation, his practical approach to medical problems, and probably most of all his sincere devotion to his patients. I am certain I learned much more from him than from any other physician.

Born in Chelburne, Nova Scotia, July 14, 1881, and graduated from Dalhousie in 1908, Sam started his practice as a plantation physician in 1909. He practiced several years at Honokaa, where he had to do everything in the medical field. This experience was broadened when he went to London during World War I and worked for about two years as a surgical resident, taking care of war casualties as well as other surgical cases. He returned to Hilo and devoted the remainder of his life to serving the people of Hawaii. He practiced here about 55 years, and as far as I know no other physician in Hawaii remained in active practice that long.

He married Ida Beverly of Boston in 1916, and they had two children, Phillip Brown, now in Seattle, and Mrs. Betsy (Jack) Shofner, in Santa Monica. Mrs. Brown died in 1964.

Sam's energy was deceptive. He was always calm, never hurried. However, up to about 1950 his days began about 7:30, and ended, as far as the office was concerned, at six o'clock. There were many night calls. He had the happy faculty of being able to drop off to sleep sitting in a chair at idle moments and renew his vitality.

Sam was not very gregarious or communicative. When chided on this latter characteristic his reply was, "I find the less I say the less I have to take back."

I consider it a privilege to render the final salute to the most unforgettable character I have met.

H. E. Crawford, M.D.

Fishermen: **Harold Sexton** and son went "nippin' in and out" of a tuna school in a little twin-engined open skiff, catching 15 good sized *aku* and *ahi* and putting larger craft to shame. **Roy Kaye, Don Poulson** (his back improved), **Dudley Seto,** and **James Young** sailed to the Banks on April 26. Weather was fine, and fishing poor. Included in their catch were four *ahi,* one *aku* and two glass balls.

Visiting Physicians

We were certainly blessed with visiting pediatric professors. **Jerome Glaser,** pediatrics professor from the University of Rochester, recommends good ol' Hawaiian poi for sound teeth. He points to the excellent quality of teeth (95 per cent perfect teeth) in Polynesian children subsisting largely on poi. Perhaps we can add poi instead of fluoride to our drinking water so that fellow doctors will not have to take issue on fluoridation. **Waldo Nelson** from Philadelphia, who completed his three months as visiting professor at Children's Hospital, endorsed the three-hospital medical complex as did his predecessor, **Joe Stokes, Jr.,** also from Philadelphia. **Benjamin Kagan,** Professor at the University of California, who collaborated with **Sydney Gellis** in "Current Pediatric Therapy" lectured one week under the visiting professor program.

Members Speak Up

The recent fluoridation issue pitted doctor against doctor and brought out the political instincts in some of our most prominent physicians. **Lyle Phillips,** President of the Citizens' Pure Water Association and IMUA Chieftain, protested that the use of fluorides was tantamount to medical malpractice and recommended that even chlorine be removed to make the water taste better. Scrappy **F. J. Pinkerton** felt that prolonged use of fluorides would destroy vital organs and might even cause fatalities if used on a wide scale. Erudite **Harry Arnold, Jr.,** testifying for fluoridation, outmaneuvered a veteran politician on his home grounds. Antifluoridationist Rep. Manuel Henriques asked Harry why he didn't "campaign against sugar instead of poisoning our pure water supply" to which Harry at his legislative best answered, "I'm shocked at your suggestion. I think it would have serious economic repercussions. I suggest we fluoridate the water supply and then we can all enjoy candy." Touché. Again, Rep. Henriques, a sucker for punishment, ticked off a list of mainland physicians who were opposed to fluoridation. Harry noted that these physicians were of the "radical right." "You mean Communists?" Henriques asked. "No, just the opposite, Communists are radical left," Harry replied. "Oh, you mean in the middle," Henriques said. "No, Rep. Henriques," Harry said, "I'm a member of the radical middle" with which the representative was again rocked back on his heels, knees crumpling.

Dick Ho, during a panel discussion at the Aina Haina Elementary School PTA, disclosed that he reads teenagers' magazines to bone up on the latest lingo such as "Supercalifragilisticexpialadocious." Dick feels that knowing such words can make the difference between being a "square" and being "on the ball."

Jim Cherry in an eloquent open letter to Spark Matsunaga suggested fuller medical and hospitalization coverage for those who cannot afford it and not for those who could. He ended with a touching, "I make this request with the depth of sincerity and deepest concern for the welfare of our nation." Amen.

With all the odds stacked against him, able **Sam Allison** did an excellent job of pushing our belated Eldercare

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RAYMOND MASASHI OTSUKA
1910-1965

Dr. Raymond Masashi Otsuka was born in Wailuku, Maui, December 4, 1910. On January 4, 1965, he passed away at The Queen's Hospital. He was married to the former LaVerne Sauers. They had eight children: Conrad, Cora May, Frank, Anthony, Christine, Dawn, Claudia, and Joel.

Dr. Otsuka was graduated from Maui High School in 1930. As a young student, he was active in school affairs. His classmates remember him in a very special way, as an accomplished pianist and organist. Many delightful hours were spent by his friends at his home where they gathered to listen to his playing of the piano.

After premedical studies at the University of Hawaii and the University of Pennsylvania, he entered the medical school of the University of Chicago and heceived his M.D. degree in 1938.

His internship and residency training in dermatology were done at the Cook County Hospital in Chicago, Illniois, from 1938 to 1944. He was selected as a dermatologist for the Cook County Hospital Army unit in the last war, but when the group was sent to the Orient he was removed because of his Oriental ancestry.

He studied three years at the University of Illinois Research Hospital x-ray department and completed his qualification as a roentgenologist in 1949. He spent a year and a half as an assistant roentgenologist under Dr. Cassidy at the St. Anne's Hospital in Chicago, Illinois. He had a private office in which he practiced dermatology in the southwest section of Chicago. He did some research work in the field of dermatology under a special foundation set up by the State of Illinois while a resident at the Cook County Hospital.

A kidney infection brought him back to Maui with his family to recuperate in June of 1952. After his recovery in 1953 he opened his private practice as a dermatologist and roentgenologist in Wailuku, Maui.

Dr. Otsuka was on the staff of the Maui Memorial Hospital, Wailuku, Maui. He was a member of the Maui County Medical Society, the Hawaii Medical Association, the AMA, and the American Radiological Society.

He had great interest in the youth of today and thoroughly believed in keeping our youth physically fit. In the interest of physical fitness, Dr. Otsuka founded the Bar Bell Club of Maui. The athletic program of the four high schools of Maui was a special pet of his. He devoted many hours of care to the boys of Maui's high schools whenever any athletic events were carried on.

Dr. Otsuka was indeed a true Samaritan. Because of his great compassion for mankind, he reached great heights in self-expression through his music, the organ and piano. His literary accomplishments were gems. No man could have left behind him thoughts more compassionate than he did when he knew his days were numbered. Reverend Chandler was charged by Dr. Otsuka to do one last favor, to read at the good doctor's final services a religious prose poem entitled "Meditation," by Raymond M. Otsuka, M.D.

M. Tofukuji, M.D.

HAWAII MEDICAL JOURNAL

Book Reviews

★The Clubfoot, 1st Ed.

By J. Hiram Kite, 232 pp., $9.75, Grune & Stratton, 1964.

DR. KITE is the foremost authority on the treatment of clubfeet. The Kite technique of wedged plaster casts is world-famous and in this text he clearly outlines this technique with excellent illustrations.

The first portion of this text contains a complete review of the literature on the subject of clubfeet including the etiology as well as the various modes of treatment and their results.

There is also a review of the clubfeet treated at the Scottish Rite Hospital for Crippled Children in Decatur, Georgia, from 1915 through 1960, which includes the results of 1,509 cases.

I feel very fortunate to have personally observed the author during some of his demonstrations. Dr. Kite's art of gentle manipulation is certainly a far cry from the early orthopedic modes of treatment such as use of the Thomas wrench, etc. In this age of refinements in surgical technique one cannot place sufficient emphasis on the nonoperative treatment of clubfeet, which is *the* treatment.

Highly recommended reading for all those concerned with the proper care and treatment of clubfeet.

NORMAN Y. NAKAMURA, M.D.

Chronic and Constructive Pericarditis

By David H. Spodick, M.D., 369 pp., $14.75, Grune & Stratton, 1964.

THIS REMARKABLE book supplies references to world-wide medical literature on chronic and constrictive pericarditis. Detailed discussions of both the usual and unusual causes of the fascinating diseases of the pericardium, an outstanding discussion of cholesterol pericarditis, the syndrome of polyserositis, Concato's disease, inflammatory cysts, and diverticula of the pericardium are skillfully presented. The glossary of eponyms in pericarditis is invaluable for students in this field; and the illustrations are good. Cardiologists, internists, thoracic surgeons, and general practitioners interested in pericardial disease will treasure this text as a reference book.

T. K. LIN, M.D., F.A.C.C., F.A.C.P.

★Blood Coagulation, Hemorrhage and Thrombosis, 2d Ed. Methods of Study

Edited by Leandro M. Tocantins, M.D., and Louis A. Kazal, Ph.D., 532 pp., $17.50, Grune & Stratton, 1964.

THIS BOOK is an excellent compilation of laboratory coagulation tests and procedures as performed by outstanding authorities in their coagulation fields. Theory and discussion are not emphasized, as it is not the intent of this book to do so; however, great detail is given to methods and techniques. Important references are given at the end of each procedure. The many contributors to this book are recognized experts in the field of clotting. This book serves as an excellent reference for basic knowledge and understanding of techniques of the various coagulation tests. It is extremely valuable for those who actually perform coagulation tests in the laboratory and of less use to the practicing clinician. For those who are actually interested in coagulation methodology, this book is highly recommended.

ROBERT T. S. JIM, M.D.

★ means highly recommended.

★ Gout, 2d Ed.

By John H. Talbott, A.B., M.D., D.Sc. (Hon.) 261 pp., $8.50, Grune & Stratton, 1964.

THIS EXCELLENT MONOGRAPH on gout covers the subject from its earliest known history to its present state. Although studies are being done to elucidate the mechanism of the disease, the answer remains obscure.

The diagnosis and treatment are covered thoroughly. No revolutionary treatment has been found, but the author gives a good account of the drugs available and their pharmacological action. There is a very good section on the x-ray findings of gouty arthritis, with many illustrations. Other diseases associated with hyperurocemia, e.g., blood dyscrasia, myxedema, and obesity, are mentioned briefly. An extensive bibliography is also included.

ARTHUR K. WONG, M.D.

★Diseases of Metabolism, 5th Ed.

Edited by Garfield G. Duncan, M.D., 1551 pp., $28.00, W. B. Saunders Company, 1964.

THIS FIFTH EDITION, just like all its predecessors, remains one of the outstanding reference texts of current knowledge in the field of metabolism. In addition to the multiple areas of metabolism covered in the previous edition, this new edition has seven new chapters: inborn errors of metabolism, parathyroid gland, metabolic considerations and functions and disorders of the digestive tract, metabolic considerations and functions and disorders of the nervous system, nutritional and metabolic aspect of the disorders of the blood, metabolic considerations and disorders of the circulatory system, and metabolic considerations and functions and disorders of the respiratory tract.

For the many readers who are familiar with older editions, no further comment can be made about the authoritative dissertation made by many of the most outstanding men in the field of metabolism. For those interested and who are yet uninitiated in the various aspects of metabolism as it applies to clinical medicine, this book is highly recommended.

WINFRED Y. LEE, M.D.

★Polypoid Lesions of the Gastrointestinal Tract

By Claude E. Welch, M.D., 148 pp., $7.50, W. B. Saunders, 1964.

DR. CLAUDE WELCH has accomplished in this short volume the aim of the series "Major Problems in Clinical Surgery," which is to keep abreast of advances and changing concepts in surgery.

Dr. Welch directs this monograph particularly to surgeons so that emphasis is placed upon features that will interest them.

Among surgeons and pathologists, there has been wide diversity of attitudes with regard to polyps of the gastrointestinal tract. Much confusion and controversy exists as to what should be the appropriate management for these lesions.

In logical and comprehensive presentation, Dr. Welch defines terms, discusses the incidence and location of polypoid tumors, and summarizes what is known about the etiology of adenomas. He then describes and illus-

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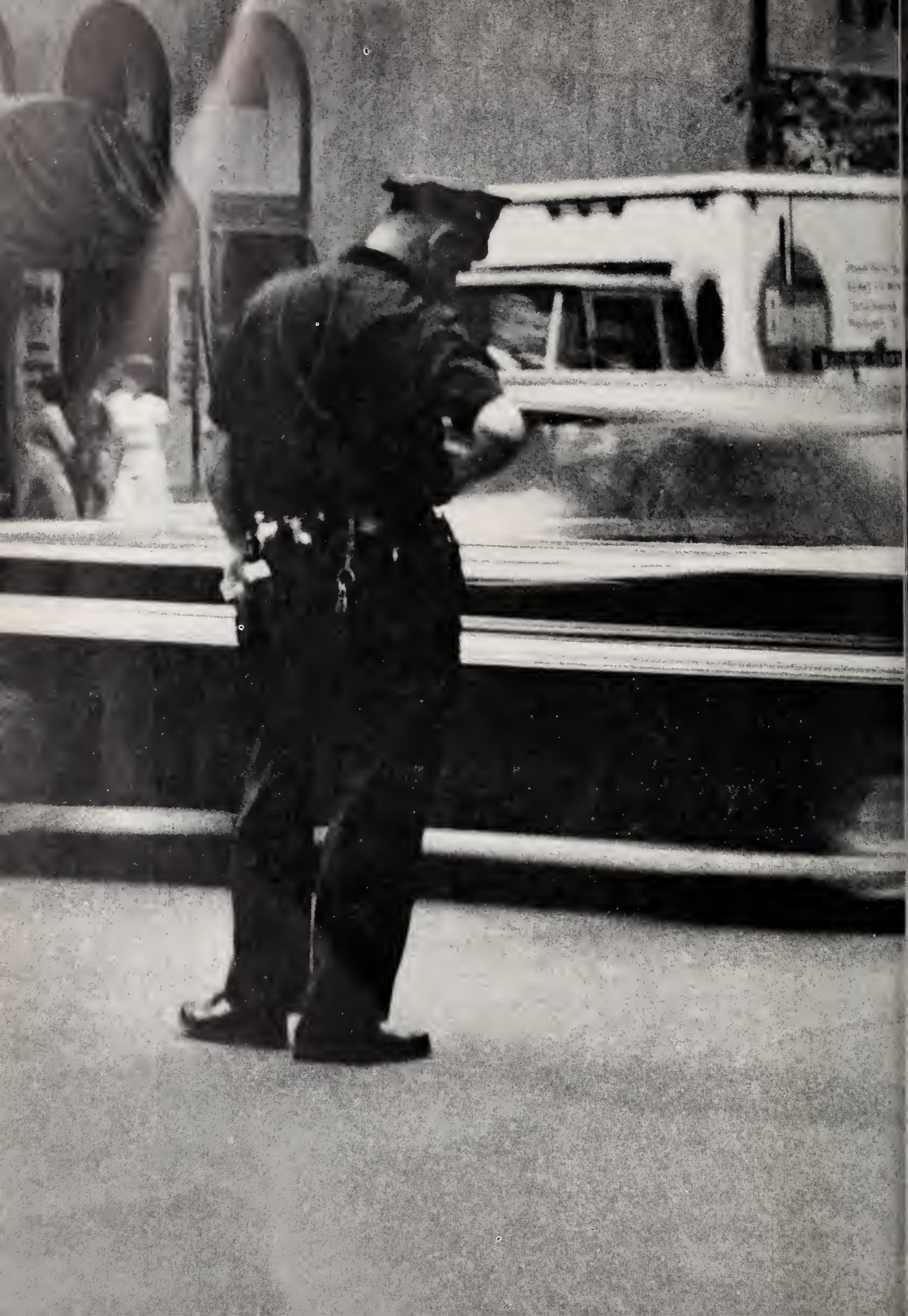

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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: JAMES YANO, Kaiser Foundation Hospital

A Bold Challenge

Heretofore HSMT officers have used these pages to a very limited extent. Here, though, is the best available means of reporting to the membership, and we hope that this joint report from your President and President-elect will be the beginning of a new custom.

Since this is a first-time effort, and since it is timed to coincide (approximately) with our annual meeting and election of officers for the coming year, it seems appropriate to make it a brief summary of what we are doing, what the activities of the past year have produced, and what is pending for future action.

The status of the medical technologist has never been less clear. Our future is uncertain. We hope that by recognizing our problems, describing them honestly, and trying to place them in proper perspective, more people will be encouraged to think about them, care about them, and see the necessity to help do something about them. This, we feel, is the way of the professional. And it seems proper that technical articles relating to our profession should share space with comments on the more prosaic aspects of medical technology.

First: What have we been doing?

The past year was one of progress and, of course, stalemate. The Board of Directors worked hard and made it unnecessary to hold long, unproductive business meetings. The membership responded by expeditiously passing most of the recommended legislation. For example:

1. The HSMT Scholarship and Loan Fund—served by a dedicated committee—took definite form and acquired its initial funding. The first grant will be made available in 1966.

2. Scientific meetings took on several new looks. Attendance was up and participation broadened. Talks by HSMT members provoked some of the best discussions of the year.

This is a good place to express our gratitude to Straub Clinic, the State Board of Agriculture, and to St. Francis, Kuakini, Queen's, Kaiser, and Tripler Hospitals for the use of their facilities for meetings.

3. This year's Convention looks like the most ambitious program we have ever undertaken, and perhaps one of the most enjoyable.

4. Our Finance Committee conducted a successful fund-raising program and augmented the pittance realized from dues. The Scholarship Fund, our annual donation to the State Medical Library, travel expenses for a delegate to the ASMT meeting, and a contribution to the Legal Defense Fund for the National Committee for Careers in Medical Technology were some of the projects worthy of any expenditure.

The outcome of NCCMT's current legal struggle will have a profound effect on the profession of medical technology. Ethical standards, educational concepts, and regulatory functions are involved. The majority of our members—alerted to the importance of the situation by ASMT news releases—also made individual contributions.

The accomplishments seem small compared to the many perplexing situations still facing us. Since several apparently unrelated problems are actually closely connected in origin and eventual solution, they are therefore best discussed together. Salaries, recruitment, educational requirements, exploration of sources of additional income, continuing education of the graduate technologists, greater participation in community (medical and nonmedical) affairs, and MEMBERSHIP are problems which must be attacked now.

Last month's article by our Editor-in-Chief was a probing analysis of the pros and cons of a five-year medical technology program. To require more (and by inference, better) education without examining existing salary structures seems unrealistic. Recruitment could be extremely difficult if compensation is not better than it is at present.

A thorough study of salaries cannot be contemplated with a membership that does not include virtually all ASCP-registered technologists plus a good representation of those eligible for Student and Associate Membership. Membership is the first evidence of "caring." It demonstrates

to others that we are concerned about the present and future of our profession.

Similarly, further community commitments such as scholarship aid and library grants depend on increased financial resources. The membership has underwritten these projects which benefit the medical community directly and the entire community indirectly. Some way will have to be found to compensate for the lack of support and lack of interest of the medical technologists and technicians who choose to withhold financial support and professional participation.

Continuing education, in a field which changes as rapidly as medical technology, is essential. Our scientific programs are not designed to teach, so much as they are intended to illuminate areas of need. There is in Hawaii no Clinical Pathologist–Medical Technologist Committee or any other arrangement which might consider educational programs. Such committees exist on the national level and in some states. There may be good reasons for the subject to be ignored here, but it must be noted that the time and interest Hawaii's pathologists have given to medical technologists' programs is a matter of record. Apparently the lack of initiative is ours.

Our state licensure law has not become the monster it threatened to be. But that does not mean that a careful study of the law is not indicated. Its potential for undesirable effects in the community, as well as on medical technologists, should be assessed, and if it appears to contradict the AMA standards by which we have agreed to study, work, and teach, and to which we subscribe. Suggestions for improvement by amendment should be formulated.

In every instance we must answer the question, "To what extent do we want to regulate our own profession?" And when we have determined what our answer really is, we must be ready to answer the inevitable question of others: "To what extent are we capable of regulating our own profession?"

From time to time in forthcoming issues we will discuss some of these subjects individually. We hope, also, to publish comments from interested individuals. Since much of this could be of controversial nature, the Board of Directors for 1965-66 will also act as an Editorial Board. This article will be the first to be submitted to Board's scrutiny and all future material classified as nontechnical or nonfactual will be treated similarly.

Your Publications Chairman will continue as Editor-in-Chief and should receive all articles submitted for publication. Most of our allotted space should be devoted to technical material and we hope that our Editor will be swamped with material submitted by the members.

EDITH ECKSTEIN, MT(ASCP)

See General Diagnostics
Message on page 397

Society went on record as being opposed to compulsory statewide testing. No action was taken and the meeting concluded with a talk by Dr. Nelson on infections of the newborn.

Honolulu

Approximately 216 members were present at the March 2 meeting which consisted of a program, "Medical Aspects of the Space Effort," presented by Lt. Col. Richard T. Day, USAF. New members George Kimata and Herbert Y. K. Wong were presented. Dr. Allison, HMA President, paid his official visit to the Society and gave a short talk. Announcement of the Long Range Planning Committee's proposal relative to building was made by its chairman. Dr. Tomita. Details were presented by Mr. Robert Craig, Director of the Downtown Improvement Association; Mr. Wallace Fryer of Adrian Wilson & Associates (architects); Mr. Bruce Starck of Dillingham Corporation; and Mr. Ray Fridrich of Mutual of New York. The Society was advised that the BME needs additional space, the building occupancy would not be limited to physicians, stock would be sold on a voluntary basis, only a $20,000 committee is needed at this time (to secure an option on the land, which is valued at $395,000), and no tax problems are anticipated. Mr. Rice explained that the Society would be the landowners and would lease the land to a corporation which would put up the building. The stockholders of the corporation would be the HCMS itself, the BME, and the membership of the Society. It was voted that the Society would approve the project insofar as putting down the $20,000 for the land is concerned and then go ahead and work toward the project's completion. There was one dissenting vote.

Kauai

At the February 2 meeting it was voted to set the County dues at $49 for 1965, and that individual members contribute to HAMPAC. The scheduled polio immunization program was postponed due to the presence of a high incidence of virus infections. A similar program for measles was discussed. A follow-up program in the pregnancy study was announced. Members were advised that HMSA headquarters will be moved when their present lease expires in April, 1966.

It was voted that Dr. Zandee be advised that he is no longer eligible for dues-waived status through Kauai County. Dr. Cockett advised that his term on the Board of Medical Examiners had expired and the Secretary was asked to write a letter asking what procedure should be followed in naming a candidate to fill that position.

The Society voted to sponsor five students to attend the Careers Day program in Honolulu. Two cancer films were approved for showing to freshmen women students with their mothers also in attendance. It was voted to invite Dr. Murray Copeland to the May 4, Dr. Connor to the March 2, and Dr. Barker to the August 3 meetings. It was agreed to assist the HMA in establishing a savings account on Kauai. The February workshop program at Hanalei Plantation for February 26 and 28 was announced.

Maui

Four guests were present at the August 28 meeting. Dr. Edward Payne of the Department of Health reported on the plans for the diabetes screening program being conducted in the Hana district. He asked for the cooperation of the Society. He also mentioned that the Department of Health has funds for more Pap smears.

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County Society News *continued from 396*

Dr. Liu spoke on disability evaluation for Social Security reports and showed a movie on this subject.

Dr. Fleming asked for doctors to help at Kaanapali during the week of the Canada Cup golf matches. It was voted not to include HAMPAC dues with the county dues billing. After dinner, Dr. Tompkins reported on the plans and activities of the Mental Health Program on Maui.

* * *

HMA President Allison and President-elect Pinkerton were present at the December 15 meeting. Dr. Moran reported on his Honolulu meeting regarding the proposed medical school. The Nominating Committee's report was presented and a unanimous ballot cast.

Dr. Fleming thanked the Society for its support in his recent election and turned the meeting over to the new President, Dr. Hanlon, who asked for the Society's feelings on Careers Day programs. A motion to adopt a Careers Day program was carried, and Dr. Moran was elected chairman.

* * *

A dinner meeting was held on February 25 at which several of the wives were present. Two doctors were interviewed for the position of hospital radiologist. Dr. Waldo E. Nelson gave a lecture on "Respiratory Disorders of the Newborn." The solicitation for financial help for the Hawaii Medical Library was tabled. HMA delegates were elected. It was voted to appoint a program committee and that after the meeting with Dr. Vilter the regular meeting night not be changed.

* * *

Dr. Richard Vilter was the guest speaker at the March 26 meeting. No business meeting was included except that a letter from Hilo County Medical Society was circulated to the doctors present with the advice that it would be discussed at the next meeting. ■

Notes and News *continued from 389*

program. Besides all the familiar arguments for Eldercare, he made an appeal to the advocates of brevity by pointing out that the Herlong-Curtis Bill is only 15 pages long while the King-Anderson is 296.

Bob Ho and **Fred Reppun** made the Bob Krauss Special during General Practice Week. Bob delivered a baby on a plane over the Pacific via radio instructions to the stewardess and Fred did emergency surgery on a premie to correct a strangulated hernia, thus extolling the challenges of general practice.

L. T. Chun, capable chairman of the Hawaii Heart Association's rheumatic fever prophylaxis program, announced an enrollment of 547 rheumatic heart patients on all islands. **David Bassett,** Director of Hawaii Cardiovascular Study, feels that high sugar intake may also contribute to raising our cholesterol levels. Perhaps we should keep this information under cover lest Hawaii's economy be affected.

We enjoyed **Eldon Dykes's** letter to the editor in which he protested the lack of traffic control by police after accidents during rush hours on the Pali Highway. He pointed out that it took him an extra 15 minutes and that multiplied by the number of cars involved means "literally hundreds of man hours lost."

David Woo, President of the Hawaii Heart Association Big Island Council, wrote an excellent four-part series on heart disease, relating the history of heart research, the role of the Heart Association, and the advances made in the past 15 years.

Inexhaustible **Ralph Cloward,** world traveller, public figure, and neurosurgeon turned political commentator, turned out an "Inside Africa" series after returning from a safari in darkest Africa. He relates the story of the

continued page 400

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rand of chlorthalidone

In terms of sodium excretion, 2 tablets of Hygroton, brand of chlorthalidone, are significantly more potent than 4 tablets of chlorothiazide, and also more potent—though not significantly—than 4 tablets of hydrochlorothiazide.* Thus, tablet for tablet, you can expect more from Hygroton, brand of chlorthalidone. Especially since it acts for up to 72 hours. You can prescribe fewer tablets at wider intervals than with any other diuretic.

Geigy

Notes and News *continued from 398*

hunter and bear to describe coexistence with Communism. A hunter cornered a bear in the wilderness. The hunter wanted a fur coat and the bear a full stomach. They sat down to talk it over and soon they both got what each wanted, viz. the bear got a full stomach and the hunter his fur coat.

HMA Convention Gems

Moses Grossman, speaking on vaccination complications, relates the case of autoinoculation in which the physician swears he washed his hands thoroughly and used a glove to do a rectal examination just after vaccinating another patient. Dr. Grossman was simply ecstatic as he said, "As beautiful a case of inoculation as I have ever seen. . . ."

Dr. Grossman also related the case of meningococcemia which occurred during a measles epidemic. The family physician after listening to the mother describe the lesions over the phone decided that it was a clear-cut case of measles and prescribed some home remedies. The child's skin later sloughed and required extensive plastic surgery. Sometime later, Dr. Grossman was at a party and was asked by a lawyer about his opinion of the same case. Dr. Grossman recommended that the settlement be postponed until the patient was 21, to which the cagey lawyer retorted, "I am not waiting that long. . . . There's gold in those scars right now."

Mr. George Squibb, Vice-President of E. R. Squibb & Sons, pharmacist, and lawyer, produced laughter with "I am not a member of any organized political party" . . . pause . . . "I am a Republican." He spoke at length on current legislative trends and their relationship to research, medicine and drugs.

Frog-voiced **Fred Warshauer,** suffering from a severe case of laryngitis, MC'd the wet luau. **Rodney West,** resplendent in coconut palm hat and aloha shirt, won the door prize by a drawing, not by looking the typical barefoot Hawaiian. **Randy Nishijima** won the prize for the most unusual hat with a Dali creation. **Walter Quisenberry** in an exotic red creation won the prize for the most unusual shirt. He later admitted that the same shirt has won him three other previous prizes and that he can now afford to retire the shirt. We thought it look a little faded.

Sunday morning, hangover and all, over 30 enthusiasts met at the Waialae Golf Club tennis courts for the first tennis tournament of the HMA Convention. A drizzle started at 8:00, but spirits undampened, the players drew lots for partners admist silent groans and delighted pips. At 8:15, the drizzle became a downpour and the courts became unplayable. Tournament Chairman, **Charley Judd,** decided to move the tournament to Iolani, where the 30 participants reconvened. The downpour turned to a cloudburst trimmed with lightning and thunder. The presence of orthopod **Don Jones** and neurosurgeon **Bill Goebert** was still not enough reassurance for the players to venture onto the courts. The tennis tournament was respectfully postponed to the following Sunday.

Over 80 golfers signed up for golf. As to how many played and finished in the torrential rains, we do not have the final tally. The best mudders turned out to be **Joe Nishimoto** with a 19 handicap, net 67, who later won the playoff with **Albert Ho,** 11 handicap, net 67. Joe had a definite advantage over Al, having consumed six glasses of beer before the playoff. Albert, however, won the low gross with his 78 and was not entirely unhappy. **Ed Emura** and **Duke Choy** tied for third place with low nets of 69. Ed drew cards and won a golf umbrella clearly labeled $35, which he accepted grudgingly. **Mac Mitsuda** with a gross 79, net 71, came next and **Homer Izumi** and

continued page 402

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Processing cycle—dry to dry—8 minutes for an average-size film. Put-through rate, 10 inches per minute.

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Notes and News *continued from 400*

Toots Fujii, with nets 72, followed in order. **Ray Fujikami** won first prize for nonhandicappers. Every player won a prize and as co-chairmen **Bill Ito** and **Richard Chun** kept going down the list. we could hear **Paul Tamura** in a plaintive lament say, "Chee, they have a long ways to get to me." But at least Paul stayed. **Norman Nakamura,** who is averse to muddy courses, was not on hand to receive a case of apple cherry juice for his high gross of 112. **Carl Mason** with jubilant shouts accepted the prize for Norman. Carl with a gross 110 and **Charley Ching** with 108 were close contenders. There followed an animated session of indoor golf and some of the golfers fared better.

News

HEART ASSOCIATION GRANTS

The American Heart Association is now accepting applications from research investigators for support of studies to be conducted during the fiscal year beginning July 1, 1966.

September 15, 1965, is the deadline for submitting applications for Established Investigatorships and Advanced Research Fellowships.

Applications for Grants-in-Aid should be submitted by November 1, 1965. Grants-in-Aid are made to experienced investigators to help underwrite the costs of specified projects, such as equipment, technical assistance and supplies.

Further information and application forms for research awards may be obtained from the Director of Research, American Heart Association, 44 East 23rd Street, New York, N. Y. 10010.

POSTGRADUATE COURSES AT VIENNA, AUSTRIA

This year a new diversified program of postgraduate seminars has been issued by the American Medical Society of Vienna in connection with the Medical Faculty of the University of Vienna. Dr. M. A. Kline, the President of the Society, reports an extended schedule of seminars in all medical specialties and subspecialties and the availability of top medical scientists of the University Clinics.

Book Reviews *continued from 390*

trates common as well as rare polypoid lesions one may encounter in the gastro-intestinal tract.

Sections on pathology, symptoms and diagnosis are short but well covered. A chapter on treatment delineates location and identification of polyps, giving arguments for and against their removal. Polypectomy and resection are discussed and their relative merits contrasted.

The author interjects his own conclusions and opinions as well as the opinions of various authorities to help guide the reader.

The reader will find this book not only educational and easy reading but also an excellent source for the solution of problems associated with polypoid lesions of the gastro-intestinal tract.

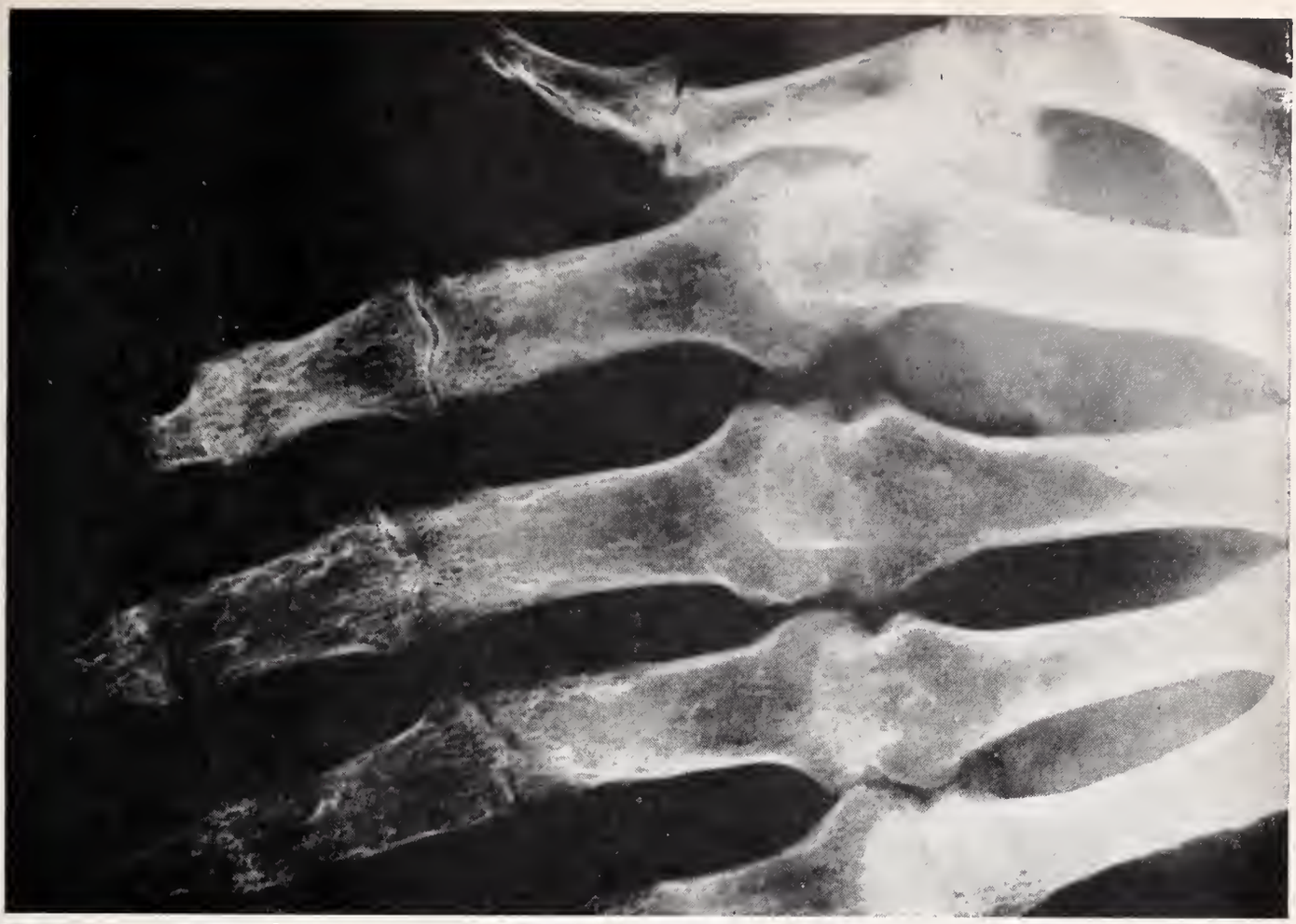
CLARENCE S. SAKAI, M.D.

Give and Take

By Francis D. Moore, M.D., 182 pp., $5.50, W. B. Saunders Company, 1964.

THIS IS THE FASCINATING history of organ transplantation during the last sixteen years. It is fascinating because of the many homely similes and metaphors contained in the

continued page 404



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Salicylate or steroid therapy can usually be diminished or, in some instances, eliminated.

Psoriatic arthritis responds in the same way as rheumatoid arthritis but the skin lesions are usually not affected either favorably or adversely by treatment.

Precautions
Before prescribing, the physician should obtain a complete history and perform a complete physical and laboratory examination, including a blood count.

The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools.

If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time.

Side effects
The most common side effects are nausea, edema and drug rash. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug.

Contraindications
These include: edema, hypertension, or danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when other potent chemotherapeutic agents are given concurrently because of the increased possibility of toxic reactions; when the patient cannot be seen regularly; when the patient is senile.

Note: The physician should be fully aware of dosage, precautions, side effects and contraindications as contained in the complete prescribing information.

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text. It is chiefly concerned with kidney isografts (between identical twins), and homografts (unrelated), with skin grafts being used as a research tool. This book is directed at both physician and lay readers (all technical terms are explained). I recommend that all my medical colleagues read it to add to their information on homografting. While not trying to do so, the book offers the perfect rebuttal to articles in recent medical literature advising against transplantation of kidneys.

M. H. MACK, M.D.

Also Received

Ciba Foundation Colloquia on Endocrinology, Vol. 15

Etiology of diabetes mellitus and its complications, 405 pp., $12.50, Little, Brown and Company, 1964.

ANOTHER INTERESTING and comprehensive review by Ciba. Especially recommended for those who desire to look into the current basic concepts of the etiology of diabetes.

Modern Nutrition in Health and Diseases, 3rd Ed.

Edited by Michael G. Wohl, M.D., Robert S. Goodhart, M.D., D.M.S., 1,282 pp., $20.00, Lea & Febiger, 1964.

AN AUTHORITATIVE guide on nutrition for practicing physician, with new chapters on inborn errors of metabolism, nutrition in alcoholism, and nutrition in neoplastic diseases.

Aging of the Lung Perspectives The Tenth Hahnemann Symposium

Edited by Leon Cander, M.D., Associate Editor, John H. Moyer, M.D., 371 pp., $15.75, Grune & Stratton, 1964.

AN INTERDISCIPLINARY look at the effects of aging of the lung—as presented at the tenth Hahnemann Symposium by 50 outstanding authorities.

Industrial and Traumatic Ophthalmology Symposium of the New Orleans Academy of Ophthalmology

By Arthur H. Keeney, M.D., Hedwig S. Kuhn, M.D., Roderick Macdonald, Jr., M.D., Frank W. Newell, M.D., Joseph F. Novak, M.D., Ralph W. Ryan, M.D., Lorenz E. Zimmerman, M.D., 321 pp., $14.50, The C. V. Mosby Co., 1964.

SYMPOSIUM on an ever-increasing problem in our mechanized society.

Nurses' Illustrated Physiology

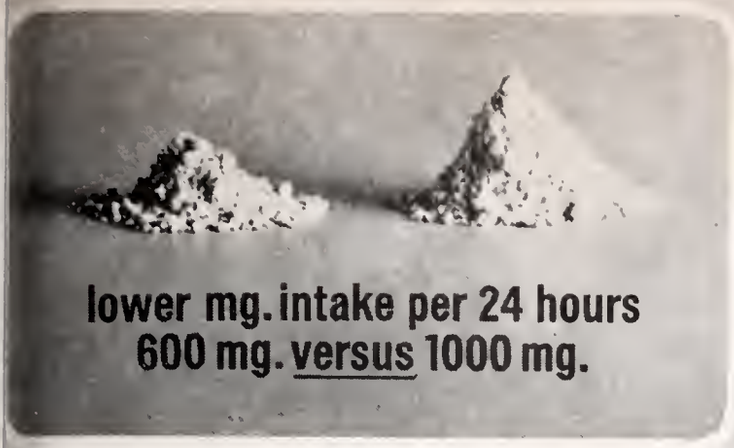
By Ann B. McNaught, M.B., Ch.B., Ph.D., M.I. Biol., and Robin Callander, F.F., Ph., 156 pp., $3.75, Williams, 1965.

SIMPLIFIED PHYSIOLOGY for nurses and useful as a supplement to lectures.

Body Fluids and the Acid—Base Balance

By Halvor N. Christensen, Ph.D., 506 pp., $6.50, 1964.

A USEFUL GUIDE for medical students and those desiring a review of basic physiology in this field.



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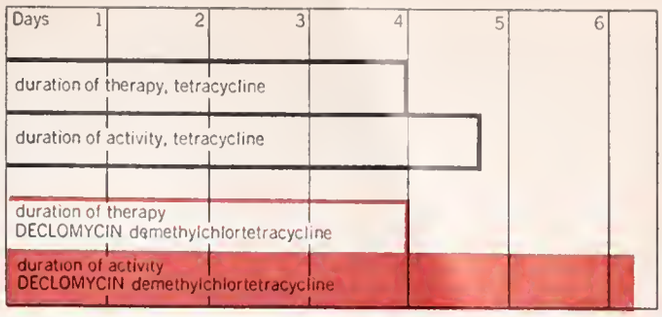

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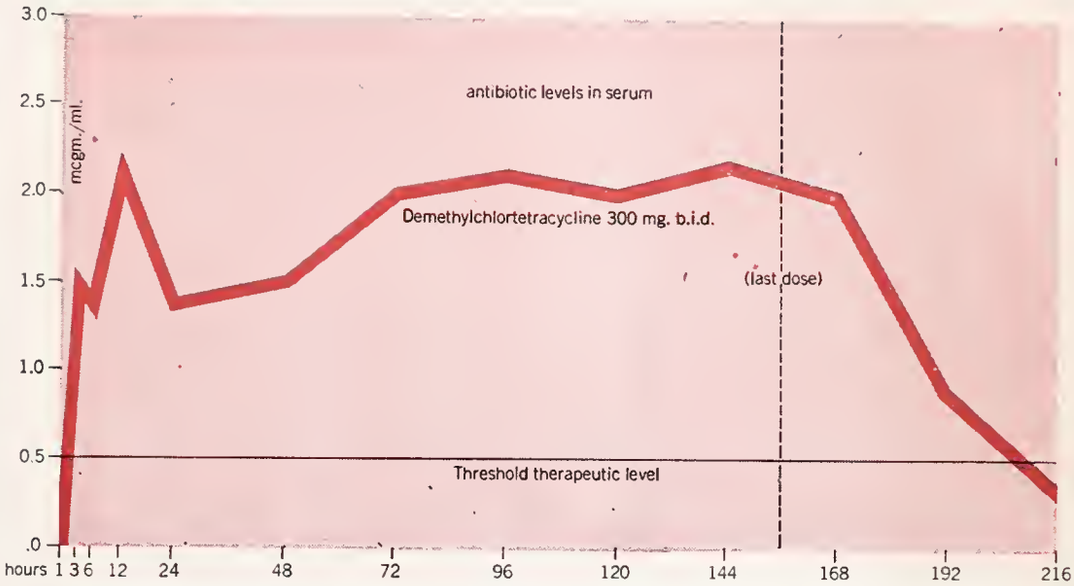

From Sweeney, W. M.; Dornbush, A. C., and Hardy, S. M.; Amer. J. Med. Sci. 243:296 (Mar.) 1962

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In this issue

Annual Meeting Transactions

VOLUME 24 • NUMBER 6

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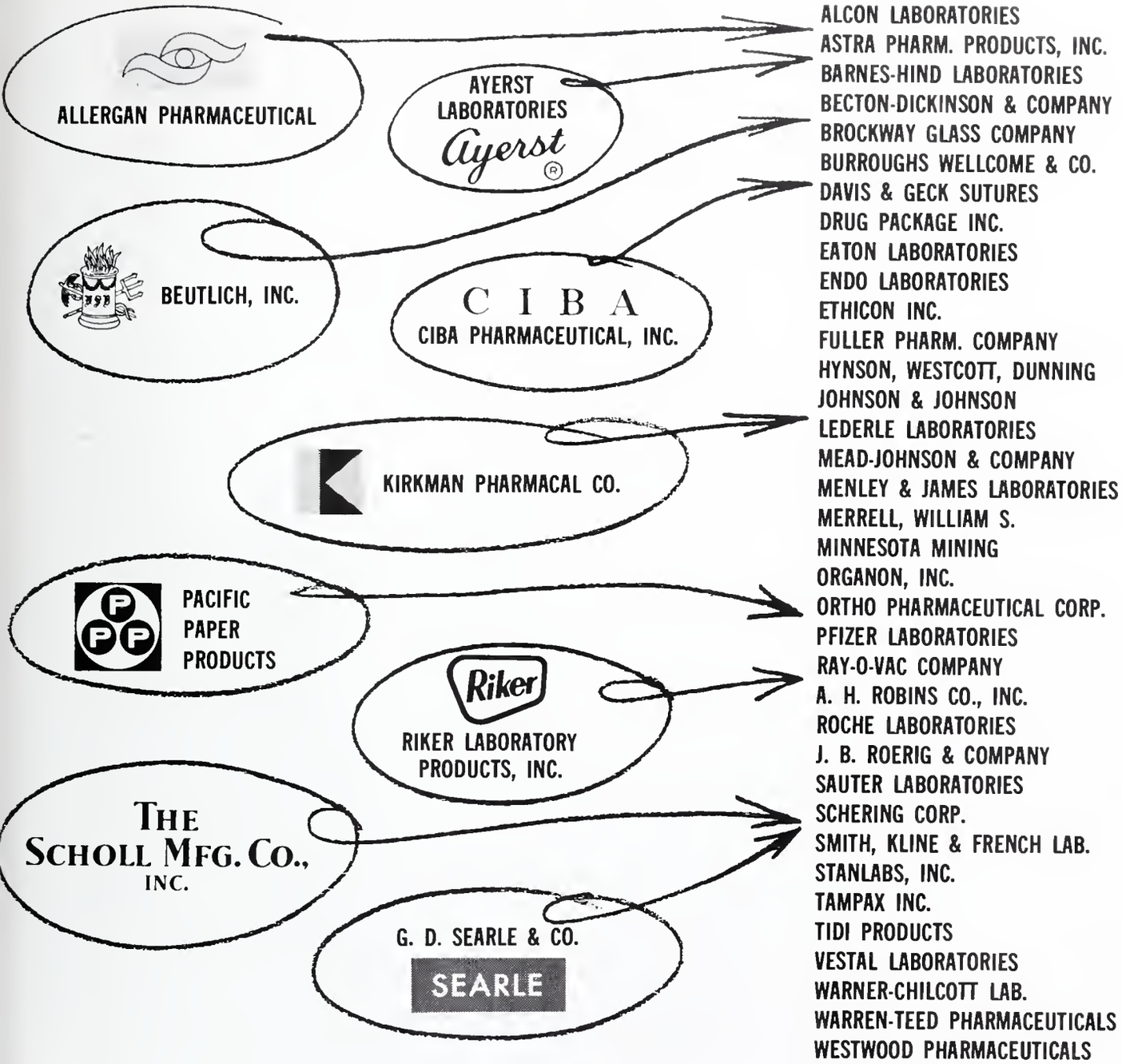

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HAWAII MEDICAL JOURNAL

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Volume 24, Number 6, July-August, 1965

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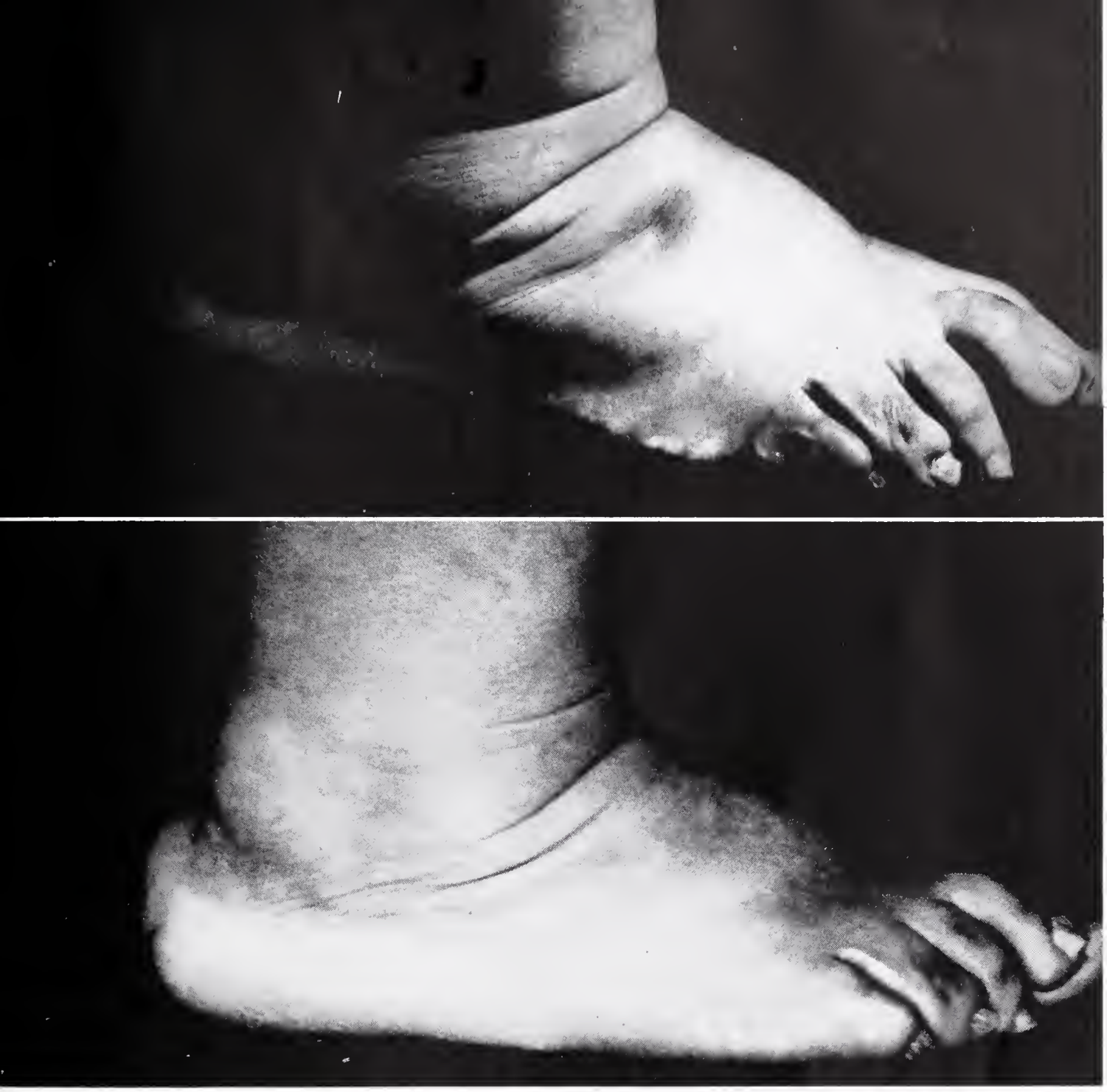

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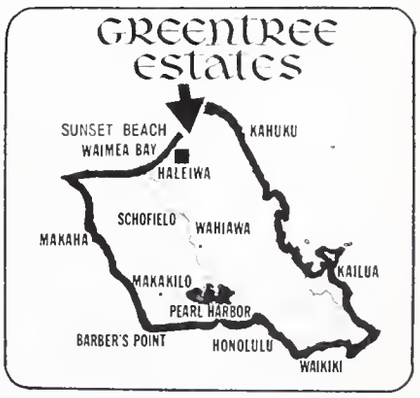

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References: 1. Carpenter, E. B., South. M.J. 51:627, 1958. 2. Crookshank, J. W.: J. Louisiana State Med. Soc. 114:272, 1962. 3. Feinberg, I., et al.: Am. J. Orthoped. 4:280, 1962. 4. Fitzgerald, W. J.: Miss. Valley M.J. 82:146, 1960. 5. Forsyth, H. F.: J.A.M.A. 167:163, 1958. 6. Meyers, G. B., and Urbach, J. R.: Penna. M.J. 64:876, 1961. 7. Truitt, E. B., Jr., Morgan, A. M., and Nachman, H. M.: South. M.J. 54:318, 1961. 8. Weiss, M., and Weiss, S.: J. Am. Osteopath. Assn. 62:142, 1962.

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Each pink-and-white laminated Tablet contains:

Robaxin® (methocarbamol, Robins).....400 mg.

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Aspirin (5 gr.).....325 mg.

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Robaxin® (methocarbamol, Robins).....400 mg.
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(Warning: May be habit forming.)

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as if driving a truck were not enough...

he also has the excruciating discomfort of *pruritus ani.* ARISTOCORT Triamcinolone Acetonide Cream is highly active against the embarrassing and intolerable irritation of pruritus ani and vulvae. Sparing application to the affected area—3 to 4 times daily—usually provides rapid relief when other measures prove inadequate. And when excoriation of the area raises the threat of infection, NEO-ARISTOCORT Neomycin Sulfate-Triamcinolone Acetonide will also provide prophylaxis against a wide range of skin pathogens. A possible side effect may be local skin sensitization due to neomycin. Steroid-related systemic effects (including subcapsular cataract) are possible. Contraindications (both forms): tuberculosis of the skin, herpes simplex, chickenpox, vaccinia, and fungal disease. Prescribe tubes of 5 or 15 Gm. Also available in ½ lb. jars.

Aristocort® TOPICAL CREAM 0.1% AND OINTMENT 0.1%
Triamcinolone Acetonide

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Neomycin Base (0.35%) – Triamcinolone Acetonide (0.1%)

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703B

HAWAII MEDICAL JOURNAL

Reports & Snorts

Memory in goldfish, say University of Michigan researchers Agranoff & Davis, seems to depend on a temperature-dependent process which requires an hour or two for completion and can be blocked within this time by either electroconvulsive shock or intracranial injections of an antibiotic, puromycin.

• • •

Winthrop's Creamalin has been reformulated, and Jacob Riese at Seton Hall College of Medicine finds it rapidly effective in patients with duodenal ulcer, hyperacidity, and nervous indigestion. He also used it for gastric ulcer, but *we* wouldn't do *that, would* we?

• • •

The FDA of the Department of Health, Education and Welfare is looking out for us gourmets. "Breaded shrimp," to be so labelled, has to contain no less shrimp than breading: a minimum of 50 per cent. "Lightly breaded shrimp" has to be at least 65 per cent shrimp. Possibly we should be grateful, but it does sound as if the shrimp breaders' lobby had been mighty active!

• • •

The Kapiolani Medical Dental Center, a handsome fee simple nine-story office complex condominium, on Kanunu Street near the Pagoda Hotel, is slated for completion in the spring of 1966.

• • •

Robins Donnasep combines antibacterial (methenamine mandelate), analgesic (phenazopyridine hydrochloride), and spasmolytic-sedative (Donnatal) effects in urinary tract infection.

• • •

T. S. White, at 1719 Buckner Street in Shreveport, Louisiana, wants any Bibles you can spare, for distribution to the needy.

• • •

We suggested two months ago that the May 10 issue of *JAMA* would quite likely arrive in Hawaii about June 5, what with the unbelievably inefficient handling of surface mail on the West Coast. It was delivered today—June 8! The airmailed subscription copy of the May 31 issue has been in the office for the last four days.

The FDA has announced that cyclamates, one of the principal artificial sweeteners, appear to be safe for human use at present levels of intake. At a level of 5 grams a day—for Sweeta, this would mean roughly 600 glasses of sweetened iced tea, if you like it pretty sweet—it may cause a little diarrhea. This threat of toxicity is receiving attention.

• • •

Mark Hegsted, at Harvard, finds that myristic acid makes by far the largest contribution to serum cholesterol levels of all the saturated fatty acids in the diet. Myristic acid is found in most animal fats and few vegetable fats.

• • •

The AAPS says that the charge that refusal to treat patients on the terms of the impending "Medicare" law would be a strike is just a foul calumny. If so, it might be well to practice—in preparation for The Day—by refusing to accept payment (except from the patient) for Workmen's Compensation cases, or Federal Plan insurance cases, or HMSA patients, or . . . .

• • •

Chap. 28
Digitorum Nodi.

What are those little hard knobs, about the size of a small pea, which are frequently seen upon the fingers, particularly a little below the top, near the joint? They have no connexion with the gout, being found in persons who never had it: they continue for life; and being hardly ever attended with pain, or disposed to become sores, are rather unsightly, than inconvenient, though they must be some little hindrance to the use of the fingers.

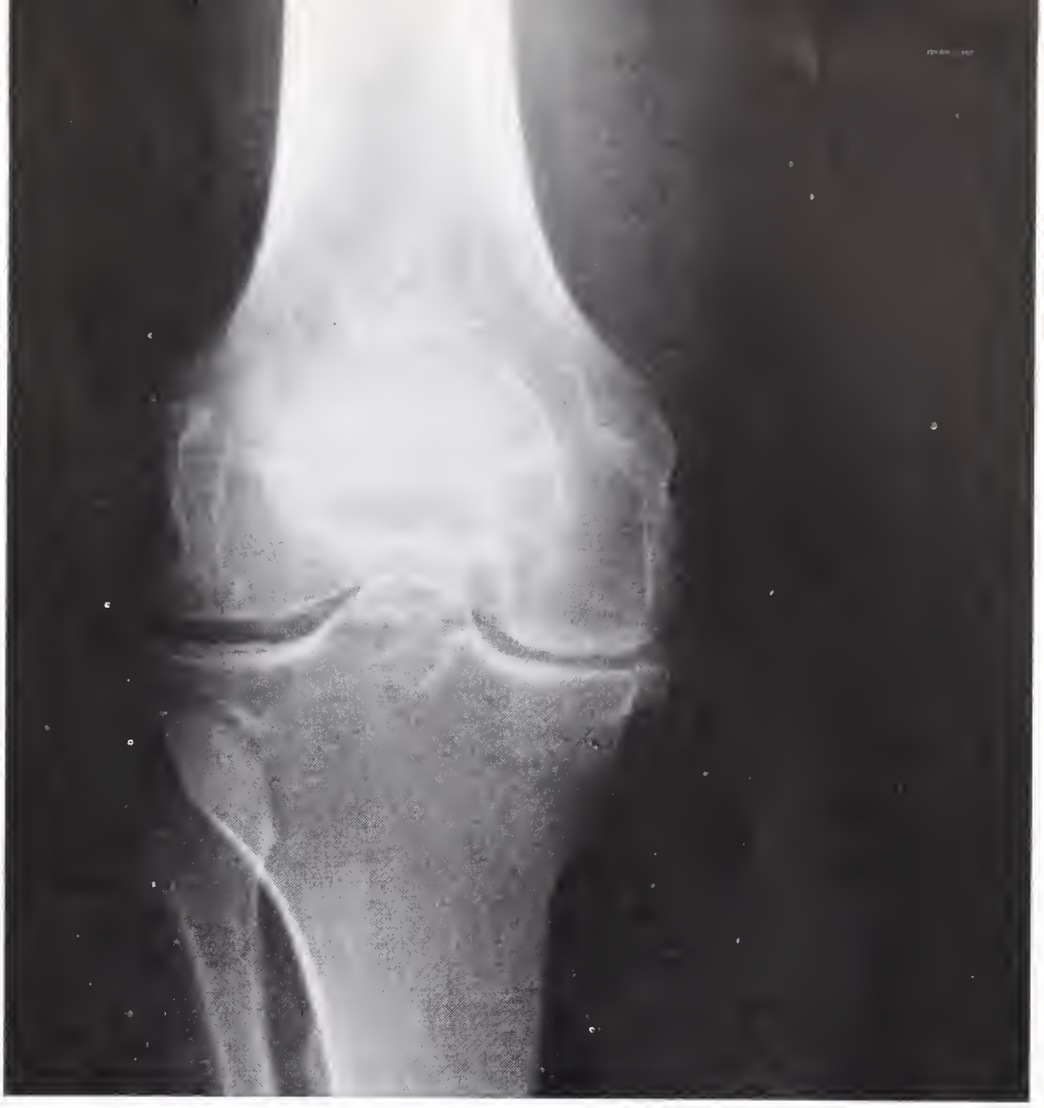
—William Heberden, M.D.
Commentaries on the Cause and Cure of Diseases, London, 1802

• • •

Asian flu vaccine is probably obsolete now, because of mutations, and Kilbourne and Shulman of Cornell reported to the A.A.P. in May that virus cultures may permit current and future mutations to be identified and anticipated.

Butazolidin®
brand of
phenylbutazone

in osteoarthritis



Geigy

Therapeutic effects
A number of investigators report improvement in about 75% of cases. Relief of pain and stiffness is the predominant response. Frequently, there is also a significant improvement in function. The beneficial effects of the drug are usually seen by the third or fourth day of treatment.

There is general agreement that milder cases of osteoarthritis are preferably treated by simple analgesics. In many patients, however, this mode of therapy fails to give sufficient relief. Because steroids are not very effective in this form of arthritis, phenylbutazone affords the drug therapy most capable of relieving the more severe cases. For best results, it is recommended that treatment with phenylbutazone be combined with physiotherapy and other appropriate supportive measures.

Dosage
The initial daily dosage in adults is 300-600 mg. in divided daily doses. In most instances, 400 mg. daily is sufficient for maximum therapeutic response. A trial period of one week is adequate to determine the effects of the drug; if there is no improvement, discontinue the drug. When improvement does occur, dosage should be promptly decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

Precautions
Before prescribing, the physician should obtain a detailed history and perform a complete physical and laboratory examination, including a blood count. The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made. The drug should be used with greater care in the elderly.

Warning: If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea and sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Side effects
The most common side effects are nausea, edema and drug rash. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Contraindications
These include: edema, hypertension, or danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. Because of the increased possibility of toxic reactions, the drug should not be given when the patient cannot be seen regularly, when the patient is senile, or when other potent chemotherapeutic agents are given concurrently. Large doses of Butazolidin® alka are contraindicated in patients with glaucoma.

Note: The physician should be fully aware of dosage, precautions, side effects and contraindications as contained in the complete prescribing information.

Butazolidin alka

Each capsule contains:	
Butazolidin, brand of phenylbutazone	100 mg.
dried aluminum hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
homatropine methylbromide	1.25 mg.

Butazolidin
brand of phenylbutazone
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New Nursette is the prefilled, glass formula bottle available for hospital and home use. It combines the convenience of disposability with the dependability of a product prepared under conditions and controls not attainable in the home. Unique processing of the Enfamil 20 cal./oz. Ready-to-Use formula in Nursette guarantees a sterile formula with the natural whiteness of whole milk and consistently high nutritional values.

The Nursette is always ready when needed. Unopened bottles do not require refrigeration. Nor is warming necessary—just unscrew the safety-seal cap and attach any standard nipple and collar. Safety is optimal because opportunity for error in preparation is virtually nonexistent. No special equipment is needed—no new procedure to be learned. Three sizes of Nursette bottles (4, 6, 8 oz.) easily keep pace with the infant's growing appetite.

The reliability of the Enfamil formulation has been demonstrated by years of successful patient use. A carefully controlled clinical study[1] shows that Enfamil infant formula provides good weight gain with normal stool patterns and excellent acceptance. Of course, the Nursette bottle prefilled with Enfamil infant formula is completely interchangeable with all other forms of Enfamil formula in normal dilution.

After feeding, the empty Nursette bottle can be discarded. The nipple unit can be reused for economy.

1. Brown, G.W., Tuholski, J.M., Sauer, I.W., Minsk, L.D., and Rosenstern, L.: J. Pediat. *56*:391, 1960.

*NURSETTE IS A TRADEMARK OF MEAD JOHNSON & COMPANY

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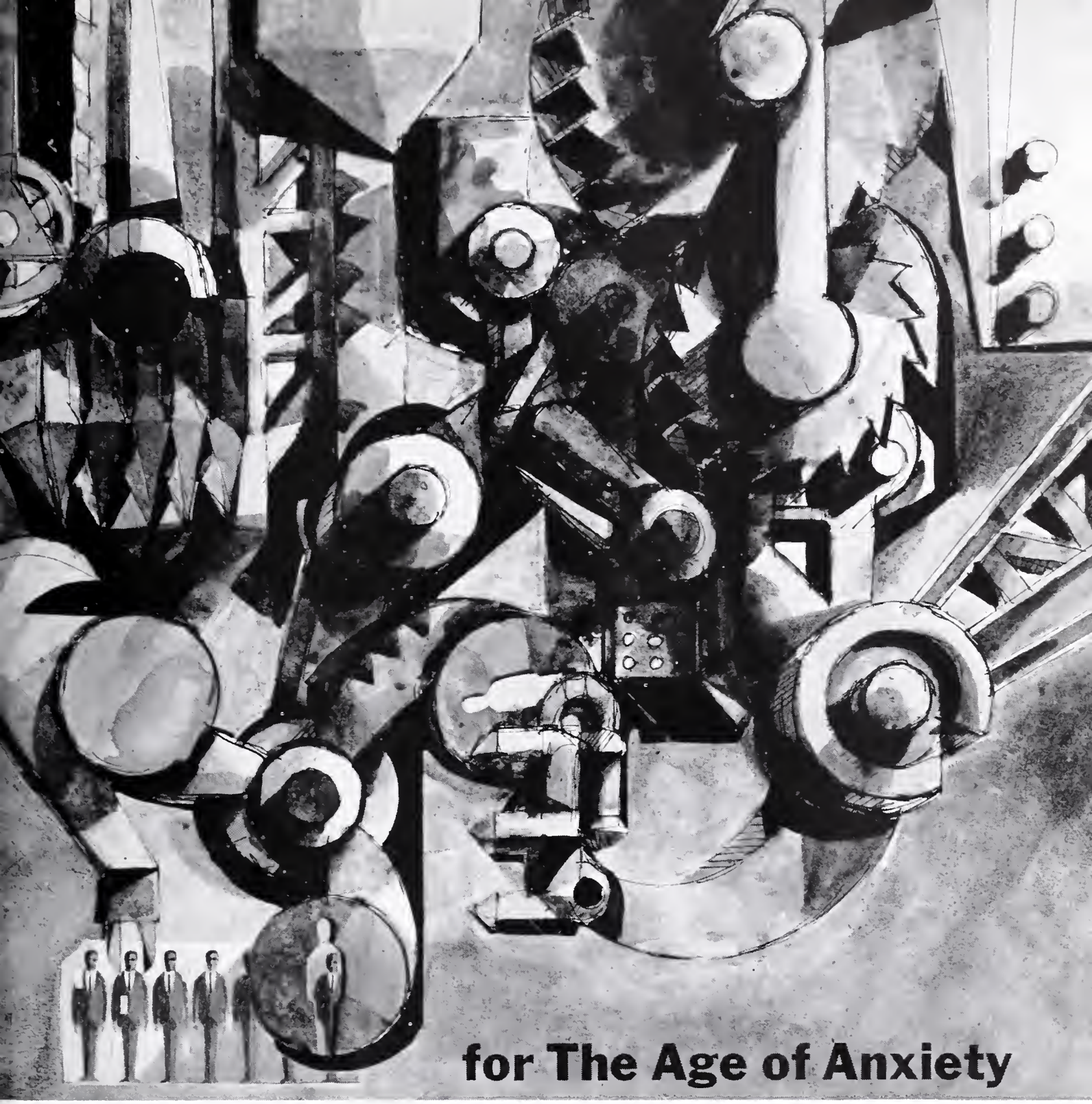
Symbol of service in medicine



For those who cannot cope realistically with the emotional turmoil and stress of modern living, the physician has at hand many valuable psychotherapeutic aids. One of the most useful is Librium, a pre-eminent prescription for excessive anxiety in this modern age.

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LIBRIUM® (chlordiazepoxide HCl)

5 mg 10 mg 25 mg capsules in #50's

In prescribing: Dosage—Adults: Mild to 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. **Side Effects:** Side effects, usually dose-related, include drowsiness, ataxia, minor skin rashes, edema, menstrual irregularities, nausea and constipation. When treatment is protracted, blood counts and liver function tests are advisable. Paradoxical reactions may occasionally occur in psychiatric patients. Individual maintenance dosages should be determined. **Precautions:** Advise patients against possibly hazardous procedures until maintenance dosage is established. Though compatible with most drugs, use care in combining with other psychotropics, particularly MAO inhibitors or phenothiazines; warn patients of possible combined effects with alcohol. Observe usual precautions in impaired renal or hepatic function, in long-term treatment and in presence of depression or suicidal tendencies. Exercise caution in administering drug to addiction-prone patients or those who might increase dosage; withdrawal symptoms, similar to those seen with barbiturates or meprobamate, can occur upon abrupt cessation after prolonged overdosage. Caution should be exercised in prescribing any therapeutic agent for pregnant patients. **Supplied:** Capsules, 5 mg, 10 mg and 25 mg, bottles of 50.

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Presidential Address

SAMUEL D. ALLISON, M.D., *Honolulu*

IT HAS BEEN an honor to serve as President of the Hawaii Medieal Assoeiation. It has also been a great pleasure to work closely with many members of the Association with whom I normally have little eontact in my praetice. This is particularly true of some of the younger physieians with whom I have been particularly impressed not only as to their professional abilities but their interest in general community good.

It is a remarkable organization, in whieh approximately one-third of the membership partieipates actively in some form of eommittee activities. Nearly all of the neighbor island physicians are on committees, and approximately 250 Oahu physieians work on the nearly 40 committees of our Assoeiation. We all owe a great deal to these active eommittee members, many who have spent innumerable hours in behalf of medieine.

While these have been the pleasures of the year, this seems to be the time to express certain observations about some of the problems of medicine. With eontinued active partieipation by our members, I'm sure many of these problem areas can be eliminated.

INADEQUATE FEES

It has been said that the laborer is worthy of his hire. Increasingly, however, physicians are being asked or required to earry on more aetivities by government, with no thought of the cost to them in time or money. Historically, we have been very happy to care for the needy who could not afford physician care. This has been donc freely and with good will. But times ehange. No longer does the family or the ehurch or private eharity take care of the less fortunatc members of soeiety. All of us are paying for them, through taxation. An individual now expects to be cared for by the state when he is in need. This is not bad in itself, but when large segments of the population expect to be favored without regard to their eeonomie need, this is most unfortunate. Physicians, for example, are not only earing for the indigent sick, but are providing medieal serviees at redueed and often semi-eharity rates for well-paid individuals in industry and government. Fees paid for such service are often far less than the physician would charge for similar services given to his private patients. With the prospective introduetion of "Medieare," it may be that our eontinued aceeptance of the HMSA, Federal Plan, Veterans, and Military Dependents fees, and the Industrial Accident Fee schedules will suggest that these are "usual" medical fees and are appropriate for the government subsidized Eldereare reeipients.

POLICING "MEDICARE"

We have attempted over the years to police our ranks through grievance eommittees, fee adjustment committees, utilization eommittees, and the like. These have been formed because we have always felt it important to keep our profession clean. Under prospeetive Federal legislation, however, we will be mandated to establish utilization committees to aid in policing the Federal hospitalization program. This will be a service demanded by the Federal government of all physieians. It is quite different to perform such service on a voluntary basis for the benefit of our eommunity and the profession; but when we are mandated to do this by Government, this is a direct imposition on us—involuntary servitude with the sanction of the law.

GROSS INCOME TAX

I'm eertain that the publie will soon bc aware of the cost of this Federal program, as we will be in our tax inereases. In addition to the Federal taxes, it also appears that we are going to have an inerease in our gross income tax, thus adding more to the cost of practieing medicine. These taxes do not particularly bother me as they relate to private patients paying usual fees. The gross income tax is particularly onerous as it is a tax on services we provide for a fee whieh, in many instanees, is set arbitrarily by others. We cannot ehange the fee schedules. We must absorb these increased eosts. It is my belief that one possible relief is to indieate the gross income tax on our bills and pass this tax on as what it is—a tax—and not as a cost of medical service.

HMSA NEGOTIATIONS

With regard to "eontracts" with ageneies limiting fees, such as the Industrial Aeeident Commission and the HMSA serviee plans, it seems imperative that we have fixed end-points at which time the physieians and insurance earriers can get together on solutions equitable to all parties—the patient, the insuranee carrier, and the physieian. As it now stands, we negotiate from complete weakness. I am eertain that the Board members of HMSA and its staff are most anxious to work with the medical profession. It is imperative that we keep the HMSA strong. On the other hand, the contracts must be of sueh a nature that at

Delivered at the 109th Annual Meeting of the Hawaii Medical Association, April 30, 1965.

some point in time we can negotiate with reasonable assurance of equitable answers to all.

LIMITING PHYSICIAN INFLUX

Over the past 15 years I have exchanged letters quite regularly with the Director of Health and the Attorney General's office concerning the enforcement of the Medical Practice Act. I believe that this Act has never been effectively enforced, nor until there is a change in community opinion *will* it be enforced. For reasons peculiar to Hawaii, there should not be completely free interchange of physicians between here and the other states. We must continue to have some protective mechanism in Hawaii to keep out physicians who might not serve our public to its best advantage. Perhaps the one-year residency period is anachronistic, but if it is replaced, or if it is unenforceable, which seems to be the case, it should be supplanted by rigid examinations given to all applicants by our local examining Board; and this perhaps should be preceded by a basic science examination to assure us only highly competent, knowledgeable, new physicians.

MEDICAL EDUCATION

There is considerable difference of opinion in the Medical Association as to the role Hawaii should play in medical education. It is my opinion that until the State is willing and able to pay for already existing paramedical and medical education—nursing education and the education of residents and interns in established programs—the State should not embark on undergraduate medical training. Ultimately Hawaii will have some form of medical school; however, it seems to me that this should evolve and not be suddenly created.

The recent new administration at the University has done a great deal toward developing rapport with the medical profession. The University is to be highly commended on importing outstanding scientists such as Dr. Cutting and his new biochemical geneticist, myoneural physiologist, biostatistician, microbiologist, and neuropharmacologist. We are also happy to see that local physicians again are being welcomed at the Pacific Biomedical Research Center. This cordial relationship was envisioned some years ago, but it seemed that local physicians got lost in the process of striving for a new medical school.

Hawaii is uniquely situated for many facets of the University advancement, but it seems that the creation of a full-blown medical school is based on less need, flimsier footing, and perhaps with less ultimate chance for excellence than some other areas such as Oceanography, Oriental Studies, and the activities carried on by the East-West Center. Let's move toward a medical school, but before moving too rapidly let's be certain that we can produce one of excellence.

What I have said about medical education does not necessarily apply to the School of Public Health. Hawaii can serve a unique function in the training of health personnel for the entire western Pacific area. In my opinion this School should not attempt to compete with Yale, Michigan, Hopkins, and Harvard, but it should serve its own unique role in the education of people to serve the western Pacific area. This School has a nucleus of fine people. It should be expanded, but not at the expense of the local Health Department, which has been preeminent for years and must continue to be, both for the good of our State and also if a School of Public Health is to be successful at the University.

HOSPITAL PLANNING: A MUST

It has been stated that "the wiser people become—whether in science, religion, politics, or art—the less dogmatic they become." The time for dogmatism in hospital planning has ended. It is imperative that all of us get together and plan for the future development of our hospitals. We have seen the historic problems of isolation. The recent Stokes report has suggested some solutions. The Health Facilities Planning Council, in spite of recent internal problems, should be able to help materially with planning if properly supported by us. As physicians we must not, however, pass the buck to outside "experts"; we must look at our own needs, space and population problems, possible alignments of forces, and then develop hospital facilities best suited to serve our own community. We may all have different views. However, it is my personal belief that a hospital complex should be developed, and it should be developed around an existing major facility. As physicians, we should look carefully at the problems related to moving any hospital to a new site, or moving several hospitals to a completely new area. We should also consider historic values. We must always keep in mind the best quality of medical care for our patients and the most efficient utilization of our own time and efforts.

NEXT: PEDICARE?

I had the good fortune the other morning to sit with a number of young physicians interested in the development of health facilities for children. If their hopes can be realized, it may blueprint a program for cooperation in other areas of medical and hospital care. I hope their basic plans can be consummated. However, some of these younger physicians indicated that the next governmental step would be "Pedicare" and that some of their

philosophies might be, perhaps, a little more liberal than those of some of the older members of our Association. While I can support their general thesis, in terms of a recent article by James Reston, "The Great Society, Are We Ready for It?" I think we must be ever vigilant not to move too rapidly into unexplored areas.

We must, however, recognize that medicine as well as our entire world is in a stupendous revolution. And we must continually ask ourselves if we are doing all that is relevant and needed in terms of present-day realities. Most of us are reluctant to make change. Our institutions are quite sacred; but we do have major problems to meet and we should listen to all possible new solutions, particularly if they can preserve the better aspects of our present medical system and yet assure fulfillment of unmet needs.

THE AMA

This leads to some comments about the AMA. To quote J. B. Priestly: "As women behave toward the men they love, a loving wife will do anything for her husband except to stop criticizing and trying to improve him. That is also the right attitude for a citizen." This is the feeling we should also have about the American Medical Association. We should love it, but we must continue to criticize it and try to improve it. The AMA does much for the betterment of all aspects of medicine—medical and public education, quackery control, assurance of the safety of new drugs, and scores of other activities. It has been most recently active in the political arena. And while passage of some "Medicare" legislation seems imminent, the AMA has managed a holding action for over 30 years which I am convinced has helped to put off the day when medicine will be socialized—which in my belief will lead to the ultimate deterioration of the quality of medical care in the United States. So, for these things, we thank the AMA.

On the other hand, in relationships to our own Association I have sensed a major communication problem. This has been discussed in detail with representatives of the AMA, and I hope it can be solved. Regional representatives have been added to the AMA staff. The idea is good. I think it is important, however, for us to assay the relative role that physicians and our well-qualified lay representatives play in medical affairs. We need expert nonmedical help, but we must not lose the reins.

THE BRIGHTER SIDE

These are some of the more troublesome comments I have to make. There have been many brighter sides to the year. It is not possible in the time available to comment on the outstanding activities of many committees. I'll just talk about one, the Public Relations Committee. I have long been interested in health education, and it seems that our State program is an excellent one. With the increasing interest by the press, our radio and television programs, the excellent Careers Day and the Health Fair planned for later this year, our relationship with the public undoubtedly will improve. The public health programs that we encourage, the relationships with other groups such as ministers, and at the county level, the legal profession, and many of the other activities of our society are joys to look back on.

NEW IDEAS

We are perhaps living in one of the golden ages of history. Technology, science, and medicine are advancing in geometric proportions. With this there is change in our concept as to the form of medical practice, groups, panels, proposed major centers for stroke, heart, and cancer victims, "Medicare," "Pedicare," and unfortunately the specter of socialized medicine. Most of us are not used to these things. We have no precedents to guide us. Our wisdom was designed for simpler times.

However, we have men in our Association knowledgeable in medical economics. We have youthful thinkers who are conscious of the change in the medical scene and are anxious to provide the best possible care for patients through these innovations. I would suggest that there be created within our Association a study group or council to evaluate the changing role of the practice of medicine and how best to meet changing needs. This group might make it possible for us to make decisions other than on the spur of the moment —not elder-care to defeat Medicare but grass roots study, plus state study, and ultimately AMA action leading the way to solution for major medical problems.

CONCLUSION

One final last word. There is much to be done in medicine. I have spelled out certain areas in which many of us have different opinions. We should be able to disagree without being disagreeable. As I can be loyal to my city, state, and nation, so can I be loyal and participate actively with my hospital, county and state medical associations, and the AMA. Let's iron out such small differences as exist and get our minds solely on the advancement of medicine, without regard to who does the job. Let's keep our eyes on one goal: the best possible medical care for all of our people. ■

305 Royal Hawaiian Ave.

Only one-fourth of Oahu's 526,000 people are of mixed ancestry. One-tenth of the total have asthma, or hay fever, or both.

The Oahu Health Surveillance Program

PAUL T. BRUYERE, M.D., ALICE A. SCOTT, R.N., and CHARLES G. BENNETT, M.S.,* *Honolulu*

• *A three-year statistical sampling of illness in Oahu's population has been started as an outgrowth of the 1958 National Health Survey Program. The figures for the first six months show that the category asthma-hay fever tops the list of chronic disease prevalence by a wide margin, the rate being 101 cases per 1,000 population. High blood pressure, at 36, is next, followed closely by "other allergic disorders" and sinusitis. Of acute conditions, the common cold and influenza are predictably at the top of the list. The survey shows that 72.8 per cent of the population is of unmixed ethnic background; 13.8 per cent are of only two ethnic strains; and 13.4 per cent of more than two; most of the latter group were part-Hawaiian.*

IN 1958, the National Health Survey Program extended its household survey operations to Hawaii for a period of one year, in collaboration with the State Health Department and the Oahu Health Council. A part of the funds necessary to carry out the survey was donated by local agencies. Results proved highly satisfactory and the data have been widely used in local public health and other programs. Even today, five years after the survey, the Health Department is still supplying information from it to individuals and agencies.

The present Health Surveillance Program, which began in May of 1964 as a joint project of the Health Department's Research, Planning and Statistics Office and Public Health Nursing Branch, is largely an outgrowth of the Federal survey. The questionnaire, instructions to interviewers, concepts, and procedures, are based to a large extent on the National Health Survey. In some cases, we are using almost exact duplicates of materials prepared in the national office; in other cases, some modifications were necessary to suit our particular situation. One advantage in conducting the program along lines similar to the National Survey is that data for the Mainland will be comparable with Hawaii results.

The continuous national household interview survey is carried on by sampling in large regions. Results cannot be compiled for any single state. Although interviews are conducted in Hawaii, they are included in a western region and the number is too small to be of value to the state *per se*.

During a three-year period, the Oahu Health Surveillance Program is being supported in large

*The authors are administrative officers of the Hawaii State Department of Health.
Received for publication March 22, 1965.

part by the Bureau of State Services (Community Health) of the U.S. Public Health Service as a demonstration project. Objectives of the project are "to institute, develop and demonstrate the feasibility and utility of continuing health surveillance by means of interviews conducted in small random samples of households independently selected each month; to provide sensitive, up-to-date measures of morbidity, population characteristics, health attitudes and the degree of health information in the community, and other knowledge useful in health planning, evaluation and research." After the three-year period, the program may continue on a permanent basis using state funds. Whether it continues, obviously, will depend to a large extent upon results obtained during the demonstration period.

At present, the program is confined to Oahu, which, in census terms, constitutes the "Honolulu Standard Metropolitan Statistical Area." Comparative data from the national health survey for certain other metropolitan areas on the Mainland will be available. In the future, if the demand exists and adequate funds can be obtained, the program may be extended to other islands of the state.

ONLY RESIDENTS SAMPLED

Interviews are conducted in approximately 200 sample households monthly. Information is obtained only about the resident and non-institutional population. This excludes vacationers and others not regularly living on Oahu, persons in institutions providing long-term medical or domiciliary care, and those in penal establishments. Military households are included in monthly samples, but individuals on active duty with the armed forces are excluded from most statistical tabulations.

Public health nurses of the Health Department conduct about half the interviews and full-time employees of the project the other half. The nurses average only about two hours time per nurse during a month. Where no one in a household is at home during working hours after a second or third call, responsibility for completing the interview is assigned to other personnel, who make evening visits. Due to their training in the field of health and their experience in making home calls, the nurses make excellent interviewers. An important objective of the demonstration phase of the project is to show the feasibility and desirability of using public health nurses as interviewers.

A basic or core questionnaire is being used, with little or no change contemplated from year to year. This includes data on family composition, age, sex, ethnic group, marital status, educational attainment, income, occupation, work status, morbidity, and the results of morbidity, such as bed days and other measures of disability.

SUPPLEMENTAL QUESTIONS

After the program is firmly established and routinized, the core questionnaire is to be supplemented by special questionnaires on a variety of subjects. A supplement on any given subject will be used for a few months only. Almost any program in the Health Department has important questions that may be answered in this way. At this time, supplementary questionnaires on mental health and on the use of pesticides in the home are being considered.

A major instruction to interviewers is that they must use questions as formulated in the questionnaire with as little deviation as possible. Above all, they are not to draw conclusions as to what kind of illness an individual has on the basis of a respondent's description of symptoms; rather, they are to write down as nearly as practical exactly what the respondent said. In every case involving morbidity, the question is asked, "Did you at any time talk to a doctor about —?" If the answer is affirmative, this question is followed by, "What did the doctor say it was — did he give it a medical name?"

Despite every precaution, including use of trained interviewers, a proven questionnaire, and a valid sample of households, the interview type of survey admittedly gives an incomplete picture of morbidity in a community, largely because some respondents are unable or unwilling to report all illnesses or injuries. In general, episodes which have had an economic or social impact upon the households concerned are those most likely to be reported. This kind of information, of course, has value in health work. Levels of health causing problems and difficulties in the population are what health authorities chiefly want to know about.

THE NEED FOR HEALTH SURVEILLANCE

The only current statistics routinely and readily available to the State Health Department and other health agencies concerning the health situation in the community are from vital statistics records, a limited amount of communicable disease reporting, and case registers pertaining to tuberculosis, cancer, mental health, and Hansen's disease [leprosy]. For the most effective management of a comprehensive health program, much more is needed, including data on all types of morbidity, hospital statistics for the community as a whole, current demographic characteristics of the population, and attitudes in the community with respect to public health issues.

TABLE 1.—*Estimated incidence of acute conditions, percent distribution, and rate per 1,000 persons: Oahu, April-September, 1964*

CONDITION GROUP	NUMBER OF ACUTE CONDITIONS	PERCENT DISTRIBUTION	RATE PER 1,000 PERSONS DURING SIX MONTHS
Total	483,600	100.0	920
Common childhood diseases	21,700	4.5	41
Other infective and parasitic diseases	18,600	3.8	35
Common cold	140,100	28.9	266
Other acute upper respiratory conditions	25,500	5.3	49
Influenza	100,600	20.8	191
Other respiratory conditions	16,200	3.4	31
Digestive system conditions	19,300	4.0	37
Acute diseases of ear	10,800	2.2	21
Acute diseases of skin	13,900	2.9	27
Acute diseases of musculo-skeletal system	7,000	1.4	13
Deliveries and disorders of pregnancy and puerperium	15,500	3.2	29
Acute genitourinary disorders	12,400	2.6	24
Fractures and dislocations	4,600	1.0	9
Sprains and strains	8,500	1.8	16
Open wounds and lacerations	19,300	4.0	37
Contusions and superficial injuries	7,000	1.4	13
Other current injuries	10,800	2.2	21
All other acute conditions	31,800	6.6	60

A monthly health survey similar to that in Hawaii has been established in Baltimore, Maryland. In describing it, Tayback and Frazier have made these statements:[1]

> The sample survey, when developed as a continuous information collection system, is efficient, remarkably adaptive, and in our opinion, necessary for effective management of a comprehensive health program . . . The Commissioner of Health and the Assistant Commissioner of Health for research and planning regard the survey technique as a principal source of information necessary to guide progressive planning and assessment.

A few examples of how data from the local health surveillance program can be used are these:

Since the program will indicate the incidence of morbidity from year to year, results can be used directly to evaluate the effectiveness of various health programs. For example, when a campaign to prevent home accidents is effective, surveillance data will reflect this by showing fewer home accidents.

The program will point out health problems of the community hitherto without adequate recognition. For example, the one-year federal survey here in 1958-1959 showed an extraordinary prevalence of asthma–hay fever. This led to plans for an extensive research project to investigate the local causes of such allergy. The program may also provide the basis for other kinds of research —for example, if one ethnic group appears more susceptible than other groups to asthma or some other disease, follow-up studies may be made in an attempt to ascertain reasons for the difference.

Health education should be a major beneficiary. The health educator will be able to learn from a representative cross-section what the public knows or thinks about any given health subject. By the same process, health education efforts can be evaluated. Any other unit of the Health Department will be able also to secure from the community information which it wants and must have for most effective operation.

FOR HOSPITAL PLANNING

A major segment of annual statistics derived from the program will concern hospitalization in short-stay hospitals. These should be of considerable value in current efforts toward planning for hospital and related health facilities. In order to make such statistics more complete, a subsidiary survey is being carried on from month to month relative to the hospitalization of deceased persons during the last year of life. All hospitals are cooperating by supplying the needed information. This is needed because the surveillance program proper collects information only for persons alive at the time of interview; consequently, some hospitalizations, especially those involving older people, are omitted.

Reliable data indicating the characteristics of the population are essential for program planning and many kinds of health research, yet the decennial census is soon out-of-date and unreliable due to changes in the composition of the population. To a large extent, the surveillance program can be used to adjust such items from the census as age, sex, marital status, ethnic group, income, education, etc. It will also afford an opportunity for special sociological research in areas such as fertility, marriage, and family living.

Hawaii is frequently referred to as the "crossroads" of the Pacific. Passengers enroute from many parts of the world arrive here daily. Under these circumstances, close health surveillance of

[1] Tayback, M., and Frazier, T. M.: Continuous health surveys, a necessity for health administration, Pub. Health Rep. (Sept.) 1962.

TABLE 2.—*Estimated prevalence of selected chronic conditions and rate per 1,000 persons by age: Oahu, April-September, 1964*

CONDITION GROUP	ALL AGES		UNDER 25 YEARS		25-44 YEARS		45-64 YEARS		65+ YEARS	
	No.	*Rate*†	*No.*	*Rate*†	*No.*	*Rate*†	*No.*	*Rate*†	*No.*	*Rate*†
Chronic infective and parasitic diseases	3,400	6	800	3	900	7	1,200	14	500	20
Neoplasms, all types	8,200	16	1,500	5	3,500	26	2,600	31	600	26
Asthma—hay fever	52,900	101	33,000	117	13,200	97	5,700	69	1,000	41
Other allergic disorders	16,800	32	11,100	39	4,400	32	800	9	500	20
Diabetes	8,300	16	–*	–*	2,200	16	3,900	47	2,200	87
Mental and "nervous" disorders[1]	7,200	14	2,100	7	3,300	25	1,200	14	600	26
Heart conditions	6,300	12	1,300	5	800	6	2,700	33	1,500	61
High blood pressure	19,100	36	900	3	4,000	30	10,300	125	3,900	153
Varicose veins	7,100	13	–*	–*	2,800	21	3,000	36	900	36
Hemorrhoids	12,800	24	1,800	6	7,000	52	3,500	42	500	20
Sinusitis	16,100	31	5,700	20	6,600	49	3,000	36	900	36
Peptic ulcer	7,600	14	800	3	3,800	29	2,200	27	800	31
Hernia	3,100	6	800	3	900	6	900	11	500	20
Chronic genitourinary conditions	6,300	12	900	3	2,400	18	1,700	20	1,300	51
Chronic skin diseases	5,800	11	2,000	7	2,600	19	1,100	14	–*	–*
Arthritis and rheumatism	10,400	20	–*	–*	2,300	17	5,300	64	2,600	102
Visual impairments[3]	4,300	8	1,200	4	1,300	10	500	6	1,300	51
Hearing impairments	9,200	17	2,500	9	2,200	16	2,800	34	1,700	66
Speech defects	3,500	7	2,300	8	–*	–*	500	6	400	15
Impairment,[2] back or spine	13,800	26	2,900	10	5,000	37	4,500	55	1,400	56
Impairment,[2] upper extremity, shoulder	3,000	6	1,400	5	900	7	300	3	400	15
Impairment,[2] lower extremity, hip	8,200	16	3,500	12	2,800	21	1,400	17	500	20

* Size of sample precludes showing separate estimate.
† Per 1,000 persons per year.

[1] Includes both specified conditions and others not clearly defined.
[2] Not including absence or paralysis.
[3] Does not include impaired vision corrected by glasses.

the population is desirable. Within a short time, the practice is to be initiated of issuing monthly bulletins indicating all acute conditions reported in the surveillance program.

SOME PRELIMINARY RESULTS

Estimates in Tables 1 and 2 concerning acute and chronic morbidity are based on interviewing for the months of April through September, 1964. A total of 1,064 sample households containing 4,078 individuals (excluding members of the armed forces) was included. Table 3 showing ethnic groups reflects interviewing for seven instead of six months; consequently, a somewhat larger number of households and individuals was included. Where numbers are shown in the tables, the sample was systematically inflated to produce an estimate of all persons and all morbidity conditions on the Island of Oahu. The numbers are rounded to the nearest 100. Rates were computed from the original sample numbers to give a slightly more accurate result.

At the end of one year of interviewing, the same tabulations shown here and others of a more detailed nature are to be made. At that time, the number of sample households included will be larger, and consequently, the sampling error less. Data in this report based on less than a year of interviewing are considered preliminary and subject to change.

Acute Conditions—A condition reported in the survey was classified as acute if it had lasted less than three months and did not appear in a list of conditions arbitrarily defined as chronic. Those minor conditions, either diseases or injuries, requiring neither medical attention nor as much as one day of restricted activity, were omitted from consideration.

Table 1 indicates that more than nine instances of some kind of acute morbidity, as defined above, occurred for every 10 persons on Oahu during the months of April through September 1964. Some individuals, of course, reported more than one condition. About 58 per cent of the conditions were respiratory in nature, with the common cold and influenza predominating. Accidental injuries accounted for approximately ten per cent of all conditions. About one-third were miscellaneous, including common childhood diseases, digestive system conditions, diseases of the ear and skin, disorders of pregnancy and the puerperium, genitourinary disorders, etc.

An additional tabulation showing acute conditions by age (not presented here) indicated, as might be expected, that rates were generally highest for young people, decreasing with age. An exception was influenza, for which rates remained relatively high at the older ages.

Chronic Conditions—A condition was considered chronic if it appeared in a prepared list of

conditions so defined or if it was first noticed three months or more previous to the month of interview. Impairments were included and were further defined as chronic or permanent defects, usually static in nature, resulting from disease, injury, or congenital malformation.

Chronic conditions in Table 2 are shown on a prevalence basis—i.e., the average number of conditions existing at any one time during a reference period—in this case, 12 months. Upon being handed a checklist of chronic conditions, the respondent is asked: "Has anyone in the family had any of these conditions during the past 12 months —conditions which are either present now or have been at any time during the past 12 months?"

RATES NOT COMPARABLE

On the other hand, acute conditions shown in Table 1 are by incidence—i.e., the number of conditions which had their onset within a specified interval of time. In this case, the interval was six months. This was because the period of recall for acute conditions was only one month instead of a year and the survey had been in operation for six months. Consequently, rates in this report for acute and chronic conditions are not comparable.

By far the most frequent type of chronic condition category reported was asthma–hay fever. This group contains cases of asthma, asthma with hay fever, and hay fever without asthma, but excludes cardiac asthma and pneumoconiotic asthma. Reporting and coding problems made it impractical to show asthma and hay fever separately.

The rate of prevalence was 101 cases per 1,000 population and more than 52,000 individuals appear to be affected at any one time. Unlike the rates for most chronic conditions which tend to increase with age, rates for asthma–hay fever decreased with age. For example, the rate for persons under 25 was 117 conditions per thousand and for those 65 and over only 41. It is, therefore, predominantly a disease category of young people.

The second highest rate was that for high blood pressure, affecting some 19,000 people. By way of contrast with asthma–hay fever, the rate for persons under 25 was only 3 compared to 153 for those 65 and over.

Other of the higher ranking chronic conditions in order of importance were allergic disorders other than asthma–hay fever, sinusitis, impairments of the back or spine, hemorrhoids, and the category "arthritis and rheumatism." All of these had rates of 20 or more conditions per 1,000 population.

"MENTAL ILLNESS" PROBED

Mental and nervous disorders, including both specified conditions and others not clearly defined, had a rate of 14 per 1,000 population and involved an estimated 7,200 cases. Taking into consideration that ascertaining cases of mental illness presents special difficulties in an interview type of survey, this estimate may be quite low. In an effort to secure a better estimate, an expansion of the survey questionnaire to include an explanation of what we mean by "mental illness" and a series of probe questions is being considered.

Because of a different method used in securing the information and for other reasons, data on chronic conditions in this report are not exactly comparable to those secured in the Oahu health survey of 1958-1959. For most major chronic conditions, rates in the current surveillance program are higher than was found in the previous survey. To some extent, higher current rates might be expected, due to some aging of the Oahu population, making it more prone to certain chronic ailments.

Ethnic Groups—Table 3, estimating the current civilian population of Oahu by ethnic groups, illustrates the demographic possibilities in a survey of sample households. Because of its rules with regard to ethnic classification and its limited number of tabulations by "race," the Census Bureau gives a less detailed picture of ethnic composition from the decennial census.

The table is arranged to show the number and per cent of each major group reported with no ethnic mixture followed by those reported with one additional strain. For example, the Japanese group without mixture is followed by part Japanese having one other strain. All of those reported with more than two strains were divided into two categories, namely: persons with more than two strains including Hawaiian; persons with more than two strains not involving Hawaiian.

Percentages not readily discernible from the table are these: 72.8 per cent were reported with unmixed ethnic ancestry; 13.8 per cent had only two strains; and 13.4 per cent had more than two strains. Of the latter, more than five-sixths were part Hawaiians. Those with more than two strains not involving Hawaiian constituted less than 2 per cent of the population.

The total population of Oahu shown in Table 3 was estimated independently of the surveillance program. It is a routine *de facto* population estimate of the Health Department for July 1, 1964, adjusted for non-residents present, residents absent, and subtracting the institutional population which is not covered in the surveillance program. With this total population as a starting point, other cells of Table 3 were computed by means of results from the surveillance program. ■

TABLE 3.—*Estimated civilian noninstitutional population of Oahu by ethnic group: based on household interviews, April-October 1964*[1]

ETHNIC GROUP	NUMBER	PER CENT
Total	526,000	100.0
Japanese	160,800	30.6
Part Japanese	13,700	2.6
Japanese—Caucasian[2]	4,800	.9
" —Hawaiian	1,100	.2
" —Chinese	4,800	.9
" —All other[3]	3,000	.6
Portuguese	19,200	3.6
Part Portuguese	12,900	2.5
Portuguese—Other Caucasian	7,200	1.4
" —Hawaiian	2,200	.4
" —Filipino	1,500	.3
" —Chinese	1,100	.2
" —All other[3]	900	.2
Other Caucasian	110,000	20.9
Part other Caucasian	35,500	6.8
Other Caucasian—Japanese	4,500	.9
" " —Portuguese	7,200	1.4
" " —Hawaiian	14,500	2.8
" " —Puerto Rican	2,900	.6
" " —Filipino	4,000	.8
" " —Chinese	600	.1
" " —All other[3]	1,800	.4
Chinese	35,300	6.7
Part Chinese	23,300	4.4
Chinese—Japanese	4,800	.9
" —Portuguese	1,100	.2
" —Other Caucasian	600	.1
" —Hawaiian	15,300	2.9
" —Filipino	1,500	.3
" —All other[3]	100	[4]
Hawaiian	6,200	1.2
Part Hawaiian	97,700	18.6
Hawaiian—Japanese	1,100	.2
" —Portuguese	2,200	.4
" —Other Caucasian	14,500	2.8
" —Filipino	2,400	.4
" —Chinese	15,300	2.9
" —All other[3]	500	.1
Persons with more than two strains including Hawaiian	61,700	11.7
Puerto Rican	4,600	.9
Part Puerto Rican	4,200	.8
Puerto Rican—Other Caucasian	2,900	.6
" " —Filipino	900	.2
" " —All other[3]	400	.1
Filipino	41,800	7.9
Part Filipino	10,700	2.1
Filipino—Portuguese	1,500	.3
" —Other Caucasian	4,000	.8
" —Hawaiian	2,400	.4
" —Puerto Rican	900	.2
" —Chinese	1,500	.3
" —All other[3]	500	.1
Residual	14,300	2.7
Unmixed strains not included above	5,000	1.0
Persons with more than two strains not involving Hawaiian	9,200	1.7

[1] This table is based on a sample of 1,267 households containing 4,908 persons excluding the military. The components of ethnic mixtures are indicated only where no more than two strains were reported. Each two-strain category is shown twice—for example, the category "Japanese-Chinese" under "Part Japanese" is repeated under "Part Chinese."
[2] In this particular category the term "Caucasian" includes both Portuguese and other Caucasians.
[3] "All other" refers to other two-strain combinations.
[4] Less than .1 per cent.

Diverticulitis of the left colon afflicts haoles;
of the right colon, nonhaoles, especially Japanese.

Colonic Diverticulitis in Hawaii

A Study of 414 Cases

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• *Diverticulitis in three Honolulu hospitals was predominantly a disease of the left colon in Caucasians and of the right colon in non-Caucasians, especially in Japanese. Only 5 per cent of white patients had it on the right, whereas two-thirds of the Japanese, half the (very few) Hawaiians, and one-third of the Chinese and Filipinos, had it on the right. Abscesses, granuloma formation, and bleeding were the commonest complications. Surgery in complicated cases was generally successful.*

THE MANY racial groups in Hawaii have afforded excellent opportunities for the study of disease as related to racial or ethnic distribution. Strode[1] has pointed out the high incidence of gastric carcinoma in the Japanese. Pang[2] has commented on the frequency of nasopharyngeal cancer in the Chinese, and Tamura[3] has also studied the incidence of breast cancer and hepatomas among the Oriental population of Hawaii. It was the purpose of this study to investigate mainly the ethnic or racial association of colonic diverticulitis in Hawaii. Diverticulosis, that is, the mucosal outpouching of the colon without any inflammation, was not included in this study.

MATERIALS AND METHODS

The charts of St. Francis, Queen's, and Kuakini Hospitals in Honolulu for the past seven years were analyzed. This covered the years 1956 to 1962 inclusive. Only those charts which had pathologic or radiologic evidence of colonic diverticulitis were studied. Thus, 414 cases were found suitable for analysis. Of these, 217 patients had a pathologic or operative diagnosis. The rest were diagnosed by the roentgenologic appearance of spasm, irritability, obstruction, or narrowing of the colon at the areas where diverticula were demonstrated. Cases with diverticulosis but without evidence of inflammation were excluded from the study.

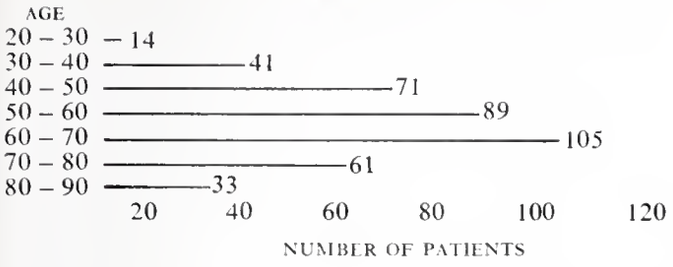
In order to compare racial distribution with annual admissions, The Queen's Hospital data for the past seven years were chosen for this phase of the study. The Queen's Hospital had the largest number of patients and its census resembled that of Oahu, the main island of Hawaii, most closely. St. Francis and Kuakini Hospitals could not be used because of the disproportionately smaller and larger numbers of Japanese, respectively, admitted to these two institutions. The 1960 census for Oahu was secured from state records.

MOST ARE "OLDER"

As noted in Table 1, most of the patients were in the older age range, 50-70 years of age. The youngest was a 21-year-old Japanese man with cecal diverticulitis and the oldest was an 87-year-old Caucasian woman with partially obstructing sigmoid disease.

Received for publication August 20, 1964.

TABLE 1.—*Age incidence*



SEX AND RACE

There were 218 (53%) males and 196 (47%) females. The ethnic breakdown revealed 275 patients (66.4%) were Caucasians, 88 (21.2%) were Japanese, 24 (5.7%) were Chinese, 12 (2.9%) were Filipinos, 8 (1.9%) were Hawaiians or Polynesian mixtures, and 7 (1.9%) were Koreans, Table 2.

MOSTLY LEFT-SIDED

Left-sided diverticulitis, mostly sigmoid in location, was found in 261 Caucasians (79.3%), 35 Japanese (10.6%), 16 Chinese (5%), 8 Filipinos (2.5%), 5 Koreans (1.3%), and 4 Hawaiians or Polynesian mixtures (1.3%). This was a total of 329 patients with left colonic disease.

JAPANESE OFTEN RIGHT-SIDED

Eighty-five patients had their inflammation in the right colon. Of these, 53 were Japanese (62.3%), 14 were Caucasians (16.4%), 8 were Chinese (9.4%), 4 were Filipinos (4.7%), 4 were Hawaiians or Polynesian mixtures (4.7%), and 2 were Koreans (2.4%). Of the 88 Japanese who had colonic diverticulitis, 53 (60%) had right sided disease. Furthermore, 65 per cent of all those with cecal diverticulitis were Japanese. The average age of these patients with right colonic diverticulitis was 44.5 years in contrast to the group with left colonic disease who were usually 15 to 20 years older. Fifty-nine per cent were men and 41 per cent were women. The youngest patient was a 21-year-old Japanese man with cecal diverticulitis and the oldest with cecal involvement was a 76-year-old Japanese man with an abscess and complete obstruction at that area.

TABLE 2.—*Racial distribution of diverticulitis 414 patients*

RACE	DIVERTICULITIS		LEFT-SIDED DIVERT.		RIGHT-SIDED DIVERT.	
	No. of pts.	*%*	*No. of pts.*	*%*	*No. of pts.*	*%*
Caucasian	275	66.4	261	79.3	14	16.4
Japanese	88	21.2	35	10.6	53	62.3
Chinese	24	5.7	16	5.0	8	9.4
Filipino	12	2.9	8	2.5	4	4.75
Hawaiian	8	1.9	4	1.3	4	4.75
Korean	7	1.9	5	1.3	2	2.4
Total	414	100.0	329	100.0	85	100.0

The Hawaiians and Polynesian mixtures made up only 2 per cent of the entire group that had colonic diverticulitis, even though they were 16.1 per cent of the population.

The ethnic or racial distribution of colonic diverticulitis at The Queen's Hospital only, as compared to the average annual admissions of each race at The Queen's Hospital, is shown in Table 3. Percentages depicting locations of the disease in each ethnic group are very similar to those in Table 2.

The 1960 census for Oahu is shown in Table 4 to compare with the racial distribution of the disease and to compare with the average annual admission to The Queen's Hospital.

SIGNS AND SYMPTOMS

Pain and tenderness in the abdomen over the inflamed intestine were the outstanding symptom and sign. Three hundred and fifty-one patients complained of abdominal pain, 101 of diarrhea, 74 of constipation, 61 of vomiting, and 55 of nausea. Other symptoms were anorexia, distension, tenesmus, fever, weakness, genito-urinary complaints, and malaise. Two hundred and forty-three persons had abdominal tenderness. Obesity, an intra-abdominal mass, blood in the stools, muscle guarding, and tachycardia were also noted.

RECTOSIGMOID MOST INVOLVED

As shown in Table 5, the rectosigmoid area was the most frequent location for the disease. It ac-

TABLE 3.—*Racial distribution of diverticulitis and annual admissions at Queen's Hospital*

RACE	DIVERTICULITIS		LEFT-SIDED DIVERTICULITIS		RIGHT-SIDED DIVERTICULITIS		PER CENT OF ADMISSIONS	
	No. of pts.	*%*	*No. of pts.*	*%*	*No. of pts.*	*%*	*No. of pts.*	*%*
Caucasian	188	70.2	177	82.8	11	20.4	7,099	36.5
Japanese	52	19.4	21	9.8	31	57.4	5,361	27.6
Chinese	12	4.5	6	2.8	6	11.2	1,229	6.4
Filipino	5	1.8	4	1.8	1	1.8	1,392	7.2
Hawaiian	7	2.6	3	1.4	4	7.4	4,047	20.8
Korean	4	1.5	3	1.4	1	1.8	288	1.5
TOTAL	268	100.0	214	100.0	54	100.0	19,422	100.0

TABLE 4.—*1960 Census of the Island of Oahu, State of Hawaii*

	NO. OF PERSONS	%
Caucasian	178,861	35.7
Japanese	148,920	29.7
Chinese	35,918	7.2
Filipino	44,366	8.9
Hawaiian and Cosmopolitan	80,396	16.1
Others (Koreans mostly)	11,948	2.4
TOTAL	500,409	100.0

counted for 307 (74%) of the 414 patients. Seventy-one patients had their difficulties in the cecum (17.2%). The left side of the colon accounted for 329 of the patients (79.5%) and the right colon accounted for the remaining 85 patients (20.5%).

COMPLICATIONS

Abscesses were found in 50 patients and a granulomatous mass was noted in 29. Twenty-eight patients had bleeding per rectum that required two or more pints of blood. Free perforation with diffuse peritonitis was found in 16 patients, obstruction in 13, fistula formation in 5, and an associated carcinoma in 5. The complication rate of diverticulitis was 37.7 per cent. Seventy-five per cent were in the left side and 25 per cent were on the right side.

Sixteen abscesses were found on the right side and 34 on the left. The other complications are tabulated either for the left or for the right in Table 6. Altogether ten deaths were recorded in the 414 charts. Half of these followed surgery and had severe postoperative complications such

TABLE 5.—*Location of the diverticulitis*

Rectosigmoid colon	307
Descending colon	20
Transverse colon	2
Ascending colon	13
Cecum	72
TOTAL	414

as intraperitoneal abscesses, fistulae, disruption of the suture line, and peritonitis. Others had severe associated diseases as arteriosclerosis or myocardial, kidney, or hepatic diseases. These contributed heavily to the demise of the ten patients.

One hundred and sixty patients had at least two or more episodes of diverticulitis, but most of the patients had only one attack.

OFTEN MISCALLED APPENDICITIS

The diagnosis on admission was incorrect in 260 (63%) of the cases. Appendicitis was the erroneous impression in 48 (56.5%) of the 85 cases of right-colonic diverticulitis. Other incorrect diagnoses entertained were colitis, obstruction, carcinoma, ulcer disease, and cholecystitis.

SURGERY USUALLY DONE

Surgery was the primary method of treatment in 217 patients. A resection of the offending colon was done in 172 persons. Forty-five individuals either had a laparotomy only or a local attack on the disease such as diverticulectomy or an inversion of the diverticulum. Twenty-four cases involved solitary diverticula which were largely on the right side.

Complications following surgery included ten intra-abdominal abscesses, seven fistulae, six serious wound infections or abscesses, six dehiscences, three disruptions of anastomosis with peritonitis, two anastomotic strictures, and eight other associated complications such as myocardial infarctions, pneumonia, atelectasis, and urinary tract

TABLE 6.—*Complications of diverticulitis*

COMPLICATIONS	TOTAL GROUP	RIGHT COLON		LEFT COLON	
	Number	*Number*	*%*	*Number*	*%*
Abscesses	50	16	32	34	68
Granulomas	29	11	38	18	62
Bleeding	28	6	21.4	22	78.6
Free Perforations with peritonitis	16	4	25	12	75
Obstructions	13	1	7.7	12	92.3
Fistulae	5	0		5	
Carcinomas	5	0		5	
Deaths	10	2	20	8	80
TOTAL	156	40	25	116	75

infections. There were five postoperative deaths, due to severe infections such as intraperitoneal abscesses, or peritonitis, or to anastomotic disruptions.

RACIAL AND AGE ASPECTS

The relationship of colonic diverticulitis to race has never been studied in Hawaii previously. Certainly, the data found in these 414 cases have been revealing. Patients with right-sided diverticulitis averaged 44.5 years, about 20 years younger than those with left colonic disease.

Diverticulitis has generally appeared to be a disease of Caucasians. Why white people should have more of this disease than nonwhites is a moot point. Although diet in Hawaii has varied in different ethnic groups, there has really been no good evidence to indict food as a cause. Furthermore, the Japanese, who also had a goodly share of this disease, were found to have right colonic diverticulitis far more often than other races. The Japanese group has also been unusual because of their higher rate of stomach cancer and their

lower rate of breast malignancy.[4] It will be interesting to see, in future years, the results of diet changes amongst the second and third generation Japanese as they have gradually adopted Western foods. The Hawaiians, surprisingly, had a low incidence of diverticulitis, in spite of the fact that so many of them were obese.

The main signs and symptoms of this disease have been pain, tenderness, diarrhea, constipation, nausea, and vomiting. These have been found to be present in both right- and left-sided diverticulitis. All ethnic groups who developed this disease manifested these signs and symptoms. Furthermore, the complications have occurred about the same rate on the right side as the left side in all races. Abscesses and granulomas, however, seemed to have developed more frequently on the right than on the left.

DIAGNOSIS DIFFICULT

The diagnosis of diverticulitis was frequently missed in spite of classical symptoms in many instances. In right sided disease, diverticulitis should be an important consideration, especially when the picture is not typical of appendicitis and the patient is a Japanese. Yet, consistently, appendicitis was the erroneous diagnosis in over half of these cases. Diverticulitis as an important cause of right sided abdominal pains in the non-Caucasian certainly deserves more emphasis.

In these instances when diverticulitis has been discovered at laparotomy to be the cause of the right abdominal discomfort, resection has generally been the rule. In spite of this fairly liberal approach, results have been good. Indications for surgery have otherwise been for the complications of this disease. Conservative therapy with antibiotics and bland diet has been adequate for the uncomplicated lesions.

SUMMARY AND CONCLUSIONS

Four hundred and fourteen cases of colonic diverticulitis in Hawaii were studied. Ninety-five per cent of the 275 afflicted white patients had the disease in the left colon, most in the sigmoid colon. Caucasians constituted only 35 per cent of the total population.

On the other hand, right colonic diverticulitis appeared to be most frequent in the Japanese. Fifty-three patients (62.3%) of the total number (85) of Japanese had right sided disease, and 57.4 per cent of right sided cases occurred in Japanese. Most of them were in the cecum. Japanese formed only 29.7 per cent of the total population.

Thirdly, Hawaiians had very little difficulty with this disease. Only two per cent of their group were afflicted, although they constituted 16.1 per cent of the total population.

Besides the high incidence of right colonic diverticulitis in the Japanese, a third of the Chinese, half of the Hawaiians, and a third of the Filipinos also had their disease on the right side. Thus, left colonic diverticulitis was largely a disease of the Caucasian and right colonic diverticulitis a disease of the non-Caucasian.

Pain and tenderness of the abdomen, diarrhea, constipation, nausea, and vomiting were the most common manifestations of this disease.

Complications occurred in both right and left colonic diverticulitis with abscesses, granulomatous formation, and bleeding as the three most common complications.

Resection for the advanced disease was the treatment of choice. In the uncomplicated lesions, conservative therapy proved to be adequate. ■

1040 So. King St.

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The reason why some cattle in Naalehu age prematurely may have a bearing on the aging process in humans

Accelerated Aging in Cattle

P. W. GEBAUER, M.D., *Honolulu*

• *Thirty years of increasingly intensive investigation have still not clarified the nature and cause of the mysterious patchy calcifying disease, characterized clinically by what looks like premature senility, afflicting cattle in the Naalehu area of the Island of Hawaii. The possibility that the observed changes may throw some light on the phenomenon of aging in humans is raised.*

ALTHOUGH the time-paced ravages of connective tissues may vary in the same and in different species, they produce the most obvious characteristic of aging which is physical appearance, so that the recognition of similar effects in diverse species is not uncommon. The signs of advanced age may be obviously similar in a lion and a mouse and defy comparison in a tortoise and a cockatoo, even though the connective tissues of all four are practically identically age-altered.

Despite this long-observed natural bent of living things, man's knowledge of aging consists of a growing accumulation of observations, each one like a separate piece of a cutout puzzle for which the final picture remains in the same state of disassembly as it was over 300 years ago when Francis Bacon wrote, "Touching on the length or shortness of life in beasts, the Knowledge which may be had is slender, the Observation negligent, the Tradition fabulous."[1]

The objects of this paper are a brief relation of the history of a rapidly acquired degenerative state of cattle confined to relatively small and spotty areas of Hawaii rangeland, and its comparison to the aging process in man. It is called Naalehu disease solely because years ago this community was near to the pastures containing afflicted animals, and large enough for easy geographic location.

Received for publication April 30, 1965.

DOCTORS WILLERS AND HENDERSHOT

The first publication concerning this condition is in a report by the Board of Commissioners of Agriculture and Forestry, Territory of Hawaii,[2] for the two-year period ending December 31, 1942. A portion written by Ernest H. Willers, D.V.M., Territorial or State Veterinarian since February 1, 1937, was particularly based on the observations of J. M. Hendershot, D.V.M., made on cattle from the vicinity of Naalehu, and recorded in reports covering a period exceeding two years. The confined distribution of the disease and its long-standing recognition by ranchers and veterinarians were noted in this concise report which listed cachexia and difficult respiration and locomotion as clinical features, and muscle atrophy, generalized arteriosclerosis, and mineralization of the lungs as pathologic features (Figures 1 and 2). The latter were classified as "Metastatic Calcification." A disturbed calcium-phosphorus intake was considered a possible etiologic factor, and plans for further studies were outlined.

Investigative observations, somewhat hampered by World War II, were continued through 1945 with the accumulation of records and specimens that were unavoidably lost in the disastrous tidal wave which struck Hilo on April 1, 1946.

DR. CROSS

Robert C. Cross, D.V.M., became Veterinary Pathologist for the Division of Animal Industry January 8, 1951. During a seven-year tenure of this position he reviewed the remnants of previous records and continued routing investigations.

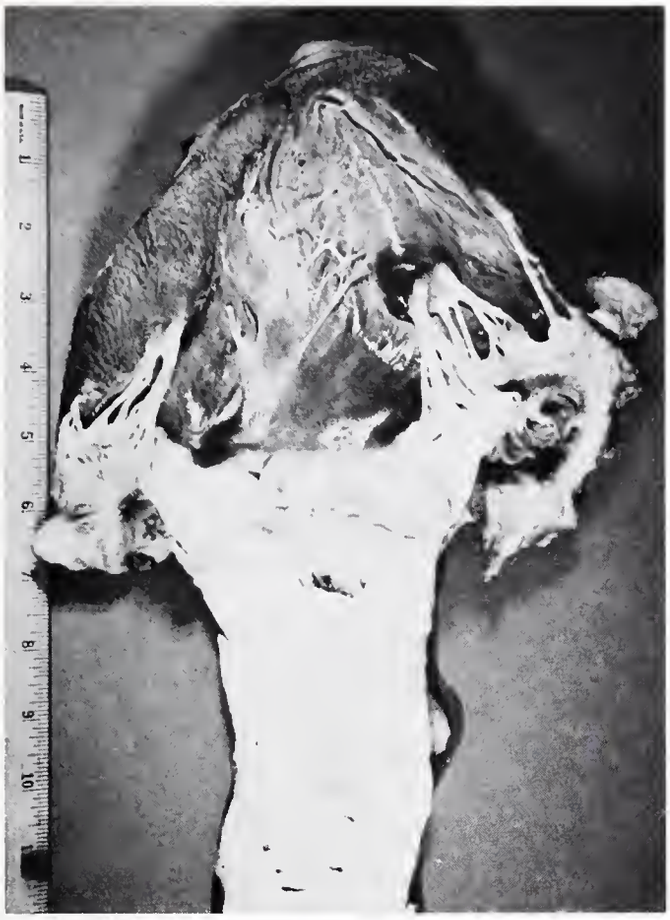

FIG. 1.—*Photograph of opened cow heart and aorta showing, from above down, sclerosis at intercostal and bronchial arterial orifices, mineralized mass at brachiocephalic origin accentuated by partial invagination, stiff, nodular aortic cusps, and thickened chordae tendineae and endocardium, made by Dr. Cross.*

He made numerous clinical and pathologic observations and considered degeneration of the elastic fibers the initial cardiovascular change.

He noted the prominence of emphysema in noncollapsible pulmonary lobes. A report on Specimen No. 568, dated October 13, 1953, described a submitted lung as "Typical Naalehu," and suggested a pathogenesis for the microscopic findings: "Collagenous tissue of alveolar walls increases, therefore blood supply reduced. Dustlike calcium granules deposited, coalesce, form large areas of calcification. Some wavy lines of dustlike granules are suggestive of elastic tissue calcification." A Naalehu Disease file contains some of his notes which included many unanswered questions. Two of these are, "What changes occur in the elastic tissue to permit the deposition of calcium?" and "Do the aging changes correspond to human aging changes?"

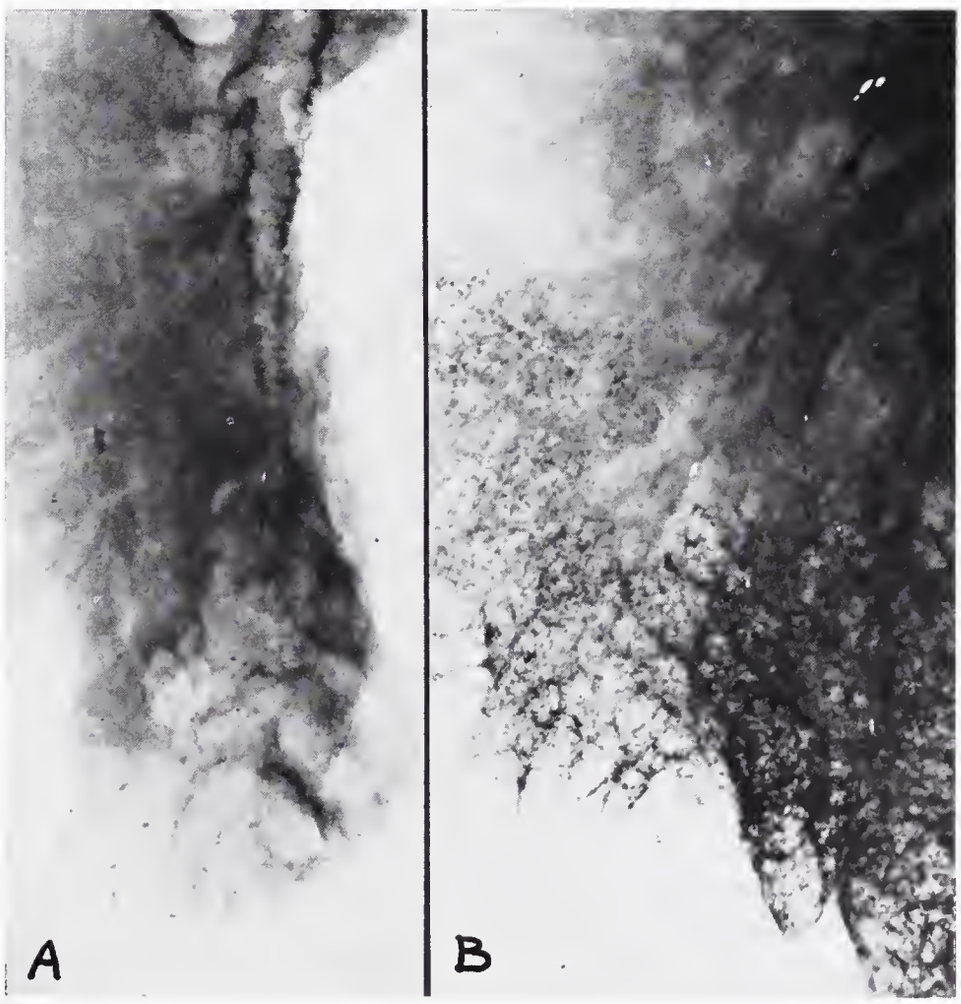

FIG. 2.—*Prints of diseased pulmonary lobes. In A, a branch of the pulmonary artery, blackened by mineralization, can be followed from the top to the periphery (bottom) where emphysematous bullae are clustered. B, demonstrates the massive replacement of functioning lung by a lacelike network of calcareous and bony spicules in far advanced disease. Made from radiographs taken by Dr. Cross.*

He also made notes on a typical rancher type of experiment.

MR. GLOVER

On Kahuku Ranch, Island of Hawaii, Naalehu disease was found at necropsy in one animal of a large herd of Hereford cattle exhibiting poor condition, restlessness, hostility, and loss of cows with calving. Low phosphorus seemed to be implicated from wet and dry season soil and forage analyses, so disodium phosphate was added to the drinking water. A gradual and marked improvement in condition and temperament was noted by Mr. Glover, and signs of Naalehu disease did not appear.

DR. LYND

Collection of blood, tissues, and bones obtained at slaughter from normal animals of different ages and sex, and from afflicted animals was carried on by Frederick T. Lynd, D.V.M., who succeeded Dr. Cross on May 29, 1959. He found pathologic changes in the joints of practically all diseased subjects, which had only been briefly mentioned in a short note filed by his predecessor. This second assembly of normal and pathologic materials was in keeping with an investigative plan formulated in 1957 by a group of interested parties which included a visiting professor of medicine, Dr. H. A. Schroeder. The plan was little more than an intensified facet of routine procedure because funds and facilities for an experimental study, such as outlined 17 years previously and thereafter under Dr. Willers' smouldering contemplation, were unavailable. The efforts of G. D. Wallace, D.V.M., of the U. S. Public Health Service and working with the Territorial Board of Health at that time, were invaluable to Doctors Willers and Lynd in their final design of an investigative project; so long desired it was almost preconceived. It proposed, ". . . to study the cause, natural history, and pathogenesis of Naalehu disease . . . and the possible relationship of this condition to cardiovascular disease in man," by selecting and confining two equal and comparable herds of cattle, one in a disease area and the other in a nearby nondisease area for clinical and pathologic observation for a period of five years, and by soil and plant studies in the two areas. This proposal was the substance of an application for a research grant* which was approved in December, 1959.

DOCTORS WILLERS AND LYND

The magnitude of this undertaking is revealed by budget items for costs of concrete foundations,

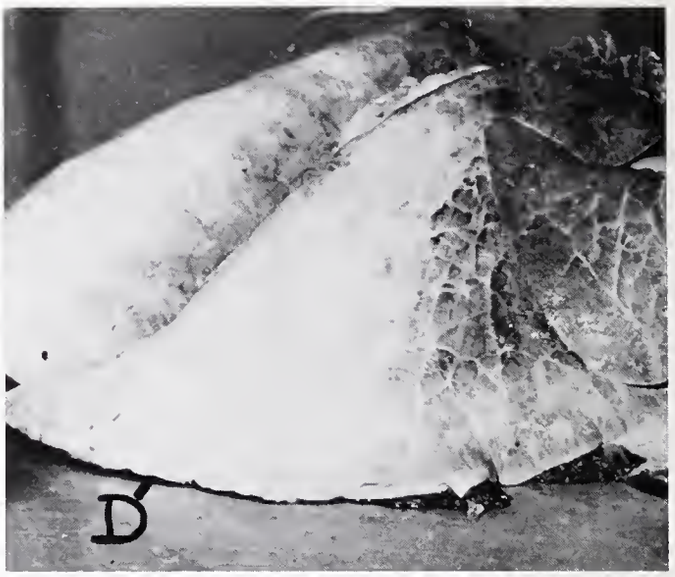

FIG. 3.—*Photograph of dorsal aspect of lungs of one-year-old cow born in experimental pasture showing pleural thickening, subpleural blebs, and scalloping and rounding of dorsal lobe margin along diaphragmatic edge —D; all early signs of disease.*

water lines and troughs, fencing, portable squeeze chutes, generators, and livestock scales, for construction of sheds, corrals, chutes, and cutting gates, for laboratory equipment and a large animal electrocardiograph, and compensation for cowboys and their horses (an item not previously budgeted at the National Institute of Health), for the project sites were originally without roads, water, or electric power. In May of 1960 another tidal wave disaster occurred, so that construction workers were at a premium. Consequently, all of 1960 and most of 1961 were consumed in a preparation for the proposed studies, which was highly dependent on the complete cooperation of the Hawaiian Ranch Company and the liaison of Deputy State Veterinarian L. A. Weight of Hilo. Electrocardiographic studies began on February 27, 1962. Two years and 10 months later the first fruits of labor were harvested in the form of two papers,[3, 4] which herein are amplified by additional observations of other diseased subjects.

AGING AND NAALEHU DISEASE —PATHOLOGIC SIGNS

The usual characteristic changes were produced in the animals at the experimental site where soil and plant studies indicated disturbed mineral and micronutrient balances, particularly those obscurely related to the enzymatic systems potentially capable of connective tissue degradations characteristic of aging.

As in the blood vessels of man, Dr. Lynd has

* NIH Grant H5018.

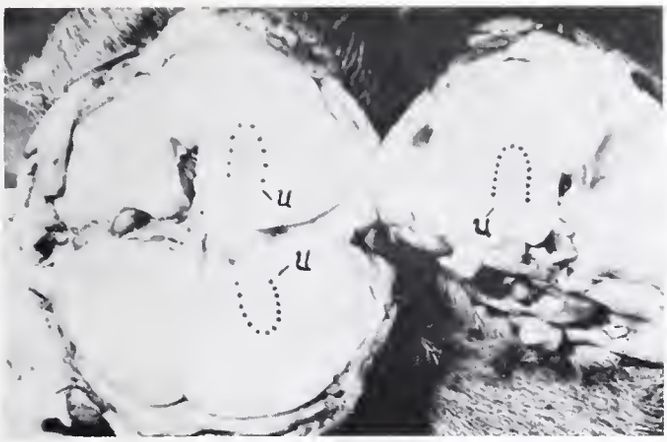

FIG. 4.—*Photograph of radiocarpal joint of subject in Fig. 3, showing multiple ulcerations of articular cartilages—U.*

noted disruption of the internal elastica and atheromatous intimal changes to be early changes as commonplace as medial sclerosis is later, when gross calcareous distortions of heart valves and large vessels become prominent. Gross myocardial infarction is unusual but occurs and in one instance produced a large ventricular aneurysm.

Early changes in the lungs are pleural thickening, scalloping and rounding of the lobe margins, and irregular collections of subpleural emphysematous blebs (Fig. 3), frequently accompanied by a villous type of ossification responsible for a typical "cereal" consistency on palpation. Later there is massive replacement of lung tissue by large bullae irregularly walled with lacelike calcareous and bony formations, leaving a dead-end, clubbed, bronchiectatic residual lung stroma. The dorsal lobes, especially in the costovertebral and diaphragmatic portions, usually contain the first and the most advanced changes; small foci are commonly found elsewhere.

The pulmonary arteries and sometimes the large veins approaching the right heart show sclerotic changes almost equal to the systemic vessels to a degree and extent only occasionally seen in generalized vascular sclerosis in man.

The outstanding pathologic features of the clinically prominent joint involvement are periarticular thickening and hyperemia with thinning and erosion of articular cartilage (Fig. 4). There is considerable variation in the severity of the process, and the ulceration frequently appears to extend from a broad base at the peripheral synovial border of the joint space toward its center and is not necessarily limited to weight-bearing areas. The radiocarpal joints of the forelimbs and the atlantooccipital joints are invariably affected.

The aging process is also simulated by atrophy and other involutional changes noted in muscle, fascia and occasionally in parenchymatous organs, and particularly by skin changes, notably reflected

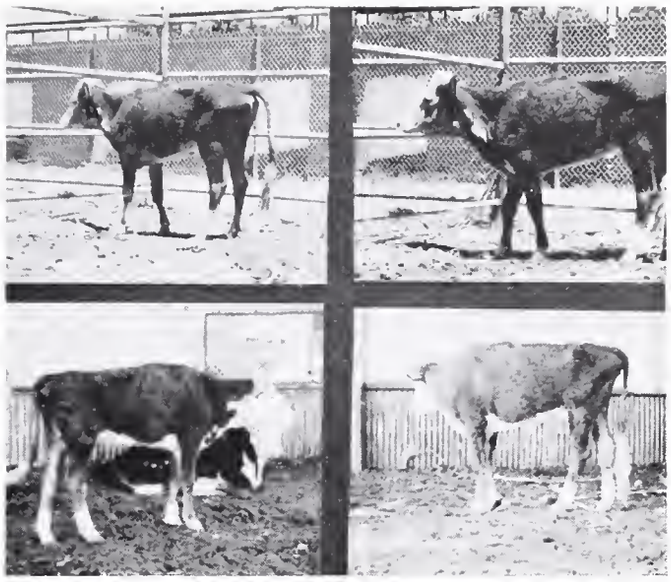

FIG. 5.—*Photographs of two-year-old cow, shortly after arrival at the Animal Quarantine Station, illustrating a shaggy coat, distended rib cage, arched back, prominent tailhead and marked hindquarter atrophy.*

in the hair coat. However, these manifestations of aging are conceivably the result of ischemia secondary to vascular sclerosis. On the other hand, the vascular, pulmonary, and articular changes mimic those which provoke the age infirmities of man. Furthermore, their occurrence in young cows is attended by a physical appearance so strikingly similar that species comparison becomes irresistible.

CLINICAL SIGNS

The nutritional deficiencies evidently responsible for this condition project an afflicted animal into a vicious circle of progressive debility, dyspnea, and difficult locomotion, thereby interfering with its foraging ability, which compounds the deficiency and abets the pathologic processes until a cachectic state is reached that precludes rangeland existence. Consequently, the immediate cause of death may be obscure, and terminal stages of the disease are rarely encountered. A typically afflicted young cow weighed 900 pounds in November, 450 pounds the following February, and could not be found at roundup three months later.

Animals still capable of ranging despite advanced involvement appear practically skeletonized, have faded, dull, long, shaggy, and curly coats with skin folds notably deepened, particularly on the lateral aspects of the neck. The rib cage is distended and relatively fixed. An arched back is accentuated by sloping pelvic bones and striking hindquarter atrophy. The tailhead is prominent (Fig. 5). Diminished muscle bulk of the withers and shoulders produces a "round-shouldered" appearance. Locomotion is slow and

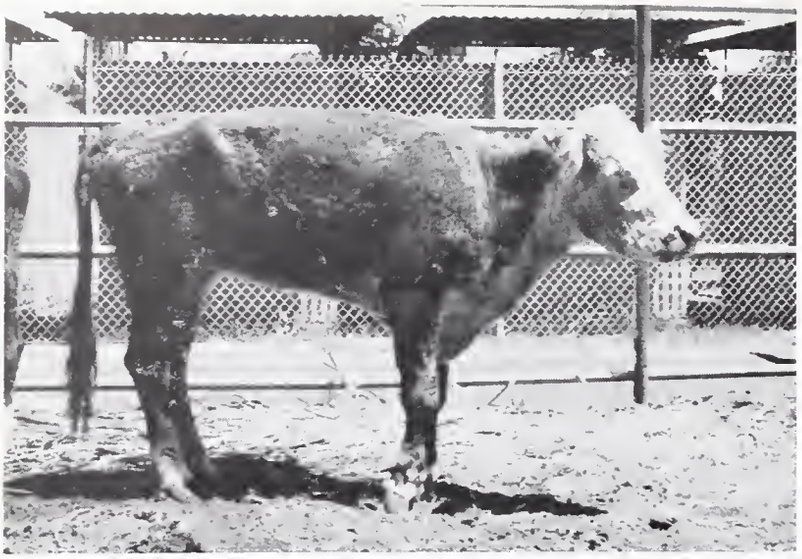

FIG. 6.—*Photographs of herdmate of subject in Fig. 5 showing rounded shoulders, bowed forelimbs surmounting a ballet* "pointes" *stance motion.*

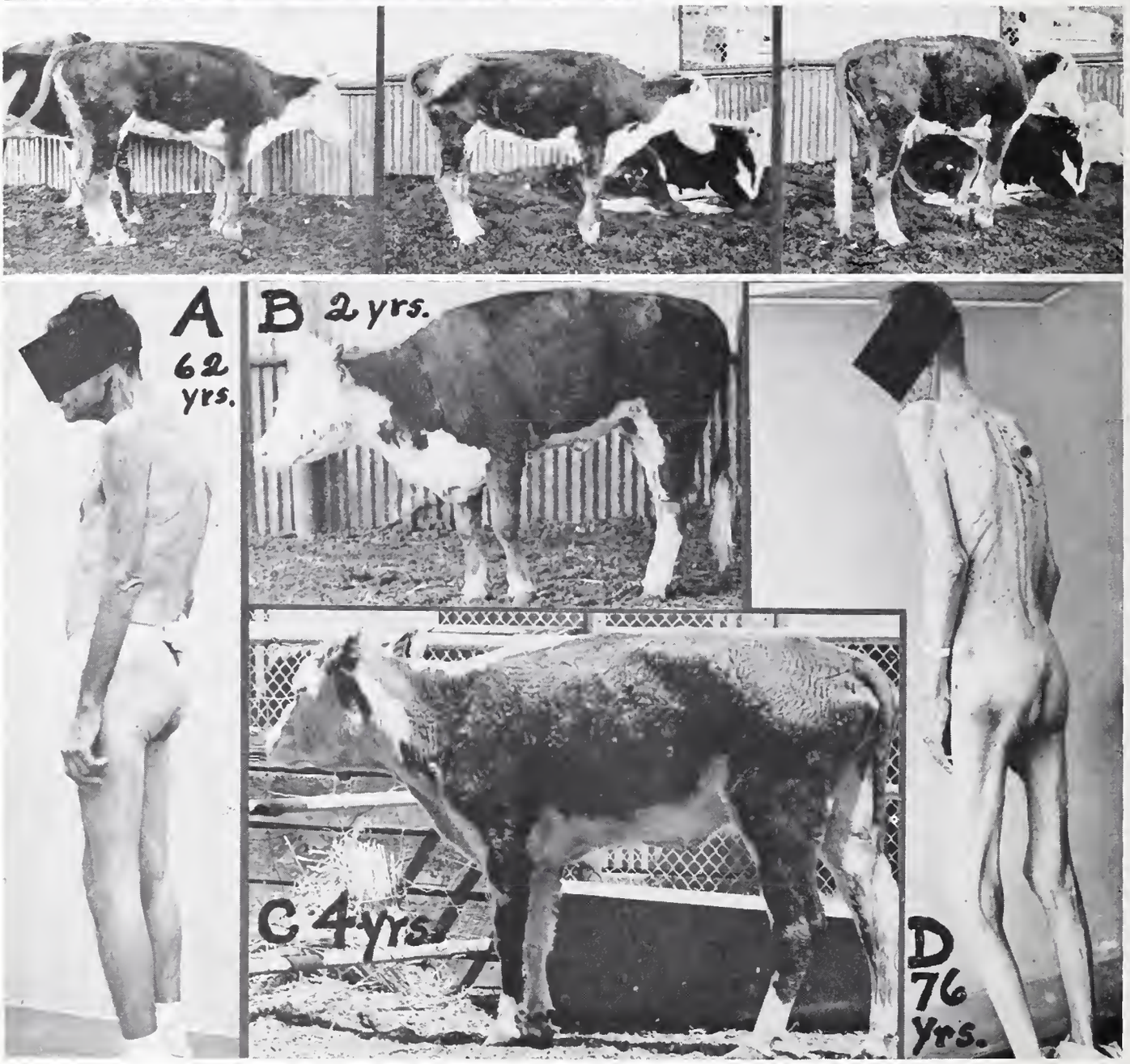

FIG. 7.—*Photographs of young cows and old men. In A, 80 per cent of specific age has passed; the ravages of severe pulmonary emphysema are manifested in the thorax and shoulder girdle. B, although at only 6 per cent of specific age, seems equally senescent because of the connective tissue changes of Naalehu disease. A similar comparison between C and D is not too difficult; respectively they are at 14 per cent and 95-plus per cent of their specific ages. The hindquarter and gluteal atrophies are more comparable than the curly coat and the diffuse senile keratoses.*

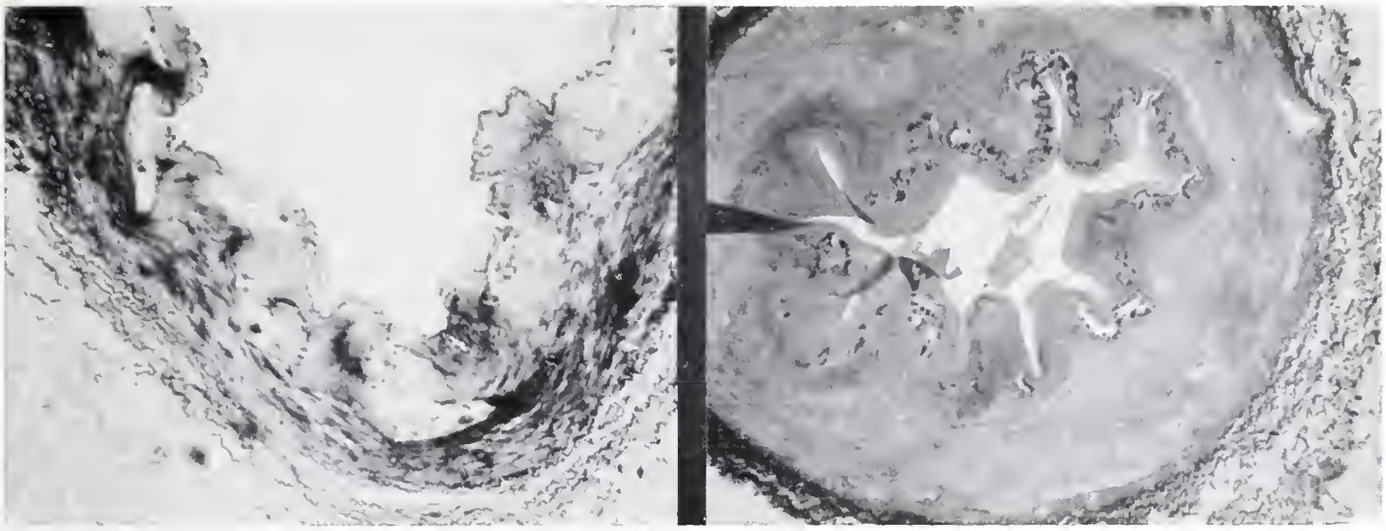

FIG. 8.—*Photomicrographs of left carotid artery segments of a two-year-old cow with moderately advanced Naalehu disease. The one on the left was obtained by carotid excision and anastomosis shortly after the animal arrived from a disease area. The rigidity of extensive medial calcification minimizes the contraction from fixatives so that the vessel wall appears relatively thin. The section on the right was obtained from the same artery by surgical excision after seven months' pen feeding of a standard basic ration. Fixation contraction is marked and the intima is thrown into folds. The internal elastica shows spotty granular calcification which has disappeared from the media. The external elastica is largely intact and the adventitia is rich in elements taking an elastic tissue stain. The latter may be an expression of hypertrophic vascularity grossly evident at operation and then regarded as related to the previous surgical procedure. Verhoeff stain. Courtesy Dr. F. T. Lynd.*

clumsy. The forelimbs are bowed, with weight-bearing awkwardly shifted to the toes (Fig. 6). With progression of the disorder, animals of even and tractable temperament become hostile, malevolent, and sometimes unmanageable. Advanced disease makes a young cow look like a cranky, winded, skinny and hunched-over old man with flat backsides and a scuffling step (Fig. 7).

EXPERIMENTAL RESULTS

Observed for over three years, the experimental animals, confined in an area at Kalae (South Point, Hawaii) which extends to the sea at Mahana Bay from an elevation of 200 feet, have exhibited evidences of early acquisition and steady progression of the disease, in contrast to the control herd located about nine miles to the northeast at 400 feet above sea level, and a good two miles from the town of Naalehu.

Comparative average weight curves reflected obvious loss of condition. Characteristic clinical signs were always upheld by examination of tissues obtained at necropsy and slaughter or by lung and carotid artery biopsies.

Electrocardiography proved to be the best means of early disease detection and a reliable measure of its progression. Some of the control animals originally obtained from a disease area at first had abnormal tracings which gradually became normal during their residence in the control pasture. Similar subjects in the experimental herd had serial records indicating disease advancement. After 18 months 96 per cent of this herd, and none of the controls, had abnormal electrocardiograms. Thus, disease regression, years ago observed by ranchers who employed the advised expedient of pasture change, was manifested by serial electrocardiographic studies.

Microscopic evidence of disease regression in a cow (Fig. 8) has been observed by Dr. Lynd at the Animal Quarantine Station in Honolulu. Identical studies have been initiated in experimental project cattle but much more time is needed to complete them. This is also true of current investigations of the cause and mechanism of disease production by studies of soils, forage, rumen contents, urine, feces, and blood. To date, calcium depletion of the bones, which characterizes "metastatic calcification," has not been found, and simple precipitation of calcium complexes by unnatural chemical concentrations or pH levels has not been implicated. On the other hand, a deficiency in biologically available magnesium and a surplus in potassium in dry season forage are suspect causative factors. Consequently, the conditions noted by Francis Bacon in his time have been improved: Touching on the Naalehu Disease Project, the Knowledge which may be had is fattening, the Observation promising, the Tradition still fabulous. However, continuance and completion of this investigation has become dependent on the acquisition of new financial aid because the presently supporting five-year grant will terminate soon, at which time the observation period

will be only 3½ years. A requested extension has not been granted.

DISCUSSION

An acceptable theory and an accurate definition of aging await the assembly of a cutout puzzle with many missing parts and without a finished picture, the latter representing the solution of the aging process: each piece a separate discovery or observation probing its secrets.

Compared to the other embryonal layers, the mesenchyme is an overwhelming progenitor of tissues in which chronologic changes characterize aging: the framework which supports the whole being, holds its individual organs together, and conducts its fluids. In all forms of life these are the connective tissue. In each of its components, the alterations, which naturally occur as time passes, are experimentally reproducible, thereby cracking the door to the mysteries of aging without permitting a good view beyond because of the artificiality of the methods used to provoke the changes.

Even if aging is accepted as a universally natural involutionary inevitability, its investigation is mandatory because of the physical and economical handicaps it may provoke before a given subject reaches his specific age. For this reason, whether or not Naalehu disease is related to aging, the primary objectives of grant H-5018 must be pursued, for arteriosclerosis is a killer constantly usurping Father Time.

Tissue calcification can be produced experimentally in laboratory animals by a variety of highly artificial means,[5, 6] its progress halted by their abandonment, and its inception prevented by prolonged, specific pretreatment.[6] On the other hand, specific experimental regression of natural calcification has not been reported. Also, when calcification occurs under natural conditions, particularly in man, it usually is regarded as permanent or progressive, and a hallmark of aging. Under such conditions, its rapid progression and especially its regression in this bovine affliction—dubbed Naalehu disease—provide an investigative opportunity of unmatched potential, for until now the natural regression of arteriosclerosis has not been observed. ■

Leahi Hospital.

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Case Report

FAILURE OF MEASLES VACCINE

A 5½-year-old boy was immunized against measles, along with his brother and sister, at a local military hospital on November 30, 1964. The child was perfectly well at the time of immunization and had not had any illness for at least two months preceding. He had not received any immunizations or gamma globulin injections prior to this time. As the mother remembers, she saw the corpsman take inoculums from two separate vials and administer them in different arms. The preparation used in the hospital is Rubeovax, with hyperimmune measles gamma globulin in the opposite arm.

The boy was seen at the Pearl Harbor Naval Shipyard Dispensary on March 6, 1965 with fever, a sore throat, conjunctivitis, and a morbilliform rash. In addition, classic Koplik spots were present on the buccal mucosa. The child was seen two days later and the diagnosis reconfirmed. Of interest is the fact that his siblings, who were inoculated at the same time and exposed to their brother, have not developed rubeola. ■

Lt. Ronald G. Latimer, MC, USN
Pearl Harbor Naval Shipyard
Dispensary

The President's Page

At the inception of my year as President of the Hawaii Medical Association I find a continuation of many problems which have confronted our Association as well as relatively new ones which have been thrust upon us. The Association was most fortunate in having the services of a very dedicated, devoted President during the past year. Dr. Allison's enviable record will be very difficult to equal. His devotion to the interests of our Association was outstanding, and having served with him as President-elect I can vouch for the magnitude of the effort required if my responsibility is to be carried out satisfactorily.

At the present time we have just completed the Hawaii Relative Value Survey, and are faced with the problem of applying it and using it as a guideline for our own individual use as well as in contractual negotiations.

As most of our members know, HR 6675, now before Congress for the first time, serves notice to physicians that socialized medicine has arrived on the American scene. By the time you read this, the exact form and outline of this bill will have been shaped with the various amendments, etc., which have been proposed. It is not too early for our physicians to make their own decisions as to whether they will elect to be nonparticipants.

I believe that one should be able to answer questions which will soon be posed by senior citizens, and be able to tell them whether or not, under the new program, they will be able to continue coming to you as their personal physician or will have to seek the care of a physician who participates. I believe one should be able to advise the senior citizen patient of the desirability of keeping his present private, voluntary insurance program. These are two specific challenges facing the physicians of this State. Bill HR 6675 by far transcends anything that has ever happened on the American medical scene.

Change for the sake of change is not essentially or necessarily good. Goethe said "what I possess I would gladly retain. Change amuses the mind, yet scarcely profits." If changes are for the good, then Bacon's comment is certainly pertinent and applicable. He said "he that will not apply new remedies must expect new evils." In the case of medical care for the aged, no physician would refuse to render such care for nothing, if the case warrants it, but not at reduced fees for those who can afford it. Increased taxation and reduced fees even for those who can well afford to care for themselves will be the eventual outcome of the proposed legislation. Increased benefits, and a lowering of the age limit, will ultimately occur.

Every physician will have to search his own mind and apply his own philosophy in meeting the problems of the present.

In the next issue of the JOURNAL I shall try to cover the many uses of Federal money in health care in the State of Hawaii. It should be easy to see how the Federal planners have utilized the philosophy of Fabius in controlling health care.

Ord Pinkerton

HAWAII MEDICAL JOURNAL

Editorials

Medical Practice and the Great Society

The nationally coordinated and financed network of regional medical complexes proposed by the President's Commission on Heart Disease, Cancer and Stroke[1] under the chairmanship of Michael DeBakey has been reshaped a little, in bills (S. 596 and H. R. 3140) now before congress, according to Elinor Langer's editorial in a recent issue of *Science*.[2]

It seems that when the proponents of an attack directed toward just heart disease, cancer, and strokes had gone home, Edward W. Dempsey, former Dean of Washington University School of Medicine, now special assistant to the Secretary of Health, Education and Welfare for health and medical affairs, was left alone to draft the bill. His broader view of the problem is reflected in the result.

The report envisioned 60 regional research centers located in universities, hospitals, and other research institutions, and over 450 diagnostic and treatment centers, concerning themselves with heart disease, cancer, and strokes. The bill, in contrast, would provide funds for "research and training and demonstrations of patient care" for these conditions "and other major diseases," and will "afford to the medical profession and . . . medical institutions . . . the opportunity of making available to their patients the latest advances in the diagnosis and treatment of these diseases."

The impact on the private practice of medicine is thus to be greatly increased—potentially, at least. The NIH is going to be in charge of implementing this program, and it will do it through "local advisory groups" representative of all concerned community agencies, by grants to "regional complexes" in which universities, medical schools, research institutions, and hospitals will participate. The extent to which private practitioners will be either involved, or competed with, is by no means clear as yet. The prospect is not a reassuring one; indeed, it verges on the alarming.

The wide-open lines of communication between Hawaii's medical profession and Hawaii's University and embryo medical school, for which we may be grateful to enlightened leadership in both organizations, augur well for an orderly and effective implementation of the new program in Hawaii, when the time comes. Keep them open!

[1] Science (Mar. 20 and Dec. 25) 1964.
[2] Science (May 14) 1965.

Hawaii Calendar--A New Feature

In response to the many requests noted on the questionnaire inserted in the last issue of the JOURNAL, we are initiating a new feature called "Hawaii Calendar." In this section we will attempt to list events which are of interest to the profession. There has long been a need for a central clearing office for medical events to be held in Hawaii and in order to make this calendar helpful, it will be necessary to receive the cooperation of all segments of the medical community. If you know of anything that you feel should be included in this section, please let the Chairman of the Convention and Seminar Committee, Dr. Richard T. Mamiya, have the information. The Hawaii Medical Association executive offices will attempt to keep the calendar current and accurate and will appreciate being advised of corrections in the listings. The first schedule appears on page 514; we hope it will meet a need and prove helpful to our members.

HAWAII MEDICAL JOURNAL

This Is What's New!

• **Anticholinesterase poisoning** produced by organophosphorus insecticides such as malathion and parathion will undoubtedly become more common as the use of insecticides increases. Watery eyes, runny nose, wheezing with shortness of breath, headache, and nausea are common symptoms and signs. Treatment consists of: (1) removal of the insecticide, especially contaminated clothing; (2) **atropine,** 2 mg, IV or IM; (3) **artificial respiration;** and (4) **pralidoxime** (Protopam) chloride IV to reactivate the cholinesterase (*J.A.M.A.* [May 3] 1965) [also HAWAII MED. J. (May-June) 1965—ED.].

• Workers in Tennessee find that **sereening for glaucoma** is not a simple affair. For example, if the commonly employed screening level of 5 on the Schiotz scale is used, few false positives will be picked up, but only about half the patients with glaucoma will be identified. In other words, at a level of 5, the specificity is approximately 95 per cent, but the sensitivity is only 58 per cent. If the Schiotz screen level is increased to 6, the **specificity drops to 81 per cent** and **sensitivity increases to 75 per cent.** This means that at screening level 6, one patient in 5 with glaucoma will be missed and one patient in four will be referred needlessly for a complete ophthalmological evaluation (*J.A.M.A.* [May 24] 1965).

• A mongrel dog in Palo Alto was still alive and healthy 11 months after his **heart had been replaced** with the heart of another dog. The Stanford researchers attributed a good deal of their success to their ability to anticipate the **rejection phenomenon** by changes in the **electrocardiograph.** At the earliest electrical evidence of onset of rejection reaction, **immunosuppressive drugs** were administered to halt the dog's rejection of his borrowed heart (*Heart Research Newsletter,* Am. Heart Assoc., Spring, 1965).

• Oxidation of xanthines gives rise to uric acid, which has a great deal to do with gout. This reaction is catalyzed by the enzyme xanthine oxidase. A compound known as **Allopurinol,** chemically very similar to hypoxanthine, **inhibits xanthine oxidase** competitively at low concentrations and noncompetitively at higher concentrations. The drug, supplied by Burroughs Wellcome & Company, was well tolerated in 11 of 12 subjects studied at the NIH. It may be used in conjunction with uricosuric drugs to **increase purine excretion,** and has a potential use in patients with **renal insufficieney** and hyperuricemia, who are usually refractory to uricosuric therapy (*Ann. Int. Med.* [April] 1965).

• **Cortisone** used for less than six days in patients with **infectious mononucleosis, mumps orchitis,** and **herpes zoster** cut the duration of the illness in half without side effects (*Antibiotic News* [March 17] 1965).

• A Boston physician banged his fingernail with a hammer and spent the next few weeks **watching the damaged nail regenerate.** He reported his findings in a medical journal. The first nail which appeared was a little thinner than the original nail and it took several months for a healthy full-thickness nail to appear. None of these scientific recordings cover up the most obvious observation—the author better let someone else do his hammering (*Arch. Derm.* 91:619 [June] 1965).

• **Alveolar atelectasis** or "shrinking lungs" is offered as an explanation for the otherwise unexplainable **dyspnea** in some patients with **systemic lupus erythematosus** (*Brit. Med. J.* 1:1273 [May 15] 1965).

• Prolonged use of **IV mannitol** as a diuretic may cause **hypernatremia.** The mannitol causes water diuresis without sodium diuresis. Hypernatremia and hyperosmolality are the final result (*New Eng. J. Med.* 272:116 [May 27] 1965).

FRED I. GILBERT, JR., M.D.

HAWAII MEDICAL JOURNAL

Bureau of Medical Economics

The phrase "gray matter" is usually associated with brain power, but there is another form of gray matter.

When classifying accounts receivable, our collection division usually applies three classifications: (a) White, (b) Gray, (c) Black.

THE WHITE CLASSIFICATION

These are usually accounts that are collected without any undue bother. One or maybe two monthly statements are mailed to the client and the account is paid. This, of course, is the near perfect client—one that gets service from the doctor and gives service by paying the account promptly. This is how it should be, but unfortunately all patients do not fit into this category.

THE BLACK CLASSIFICATION

Passing directly to this area, this is really the final category. Known as the "desperation area," the black area accounts are those in which all efforts of collection known to your staff have failed. These are the accounts that are turned over to the BME for collection.

THE GRAY CLASSIFICATION

In the writer's opinion, this is the most important area in accounts receivable. This is the "Halfway House." These patients are obviously not prompt payers, but by the same token cannot be classified as being ready for a collection agency. Let us review what usually happens to these accounts. Your assistant has sent out the first monthly statement, and there has been no payment, or any correspondence from the debtor. The following month your assistant sends out the second statement. Again no action.

Your assistant is now in a quandary. What to do next? Maybe another telephone call. She tries. The patient is not at home. Your assistant knows that the patient works and cannot be reached until after five. Your girl is not at the office after five, so she sends out another statement. Already your assistant is fighting a losing battle within herself. If the debtor is a hardened delinquent, statements will be of little avail. *This is the time for strong action.* In effect she should contact the debtor, even though this may mean sending a post card with a message "Please call ——— (giving the doctor's name and telephone number).

This is what should happen, but what usually happens is that your Girl Friday leaves the account for another month, sends out yet another statement, and hopes. In the writer's opinion, she is already "sweeping the dirt under the rug."

Another couple of months and finally most of these gray accounts, which could have well been collected, are passed over to the collection agency to handle. Quite honestly, your girl breathes a sigh of relief, because the nasty account is no longer cluttering the nice clean files together with those of nice people who pay regularly. So these accounts eventually become black.

The solution to this problem is that assistants should be more specific in their approach. They should always make a point of speaking to the debtor personally and getting a specific promise of payment as I mentioned earlier. Once a debtor can be held to some form of promise there is an obligation. They can be told that if payment is not forthcoming, the account will be handed over to the BME Collection Division.

Unfortunately most delinquents get away with loose promises and most assistants are not trained to cope with this type of patient. Most are not able to go beyond a letter and a mild reproach.

The point of "making arrangements" is another thing. Too many assistants ask for a settlement and are informed by the debtor that he is prepared to pay so much per month or "make arrangements." Many accept this on first hearing instead of requesting payment in full. Why so many offices have so many "time payment" accounts is beyond my comprehension. Teach your assistant to ask for money that is yours, as you have given service, good service, for it. A doctor does not give "time service" so why should he, among all other trades and professions, be expected to take "time payment"? However, there are times in specific indigent cases where this type of payment plan aids both the patient and the doctor. Humanity is a great thing in treatment, I know, but let not the doctor's office be taken advantage of.

At this time the Bureau of Medical Economics is investigating this financial "gray area" and shortly hopes to come up with a solution that will materially help the profession to overcome this most unhappy section of its accounts.

GABRIEL ROGERS
Manager

Hawaii Academy of General Practice

Last issue we ended on the note of the physician's obligation to educate his patients to things medical. This is intended to ease the problems of a busy medical practice.

IN TOXEMIA

We have all had the experience of dealing with a young, perhaps unmarried, and particularly unsophisticated, pregnant woman. Typically, she is a school dropout, and, as we pointed out last time, these number fifty per cent of the young. How usual it is to find her pregnancy most difficult to manage! She gains weight excessively by munching candies, attending luaus, and delighting in salt salmon, all the while smiling tolerantly at the fussbudget doctor who keeps scolding her for her weight gain. "He is probably only worrying about my loss of the nice figure I once had, whereas since I feel like a cow I might as well look like one," she is thinking. It is difficult enough to control impending toxemia in the more intelligent gravida because of her lack of understanding of the real consequences—consequences that occur usually in the sanctum of the delivery suites of hospitals.

Most maternity clinics for the medically indigent "staff care" patients rely on the social worker or the public health nurse to follow the delinquent attenders and herd them in. The dispensing of drugs is done by decree, rather than through understanding. In this day of modern drug therapy, there are still cases of toxemia that can be managed only by hospitalization and strict supervision.

These costly procedures, costly from a dollar point of view as well as in morbidity and mortality, are largely obviated when the patient is well informed and cooperative.

IN THE CORONARY

What a satisfaction for both patient and physician it is when the acute coronary case is intelligent and cooperative! I shall never forget the lesson taught me by one of my preceptors here in Honolulu, a cardiologist who, called in consultation, made the diagnosis, advised on therapy, and then initiated it at my request by FIRST talking to the patient like a Dutch Uncle. He gave it to him straight, and straight from the shoulder. He explained the facts of the case first, and then detailed the reasoning back of our plan of therapy. He elicited the intelligent patient's understanding and cooperation, without which recovery might have been compromised. How easy it became later to talk in terms of anticoagulant titers, vasodilating drugs, antidepressive therapy, and, finally, as the patient convalesced and helped himself to get well, graduated exercise, exertional limits, workloads, conditioning, and diets. Proprietary drug names became a part of his vocabulary. He didn't come into the office later for a refill of "some of those heart pills."

IN DIABETES

By contrast, I have never gotten over the case of the elderly diabetic female (inherited by force of a change in circumstance) who, with a five-year history of diabetes and regular attendance at a hospital OPD, knew nothing of daily Testaping, didn't understand that poi is a starch, took her pills with no knowledge of their names or uses or side reactions, and knew nothing about diabetes. But she was very proud of her attendance record. She just couldn't understand, for a while, why blood tests needed no longer to be taken so often.

This patient's intelligence had been completely underestimated. It didn't take long for her to learn to manage her own disability, and on a much more even and "negative" basis. Instead of a total reliance on the physician as a father-crutch, she became proud of her new-found, intelligent self-care.

PILLS AND POTIONS

Gone are the days of the secret remedy and the patent medicine. There is even a great movement on to force us to use generic terminology, to get even further away from the semblance of pet or secret remedies. The pharmacist hardly has to: "M. et Sig." All he needs to do in many instances is to cover the original label with his own store label. So, why cover it? Why not let the patient learn the new language in order that he may become enlightened about not only what might affect his own person intimately, but also in order that he can speak about things medical with his physician in precise terms.

Let us all have prescribed drugs labelled with their proper names!

Next: The intelligent paramedic.

J. I. Frederick Reppun, M.D.
Secretary

HAWAII MEDICAL JOURNAL

In Memoriam – Doctors of Hawaii.....

This is the fifty-sixth installment of In Memoriam—Doctors of Hawaii.

William A. De Tuncq

William A. De Tuncq was born at Appleton, Minnesota, May 15, 1883, the son of Pierre and Elizabeth (Gray) De Tuncq.

DR. DE TUNCQ

His early schooling was received at Appleton, following which he entered the Minnesota Institute of Pharmacy. Later he attended the Hahnemann Medical College from which he was granted his medical degree in 1917.

Coming to Honolulu in June, 1917, he specialized in internal medicine. In 1924 Dr. de Tuncq became Assistant City Physician.

He assisted in the organization of the Medical Corps of the Hawaii National Guard in 1919.

Dr. De Tuncq married Martha Johnson in Honolulu in June, 1924. He was the father of two children by a former marriage: Marlon and Harold.

After leaving the Islands in June, 1926, the doctor went to Pasadena, California, where he engaged in private practice. Following a virulent case of pneumonia, when a desert climate was desirable, Dr. De Tuncq closed his Pasadena office and moved to Delano, California. He lived in Delano until a short time before his death and served as President of the Board of Health and Police Surgeon.

Dr. De Tuncq died in San Marino, California, on November 17, 1944, at the age of 61.

He was a member of Phi Alpha Gamma, medical fraternity, and the Hawaii Medical Association, and was also a Mason, a Shriner, and an Elk.

Jennie Brooks Hildebrand

Jennie Brooks Hildebrand was born in Covington, Kentucky, in 1833. Her uncle was the well-known Episcopal Bishop, Phillips Brooks, who wrote the hymn, "O Little Town of Bethlehem."

Left a young widow with a family dependent on her, Jennie decided to study medicine and entered the Woman's Medical College of Pennsylvania in Philadelphia, graduating in 1870. Dr. Hildebrand began her practice in Kansas City, where she was said to have been the first woman west of Chicago to receive a license to practice medicine.

About 1890 she moved to California. On October 25, 1894, Dr. Hildebrand arrived in Honolulu aboard the S.S. "Monowai." The following month she was granted a license to practice and opened an office on Hotel Street, opposite Union Street. In June, 1895, she went to California where she remained until February of the next year, when it was announced that she had returned to settle permanently in Honolulu. The Board of Health appointed Dr. Hildebrand school physician for all girls in the public schools of Honolulu. This position she held from 1896 to 1897, examining 737 girls the first year and 990 the second.

Again in November, 1899, the doctor went to the mainland, returning to Honolulu for a final period of a year from May, 1901, to May, 1902, following which she returned to San Francisco and practiced until her death on January 3, 1905, at the age of 72.

She was survived by her daughters, Mrs. Mate Cartwright of San Francisco, in whose home she died, and Mrs. W. C. Henrici of Kansas City, and a son, Stanley A. Hildebrand of Sacramento.

Kiyoshi Kawano

Kiyoshi Kawano was born on December 16, 1881, in Sabae, Imadate gun, Fukui Prefecture, Japan. He was the son of Shuzo Kawano.

He received all of his education in Japan. He received his medical degree from Kyushu Imperial University Medical College. For six months after graduation, he did postgraduate work at the same institution.

In 1917 Dr. Kawano arrived in Hawaii and started his practice at 42 Vineyard Street, Honolulu.

He was married to Miss Shizuko Tateishi, and they had five children: Yoshihiko, Betty, Marian, Adeline, and Kikuko.

His special interests were art and gardening, and he spent many gratifying hours learning more about them.

Dr. Kawano died in 1945 in Honolulu.

HAWAII MEDICAL JOURNAL

Perinatal Death Study

A male infant weighing 3 lbs. 3½ oz. was delivered in a hospital during the 29th week of gestation. The mother of this infant was a gravida III, para I, abortus I, in her 20's. She was admitted to the hospital approximately one hour after she noticed profuse vaginal bleeding. After admission, however, the bleeding was only of an oozing character. Laboratory examination of the mother on admission revealed a hematocrit of 40 vol %, hemoglobin of 11.1 gm %, white blood count of 11,600, and a differential of 86 segs, 9 lymphocytes, and 5 monocytes. Urinalysis was within normal limits.

A consultant was immediately called and he performed a sterile vaginal examination under a double setup. Upon examination the cervix was found to be thick and the placenta was palpable at the opening of the cervix. A diagnosis of marginal placenta previa was made and at approximately 5:30 P.M., two hours following admission, a Caesarean section was performed. At approximately 6:30 P.M., one hour following the delivery, the infant was transferred to a premature nursery at another hospital. The infant expired at 31 hours of age and the pathologic diagnoses were hyaline membrane disease and neonatal atelectasis.

Following an unrestricted frank discussion of the case, the Committee classified the death as being a directly obstetrical death and preventable from a practical standpoint. The factor of preventability was professional injudicious haste of operative intervention and the factor of responsibility was the consultant in obstetrics.

Conclusion and Recommendations: The following conclusions and recommendations were made by the Committee. 1. Caesarean section was thought to be not indicated at the time it was performed.

2. In the face of marked prematurity and minimal vaginal bleeding, digital vaginal examination should not have been performed. Digital vaginal examination in the face of suspected placenta previa may precipitate catastrophic hemorrhage and force the attending physician to do a Caesarean section when waiting would have been preferable. It was felt, however, that speculum examination to rule out any source of bleeding in the vagina or exocervix would have been indicated.

3. Since the admission blood work was within normal limits and vital signs were normal, and because the patient was not bleeding excessively, the preferred course of treatment would have been conservative. This patient should have been crossmatched with approximately four units of blood and watched very carefully in the hospital. During this period of observation vaginal or rectal examination should not have been performed unless bleeding became uncontrollable. Only at that time should examination under double setup be performed and Caesarean section considered.

4. With the availability of an excellent blood bank there is no need to precipitate into Caesarean section for placenta previa when the baby is known to be very premature and bleeding is not excessive.

MATERNAL AND PERINATAL
MORTALITY STUDY COMMITTEE

HMA'S FIRST HEALTH FAIR

OCTOBER 9 & 10

HAWAII MEDICAL JOURNAL

New Members

William W. T. Won, M.D.

1374 Nuuanu Avenue
Honolulu, Hawaii 96817
NEUROSURGERY
State University, New York Downstate College of Medicine—1957
Internship—Kings County Hospital—1957-58
Residency—Columbia-Presbyterian Medical Center—1960-64

Felicisima B. Ylarde, M.D.

72 South Kukui Street
Honolulu, Hawaii 96813
and
94-300 Farrington Highway
Waipahu, Hawaii 96797
PEDIATRICS
University of Santo Tomas, Manila, Philippines—1956
Internship—Coney Island Hospital—1957
Residency—Germantown Dispensary & Hospital—1958
Gouverneur Hospital—1958-59
Monmouth Medical Center—1959-61
St. Francis Hospital—1961-63

Edwin Lee Child, M.D.

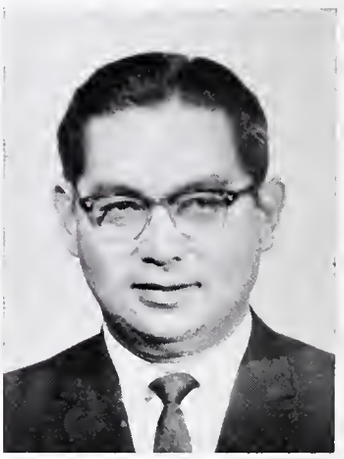
1697 Ala Moana Blvd.
Honolulu, Hawaii 96815
OBSTETRICS-GYNECOLOGY
Yale University School of Medicine—1956
Internship—U.S.P.H.S. Hospital, Staten Is., N.Y.—1956-57
Residency—Grace-New Haven Hospital, New Haven, Conn.—1961-64

Pablito V. Tanedo, M.D.

Ewa Plantation Clinic
Ewa, Hawaii 96706
GENERAL SURGERY
University of Santo Tomas
Manila, Philippines—1952
Internship—St. Joseph Hospital—1953-54
Residency—St. Joseph Hospital—1954-58

Noboru Akagi, M.D.

Leeward Medical Center
98-020 Kamehameha Highway
Aiea, Hawaii 96701
SURGERY
Keio University School of Medicine—1952
Internship—Tokyo National First Hospital—1952-53
Kuakini Hospital—1954-56
Mt. Sinai Hospital, Chicago—1956-57
Residency—Keio University Hospital—1956-57
The Queen's Hospital—1957-60
Leahi Hospital—1960-62
Surgical Staff—1962-65



John H. Takamura, M.D.

1374 Nuuanu Avenue, Room 207
Honolulu, Hawaii 96817
ANESTHESIOLOGY
Keio University Medical School, Tokyo—1950
Internship—Oakwood Hospital, Dearborn, Michigan—1957-58
Residency—Virginia Mason Hospital, Seattle, Wash.—1958-60

County Society News

Joseph E. Haddon, M.D.
Box C, Naalehu, Hawaii 96772
GENERAL PRACTICE
University of Oregon—1933
Internship—King County, Seattle—1933-35
Residency—St. Louis Children's Hospital—1946-47
Seattle—Children's Hospital—1947-48

Charles H. Belcher, M.D.
Box 916, Hilo, Hawaii 96720
PSYCHIATRY
University of Arkansas—1953
Internship—Valley Forge Army Hospital—1953-54
Residency—Boston VA—1954-57

Hawaii

At the April 21 meeting it was voted to levy a $5.00 assessment and to raise the dues to $20 for the next year. The Society discussed the stand its delegates should take at the HMA Annual Meeting. The Society felt that it would like to invite the HMA to hold its annual meeting on Hawaii in 1967. The HMSA contract was discussed. Dr. George Wright, of Cleveland, Ohio, spoke on "Pulmonary Emphysema."

Honolulu

Approximately 166 members were present at the April 6 meeting when the following new members were introduced: Drs. William Hindle, T. Roy Kaku, Roscoe S. Pebley, John H. Takamura, Kazushi Tanaka, and Hiroaki Tottori. Mr. Thorson's new assistant, Mr. Jonathan Won, was introduced to the membership.

Dr. George P. Woollard, Director of the Hawaii Institute of Geophysics, University of Hawaii, spoke on the Moholc project, which he said would solve many problems in geophysics that would have otherwise taken two or three generations to answer.

A progress report on the building program was given by Dr. Tomita. The new corporation, whose sole stockholders at the present time are the BME and the HCMS, has been named Medical Plaza, Inc. Future sales of stock will be offered to the members. The architectural firm Adrian Wilson Associates has been employed. The Society will own the land and lease it to the Medical Plaza for developing. Dr. Tomita's committee was given a vote of confidence to proceed with the development of the building project.

The Chair advised that a letter had been received from The Queen's Hospital stating that although their Board of Directors desires an ideal medical center complex, unless there is $40,000,000 available to underwrite such a project, they must of necessity continue with their plans for expansion and development at the present location.

* * *

New members Pablito V. Tanedo, William W. T. Won, and Felicisima Bunao-Ylarde were presented to the 135 members who attended the May 4 meeting. The speaker for the evening was Mr. Baron Goto whose report on Asia was accompanied by numerous interesting slides.

Dr. Mor J. McCarthy announced a statewide operational disaster alert for May 21. The bylaw amendments presented by Dr. William Dang were adopted. Dr. Theodore Tomita gave a progress report on the Society's building program. Dr. John Felix was appointed to the Board of Censors to fill the vacancy created by Dr. O. D. Pinkerton's resignation. Dr. Pinkerton reported on the House of Delegates meeting. Dr. Chew Mung Lum reported on the negotiations with the HMSA.

A notice was passed out to each doctor, and mailed to those not present, which included a form authorizing the Society to act as the member's agent if the Society should terminate the HMSA master contract. ■

Notes and News

Professional Moves

With Spring, we again find our ever restless Homo Sapiens Medicus on the move. Surgeon **Noboru Akagi** left Leahi Hospital to open his office at the Leeward Medical Center. Urologist **Lee Simmons** joined the Straub Clinic and our Four "Mousquetaires" **Walt Chang, Vic Mori, Francis Oda,** and **Ben Tom** relocated to 1040 So. King. Surgeon **Frank Akamine** is back in town at the Medical Arts Building after a taste of California smog. Radiologist **D. R. Grininger** joined the Straub Clinic and Pediatrician **Emiko Sakurai** took over **Allen Young**'s office at 1451 So. King while Allen went back for allergy training.

We gleaned from the newspapers that **Walter Presnell,** unit chief psychiatrist at the State Hospital, resigned to accept a teaching position at Harvard University. He cited as reasons the low pay and the requirement that a specialist pass a test in general practice. (Tut, tut . . . we all have our little fears, don't we . . . ?)

Elected, Appointed, and Honored

We congratulate Past President **Bill Bergin** of Hilo, who was awarded the A. H. Robins Outstanding Physician Award at the annual Hawaii Medical Assn. meeting. Eloquent **Sam Allison,** outgoing President, cited Bill for his service to Hawaii Redevelopment Agency and his work in planning the use of the tidal wave–damaged bayfront area of Hilo. Lest we forget, we should also pay homage to our past recipients of this award, **Pete Okumoto, Varian Sloan, Joe Nishimoto,** and **William Holmes.**

On the political front, **Shizuto Mizuire** was appointed to the Hilo Hospital Managing Committee and **Varian Sloan** and **George Mills** were named to the City & County Committee on Aging. **George Mills,** President of the Association of Hawaiian Civic Clubs, was honored at a Luau at the Naniloa Hotel in Hawaii. Likeable George, a former Big Islander who spent his childhood days in Hilo, has not lost his neighbor-island charm.

Sportsmen

Tennis: The first HMA Tennis Tournament reconvened 21 strong on Mother's Day after being washed out on Convention Sunday by an inopportune thunderstorm. An uncompromising sun baking the Iolani courts did not help nullify our strong guilt complexes for not fixing our mothers' breakfasts. In A Flight (Hippocrates), the touted team of **Yutaka Yoshida** and **Alex Roth** swept through the opponent teams like a hurricane until they hit the doldrums with the slower pacing team of **Hunky Chun** and **Tom Oshiro,** the unseeded underdogs. Third place was won by **Charley Ching** and big **Ben Tom** (that hulking fellow who moves deliberately, but is everywhere). In B Flight (Galens), two non-HMA members, **R. R. Patterson** and **Ed Eyring,** were the stalwarts who not only cleaned out their flight, but also beat the A Flight winners in a playoff. The HMA Galens Perpetual trophy, however, went to second place winners **Mort Berk, Cal Sia,** and **Ghim Yeoh** (Cal, just out of retirement, developed ruptured blisters and Ghim, whose partner had an emergency, took over at half time). Third place went to **Howard Liljestrand** and **Larry Wong** (who also came out of retirement caused by a possible disc syndrome). An exhibition match followed with **Walt**

KOON SUN FONG
1904 - 1965

Koon Sun Fong, the son of the late Tai Kum Fong, was born on Kauai July 5, 1904.

After graduating from the St. Louis University School of Medicine in 1931, he interned at St. Mary's Hospital in Cincinnati, Ohio. His interest in obstetrics and gynecology and his desire to further his educational background led to postgraduate studies at the University of Vienna, Austria, and then to the University of Pennsylvania's Graduate School of Medicine, where he received his Master of Medical Science degree in gynecology and obstetrics in 1935. Studying at the University of Budapest, Hungary, and at the Women's Hospital in Berlin, Germany, also broadened his educational experience.

Conscious of and responsive to the needs of others, he volunteered to practice his specialty under the auspices of the United Nations Relief and Rehabilitation Administration (UNRRA) in Canton, China, until the Sino-Japanese War broke out in South China. He returned to the United States and served as a resident in obstetrics and gynecology at Harlem Hospital, New York City, from 1943 to 1945. After World War II, he again went back to China and established several hospitals in conjunction with the UNRRA program.

In 1947 he returned to Honolulu and practiced with the Chang Clinic until the early 1950's. He then opened his own office at 1349 Nuuanu Avenue, where he died suddenly on May 19, 1965 of an acute myocardial infarction.

Surviving are his wife, who practices obstetrics and gynecology under the maiden name of Dr. Lucy Ma; a son, Frederick, who is a freshman at Northwestern University in Evanston, Illinois; and a daughter, Frances, who is a sophomore at Pacific University in Forest Grove, Oregon.

Dr. Fong will be remembered for his youthful exuberance, cheerful disposition, humility, and total dedication to his patients.

HENRY H. C. FONG, M.D.

Jensen (Hawaii Singles Champ) and **James Bennett** sweeping the formidable team of **Yutaka Yoshida** and **Leabert Fernandez.**

We are carefully watching the progress of several physicians who are now taking formal tennis lessons in preparation for next year's tournament. The names revealed thus far are: **Toshihiko Kawasugi, Hiro Tottori, Cal Sia, San Ki Wong, Reynold Shirai, Chim Yeoh, George Kimata,** and **Betty Soo.**

Golf: Golfing news was notably absent so we wish to define the Theory of Noncerebration by golfdom's automaton **Yasuyuki Fukushima.** It is essentially the art of forgetting the minutiae and hitting the ball with a blank mind. We have found that it works, especially on crucial putts.

Golf stylist **Nobu Nakasone,** disillusioned when Arnold Palmer botched the US Open, has discarded the Palmer style and is back to propounding Ben Hogan's fundamentals. We can readily inveigle Nobu into giving us a free half hour of golf lessons simply by mentioning golf. Try it sometime. . . .

Fishermen: **Roy Kaye, Jimmy Young,** and **Jerry Tucker** caught three good sized mahimahi off Waianae in May. Roy feels that Jerry's chumming did the trick and Jerry blames the Dramamine tabs for his involuntary hyperemesis.

Dick Sakimoto's king-sized sampan has been launched and will soon be seaworthy.

Hikers: **Cora** and **Francis Au** and family joined the local hiking club on a Manoa Trail hike. Cora is currently thinking of recommending regular hiking to her pre and postpartum mothers to develop abdominal and perineal muscle tone.

Members Speak Up

We note with satisfaction that **Jeanette Chang,** our practicing pediatrician and mother of four girls, lists the advantages of breast feeding as "a ready supply of milk, convenience, sterility, and naturalness." She herself, however, could only nurse the firstborn, because with the others she had to return to work in less than a week.

Sam Allison, in a thought-provoking outgoing address, felt that "Pedicare" was next, now that "Medicare" is almost in. He endorsed the medical center complex, but felt that the University should not create a full-blown medical school unless it can produce one of excellence.

Claude Caver debated Eldercare vs. Medicare with ex-Congressman Tom Gill at a Honolulu Kiwanis luncheon. He brought out the fact that contractural arrangements under the "Medicare" bill are so restrictive that no hospitals in Hawaii can qualify. Bob Paulos (of the Press papers) noted that "It was rather painful to notice, too, that the former congressman has lost none of his cynical and sarcastic platform manner."

John Felix, an authority on the medical aspects of the crucifixion, spoke to a meeting of the Christian Family Movement of Ewa Beach on the death of Christ based on scientific observations of the "shroud of Turin." Sounds erudite . . .

Masterful speaker and Queen's Chief of Staff **Masato Hasegawa** suggested at a luncheon meeting of the Honolulu Junior Chamber that a proposed East-West Center medical research hospital be built near Queen's Hospital as part of a hospital complex. He is convinced that the University will get a medical school and have a basic research program. (**Windsor Cutting,** who has been working on this project for a few years, should be happy to learn this bit of encouragement.)

Tadao Hata and **Verne Waite** were in Seattle in March for the meeting of the American College of Surgeons. Tad read a paper on treatment of congenital cysts of the neck and Verne participated in a panel discussion of anal crypt infections. Tad has a ready supply of reprints for those interested.

Maurice Silver gave a paper on "Surgical Treatment of Delayed Ulnar Nerve Palsy" at the International College of Surgeons meeting at Las Vegas in April.

L. Q. Pang read a paper on "Carcinoma of the Nasopharynx" at the Minneapolis meeting of the Minnesota Academy of Ophthalmology and Otolaryngology in June and three days later addressed the Fellows of Mayo Clinic in an after dinner speech entitled "Racial Integration in Hawaii" which prompts us to comment that we must be versatile on any subject, medical or otherwise.

The following list of recent papers by local men was brought to our attention: "The Kahuna, Hawaiian Sorcerer. Its Dermatologic Implications," *Archives of Dermatology* (Nov.) 1964, Harold M. Johnson. "Epidemiology of Cancer in Hawaii," *Medical Arts and Sciences* (2nd Qtr.) 1964, Walter B. Quisenberry. "A New Nasopharyngeal Biopsy Forceps," *Archives of Otolaryngology* (Nov.) 1964, L. Q. Pang. "Granulomas of the Ileocecal Region," *Diseases of the Colon and Rectum* (Sep.-Oct.) 1964, J. E. Strode. "Right Bundle Branch Block by Diaphragmatic Inspiration Independent of Heart Rate," *Archives of Internal Medicine* (Oct.) 1964, T. K. Lin. "Diabetic Acidosis and Acute Renal Insufficiency," *Diabetes* (Jan.) 1965, Dudley Seto, *et al.* "Thyrotoxic Periodic Paralysis in Hawaii: Its Predilection for the Japanese Race," *Neurology* (March) 1965, Michael Okihiro and Ralph Beddow.

Visiting Physicians

We listened hopefully to **Murray Copeland,** President of the American Cancer Society, who vaguely resembles another well-known Texan President (LBJ), drawl out the information that Methotrexate was the only real break-through in cancer chemotherapy. **Elmer Rigby,** chief thoracic surgeon at St. Vincent's Hospital, Los Angeles, believes that "every smoker is potentially a lung cancer case." He recommends biannual chest x-rays for males who smoke and said, "It is intelligent to recognize the wisdom of not smoking at all." Food for thought, or better still, smoke gets in our eyes . . .

We enjoyed hearing **Moses Grossman,** Pediatrics Professor at the University of California, warn physicians with his delightful thick accent that meningitis has increased 35 per cent in the first three months of 1965. **George Wright,** head of Medical Research at St. Luke's Hospital, Cleveland, spoke at the State Tuberculosis and Health Association meeting and underscored two needs: ever increasing vigilance for active TB cases and a heightened search for an effective vaccine. Don't forget to mail in your Christmas Seal contributions . . .

Entrepreneurs

In the recent State auctions of Diamond Head view lots, we note that blood is thick and commend **Larry Wong** for bidding for Lot 26 though his first choice, Lot 1, went to his brother. **Walter Char** and **Cal Sia** were also successful bidders.

With the present furor over conflicts of interest, we wonder about the judiciousness of **Abraham Ng Kamsat's** position as a member of the Associated Plan board which hopes to market a low cost pre-need funeral plan. The corporation plans to build a mortuary and already has a casket factory.

We toured **Francis Kaneshiro's** spanking new $750,000 medical building, the King McKinley Building, and came back impressed. **Richard Sakimoto's** new Medical Arts Building, a block away, is a high rise, and is nearing completion. The $1.1 million Kailua Professional Center will include **L. T. Chun, Mor James McCarthy, Winfred Chang, Charles Kimura,** and **Herman Kramer.**

Health Dept.

We congratulate **Norman R. Sloan,** who retired in January as the State Health Department's executive officer in charge of the Special Health Services division.

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HAWAII MEDICAL JOURNAL

Book Reviews

★ An Introduction to Electrocardiography

By Thomas M. Blake, M.D., 143 pp., $4.95, Appleton-Century-Crofts, 1964.

THIS HANDBOOK is worthwhile reading for any physician interested in electrocardiograms, be he the interpreter, or the recipient of an interpretation, of an EKG. It is an excellent introduction to the clinical aspects of electrocardiography for the beginner and reemphasizes to the physician more familiar with tracings the limitations of the procedure and the danger of over-interpretation.

CHEW MUNG LUM, M.D.

Clinical Toxicology, 4th Ed.

By Clinton H. Thienes, M.D., Ph.D., F.A.C.P., and Thomas J. Haley, Ph.D., 661 pp., $9.50, Lea & Febiger, 1964.

IN THIS TEXT, the authors provide a rather broad coverage of the subject from the pharmacological standpoint, as well as from the clinical and the chemical standpoints. This is a rather big order for any textbook to accomplish (with only 661 pages). The material is well organized and presented in the manner of the usual classroom textbook. It is of value to the clinician or to the toxicologist only as a guide. It is not recommended for general reading.

PAUL Y. TAMURA, M.D.

Gynecology, Principles and Practice

By Robert W. Kistner, M.D., 654 pp., $16.00, Year Book Medical Publishers, Inc., 1964

THIS IS PRIMARILY a medical gynecologic textbook. Only a limited space is devoted to a few illustrations of gynecologic surgery. Most interesting and timely are the chapters devoted to steroid therapy and cytogenetics, dealing with chromosomal abnormalities. In addition there are chapters on endometriosis, infertility, habitual abortion, and specific endocrine disorders. The book is well-organized and easy to read, and would be of great value for medical students and specialists who seek an adequate review. It is also recommended for a busy practitioner who wishes to bring his knowledge of medical gynecology up to date.

THOMAS OSHIRO, M.D.

The Maltreated Child

By Vincent J. Fontana, M.D., F.A.A.P., 67 pp., $5.00, Charles C. Thomas, 1964.

THE "BATTERED CHILD" SYNDROME is not a rare condition. At Cook County Hospital in Chicago, for instance, the daily admission rate of physically abused children is now up to approximately ten. This condition may be one of the most common causes of death in children.

The purpose of this little book is to remind us of the types of abuse and neglect inflicted on children, and the diagnostic criteria which can confirm the physician's suspicions. The medical, social, and legal responsibilities of physicians are discussed as ways and means of reducing the prevalence of this serious problem.

WILLIAM A. MYERS, M.D.

★ means highly recommended.

★ Common Bacterial Infections

By Edwin J. Pulaski, Col., MC, U.S. Army, 301 pp., $8.50, W. B. Saunders Company, 1964.

THIS EXCELLENT text which succinctly presents much of our expanding knowledge of the pathophysiology and clinical management of most common bacterial infections.

Beginning with a short review of the dynamics of infection, it proceeds to cover most of the antimicrobial drugs currently used, their modes of action, methods of use, fate in the body, and possibilities for harm. Particularly noteworthy is the section on the uses, actions, and limitations of the newer biosynthetic penicillins and the cephalosporins. Lincomycin is the only notable omission, perhaps understandably, inasmuch as it has just been released for commercial distribution.

The clinical recognition, diagnostic aids, treatment, and prognosis of pyogenic infections is presented on a regional anatomic basis, providing a rapidly accessible source of information to the busy practitioner. Other antimicrobial agents unique to regional usage, but not mentioned in the earlier chapter on specific drugs, are considered in these sections. For example, the nitrofurans, methenamine mandalate, and nalidixic acid are reserved for discussion in the chapter on infections of the urinary tract. While tuberculosis is mentioned in the diagnostic routines in appropriate areas, antituberculous drug therapy as such is notably absent. One is impressed by the otherwise complete antimicrobial consideration of the common, acute bacterial infections.

With the continual addition of specific antimicrobial agents to our therapeutic armamentarium, this up-to-date, well-presented and well-arranged text should be a useful, practical, and valued aid to the busy physician's daily practice.

HOMER M. IZUMI, M.D.

An Outline of Pulmonary Function and Pulmonary Emphysema

By Eugene Rosenman, M.D., 137 pp., $6.50, Charles C. Thomas, 1964.

THIS CONDENSED and concise outline of pulmonary function and pulmonary emphysema deals mainly with clinical applications of pulmonary function tests, and presumes understanding of the basic mechanics and physiology involved. For this reason, it would serve admirably as a quick reference source for clinicians familiar with this field. In fact, for extremely busy physicians, the last chapter is a condensed outline of the previous presentation, which itself is in an outline form. A rather complete presentation of pulmonary emphysema is included covering all facets of this condition.

RICHARD T. MAMIYA, M.D.

★Human Reproduction and Sexual Behavior

Edited by Charles W. Lloyd, M.D., 564 pp., $12.50, Lea & Febiger, 1964.

THERE ARE ONLY a few texts that one can recommend in the field of human reproduction and sexual behavior for a practicing physician; however, Dr. Lloyd's text appears to be one of the most authoritative and comprehensive

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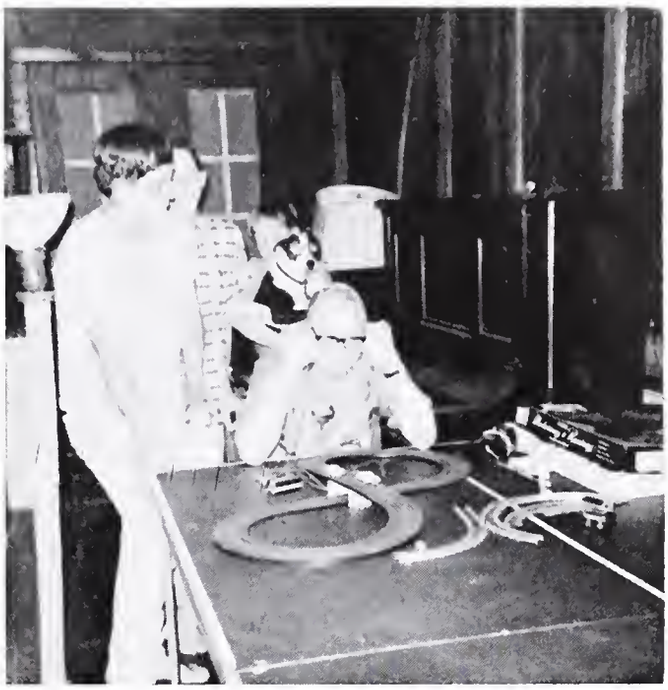
Our New President



Ogden Delmar Pinkerton ("O.D." to distinguish him from his distinguished older brother, Forrest Joy "Pink" Pinkerton), our new President, is a hardworking, universally well-liked ophthalmologist who has been involved in the knotty problem of medical care plans and fees more than most members of our Association. He was Chairman of our first Federal Medical Services Commitee, back in the dead and unlamented days of 1957, when we first began to be whipsawed by Uncle Sam, and has been a mainstay of that committee and, since 1962, the farther-ranging Medical Care Plans and Fees Committee.

Great-grandson of an Irish immigrant from County Down, O.D. is also a third cousin of the founder of the famous Pinkerton Detective Agency. O.D.'s father Cassius had a family of nine; in addition to F.J. (next to oldest) there are two brothers living, Cordell C. and Des Moine, and two sisters, Leoti and Delta. Deceased are two sisters, Florene and Ione, and a brother, Dewey. O.D. is the youngest.

O.D. received his M.D. from the University of Indiana in 1937 and came to intern at The Queen's Hospital, after which he worked for Maui Pine and HC&S for nearly a year. He then returned to the mainland for postgraduate work in ophthalmology at the University of Pennsylvania and Wills Eye Clinic and Children's Hospital. He was certified by the American Board of Ophthalmology after further graduate study in 1948.

He met Susanne Willis Purdy in Honolulu and they were married on Christmas Day, 1941. Their oldest daughter Constance, now married and living in California, has one son, their first and only grandchild. Three sons, Ogden, Jr., Mark, and Matthew, live at home on Ferdinand Avenue in Manoa, "just outside the rain belt."

O.D. has a remarkable distinction: he was the first enlisted man in the United States to be commissioned from the ranks under the Selective Service Act of 1939: drafted as an infantry private, he was commissioned a First Lieutenant on February 10, 1941, Captain a year later, and Major in August, 1945. He was honorably discharged with commendation on October 21, 1949, having received the Victory Medal, the Asiatic Pacific Theatre Service Medal, and the American Defense Service Medal with clasp.

O.D.'s professional connections include a fellowship in the American College of Surgeons, the Hawaii Eye, Ear, Nose, and Throat Society (President, 1951), the American Academy of Ophthalmology and Otolaryngology, Pacific Coast Otoophthalmological Society, Pan-Pacific Surgical Association (Trustee and Chairman of Eye Section), Bureau of Sight Conservation since 1940, and Board of Trustees of the National Medical Foundation for Eye Care. He is Chairman of the Medical Advisory Committee to the Lions Eye Foundation and also the Glaucoma Detection Clinics of Hawaii. He is Instructor in Ophthalmology at The Queen's Hospital and on the consulting staff of nine hospitals, including Tripler General Hospital.

His civic activity has led him to become a Director and Vice-president of the Honolulu Better Business Bureau and a member of the Advisory Committee for the Visually Handicapped.

Hobbies? We didn't ask him, but we asked around. The answer was "work." He's been too busy dividing his time between the Medical Association (he was County Society President in 1961-62, and that represented a decade of activity in the interest of his fellow-physicians), his practice, and his family, to have developed what Wilder Penfield calls the Second Career. Probably a year from now he'll be able to find time for it. It will be a year in which we will have had the benefit of prudent and devoted leadership. We welcome O. D. Pinkerton as our new President!

109TH ANNUAL MEETING HAWAII MEDICAL ASSOCIATION

HONOLULU, HAWAII
April 29 through May 2

The annual meeting for the one hundred and ninth year of corporate existence of the Hawaii Medical Association was held in Honolulu in 1964. The following program was presented:

SCIENTIFIC PROGRAM

Premeeting Events

Fireside Chats—sponsored by the Hawaii Thoracic Society and the American College of Chest Physicians

Ponel Discussions

Chemotheropeutics—1965

Moderator: Dr. Fred I. Gilbert, Jr.
Panelists: Drs. Murray M. Copeland, Windsor C. Cutting, Sidney Finegold, Moses Grossman

Popers

Mommogrophy, Its Reproducibility ond Usefulness in the Diognosis of Breost Concer

Dr. Murray M. Copeland

Antifertility Agents

Dr. Windsor C. Cutting

Current Legislotive Trends ond Their Relotionship to Reseorch, Medicine, ond Drugs

Mr. George Squibb

The Penicillins—1965

Dr. Moses Grossman

Another Theropeutic Approoch for Extending Lung Concer Survivol

Dr. Elmer C. Rigby

Infections Due to Nonsporeforming Anoerobic Bocterio

Dr. Sidney Finegold

Infections in o Generol Hospitol

Dr. Moses Grossman

Presidentiol Address

Dr. Samuel D. Allison

Current Stotus of AMA Activities

Dr. F. J. L. Blasingame

Evoluotion of Chemotheropy in the Treotment of Sorcomo, Corcinomo, ond Allied Diseoses Involving Bone

Dr. Murray M. Copeland

New Antibocteriol Agents

Dr. Sidney Finegold

SOCIAL PROGRAM

Luau, Gardie Perkins
Picnic for physicians, at home of Dr. Harry L. Arnold, Jr.

MEETINGS

House of Delegates, Mabel Smyth Bldg.
Fireside Chats, Mabel Smyth Bldg.
Scientific Program, Princess Kaiulani Hotel
Woman's Auxiliary, Kaimana Hotel

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Don E. Poulson
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Wolfgang G. P. Pfaeltzer (Maui)

Mabel Smyth

H. Q. Pang.....Dec. 31, 1965
B. A. Richardson.....Dec. 31, 1966
A. S. Hartwell (alt.).....Dec. 31, 1965

SPECIAL APPOINTMENTS

The National Foundation's Health Scholarship Committee—C. M. Burgess
Inter-Professional Coordinating—Leabert R. Fernandez, Theodore T. Tomita
Oahu Health Council—E. F. Cushnie, Unoji Goto
Advisory Committee to the Division of Mental Health—K. Y. Lum
Advisory Committee to the University of Hawaii—Bernard W. D. Fong
Medical Advisory Committee to the Department of Social Services—Clifford T. Druecker, George H. Mills, George H. Nip, Keith F. O. Kuhlman, William N. Bergin, J. Alfred Burden, Patrick M. Cockett
State Planning Committee on Mental Retardation—Duke Cho Choy
State Employees' Retirement Plan Review Board—Grover H. Batten, Thomas S. Bennett, C. M. Lum, Don Poulson
Inter-Society Science Education Council—Robert A. Nordyke
State T. B. Association Legislative Committee—Dudley S. J. Seto
Hawaii Heart Program—Coolidge S. Wakai
Universtiy of Hawaii Environmental Poison Study Committee—Richard K. B. Ho
Department of Health Radiation Advisory Committee—Robert A. Nordyke
2d National Conference on Cardiovascular Diseases—Coolidge S. Wakai

PROCEEDINGS OF THE HOUSE OF DELEGATES

109th Annual Meeting of the Hawaii Medical Association

The first session of the House of Delegates of the Hawaii Medical Association was called to order by the President, Samuel D. Allison, at 1:00 P.M., April 29, 1965, in the Mabel Smyth Auditorium, Honolulu.

Present were (officers) Samuel D. Allison, O. D. Pinkerton, R. T. West, Randal A. Nishijima, Herbert Y. H. Chinn; (county presidents) Raymond T. Eklund, Robert T. Wong, Marion L. Hanlon; (councilors) Bernard W. D. Fong, Chew Mung Lum, Robert M. Miyamoto, Theodore T. Tomita, Burt O. Wade; (Hawaii delegates) Walter S. L. Loo, James A. Mitchel, Nicholas Steuermann; (Honolulu) Morton E. Berk, Charles S. Brown, Walter Y. M. Chang, Kenneth Chinn, Unoji Goto, A. S. Hartwell, Robert T. S. Jim, Keith F. O. Kuhlman, Carl B. Mason, Robert Mookini, Jr., Richard S. Omura, J. I. Frederick Shepard, R. Varian Sloan, Coolidge S. Wakai, Carolina D. Wong, Warren L. H. Wong, Bernard J. B. Yim; (Kauai delegate) Peter Kim (for Yonemichi Miyashiro); (Maui delegates) Billie Fern Strother, E. A. Tompkins.

Honolulu President Robert T. Wong asked that the following alternate delegates be seated to complete Honolulu County's delegation: Robert P. C. Ho for Andrew L. Morgan, Robert C. Bell for L. Q. Pang, Carl H. Lum and Edward W. Boone for the two existing vacancies.

The minutes of the April 30-May 1, 1964, and the January 16, 1965, meetings were approved as published.

The reports of the Secretary and Treasurer, as well as those of the Hawaii, Honolulu, and Kauai societies which were received prior to the meeting, were referred to the Reference Committee on Insurance and Medical Services.

The reports of the standing and special committees were referred to the reference committees as previously announced. Resolutions were assigned to the various committees. It was noted that there was no Resolution No. 2.

The President made the following changes in the previously announced reference committee make-up: Robert P. C. Ho for Andrew L. Morgan on Insurance and Medical Services. He subsequently approved the following additions: Peter Kim to the Public Health Reference Committee, Robert C. Bell to the Insurance and Medical Service Reference Committee.

The President gave his report orally and thanked the many members who had devoted so much time to the work of the committees. About 250 members had participated, some had spent many hours working for the Association and deserved a vote of commendation. He advised of the innovations this year which included his attempt to share the responsibilities, perhaps more than in the past. He felt this had provided two things: (1) a little more democracy in the organization, and (2) more members were given opportunities to demonstrate their talents. He spoke of the manner in which the appointments were made—with the assistance of the Secretary and Treasurer—and the selection or addition of vice chairmen by the President-elect. Dr. Allison spoke of the special efforts to keep the county presidents informed, and of the officers' meetings which were held approximately bi-weekly. Councilors were asked to sit in on several committees to help them with their problems and to report back to the Council.

The President suggested that the Parliamentary Reference Committee might consider trying to find solutions for the following: (1) An experienced Speaker for the House. (2) An improvement in communications, particularly through the work Dr. Carl Lum is doing in trying to define the functions of the committees and the relationship between the Association and its component societies. (3) How to avoid the statements of physicians from being interpreted as the official stand of the Association. (4) Some form of an extension telephone between the President's office and the Executive offices. (5) A larger delegation of HMA physicians to attend AMA meetings and a way to get more physicians to visit the AMA headquarters, particularly the President-elect. (6) Activities during Annual Meeting that would encompass more members. (7) Study of staff organization with greater distribution of responsibilities, and perhaps cutting down on the work load of some members.

Dr. Richard D. Moore was asked to emphasize the importance of following the modus operandi in conducting and reporting reference committee hearings. The President asked if the House would prefer to open the second session at 1:00 P.M. the following day, but this suggestion was not adopted. He introduced the past presidents who were in attendance: Harry L. Arnold, Jr., William N. Bergin, J. Alfred Burden, Toru Nishigaya, F. J. Pinkerton, and Rodney T. West.

The House recessed at 1:45 P.M.

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The second session of the House of Delegates was called to order on Friday, April 30, 1965, at 2:00 P.M. The Secretary called the roll.

The President referred to the Bylaws governing the seating of delegates and their qualifications: i.e., the delegates must be members in good standing in their component societies for at least three years, the seating of delegates is the second order of business. He noted that in the past if the delegates were not in the room at the time of the roll call and the county presidents advised they would be present within a reasonable time, an alternate was not appointed at that time. When the House opened yesterday one delegate was not present, his county president advised he would arrive shortly. However, he did not arrive to take part in the deliberation of the reference committee to which he was assigned.

The President noted that he had been advised that one of the members who was seated the previous day had not been an active county society member for the prescribed length of time. He asked the House Parliamentarian, Dr. Richard E. Ando, to comment. Dr. Ando said he wanted the delegates to understand that the Parliamentarian could only express an opinion; he could not rule. Only the presiding officer could rule. Dr. Ando felt that if a delegate were seated who did not comply with the provisions of the HMA Bylaws, the actions of the House would be invalid, and could be so declared by a higher body. The President ruled that the member who was not eligible was declared no longer a delegate at this meeting. Dr. Strother said she thought this referred to her and asked why this did not come up the previous day when the alternate was present. It was noted that this was not called to the attention of the Chair at that time.

Dr. Ando advised that with reference to the seating of delegates, they did not have to be physically present to be seated. Dr. Hanlon asked if the neighbor islands could seat their delegates on the second day of the meeting. The President said that would be his interpretation today; however, there was not complete unanimity on this matter among the parliamentarians and the Bylaws Committee.

The Chair ruled that Dr. Ralph Beddow, who was not present the previous day, was considered a legally constituted delegate.

PUBLIC HEALTH REFERENCE COMMITTEE

Mr. President and Members of the
House of Delegates:

Your Reference Committee met yesterday until about 9:30 P.M. and submits the following report:

AUTOMOTIVE SAFETY

This committee was formed in the early part of 1964 and had its first meeting on March 13, 1964, at which time organization took place. Since that date we have

held regular meetings every two months. Much of our work has been in the sorting, screening, and reviewing of legislative business pertaining to the health aspect of automotive safety. This has been in turn sent to the Legislative Committee with appropriate recommendations.

We have also had representation on the recently formed Mayor's Traffic Safety Committee and have met with them on several occasions. The chairman represents the Association on the legislative subcommittee of the above-named Mayor's Traffic Safety Committee. Members of this Committee met at City Hall with representatives from the City and County relative to the banning of sirens on ambulances. Mr. H. Tom Thorson was appointed as the Association's liaison with a special committee appointed by the Mayor to study this problem.

At the present time this committee is in the throes of revising and making more practical the present physical examination form for drivers who come under the Public Utilities Commission jurisdiction. We are working directly with the PUC and in the very near future will have a more workable and practical standard physical examination form for all drivers. This particular form comes under the recently passed Public Carrier's Act.

I am grateful to all of my committee members for they have been particularly active, helpful, and cooperative in forming and guiding the way of this relatively new committee.

JAMES G. MARNIE, M.D.

Automotive Safety Committee

Your Reference Committee recommends acceptance of the report and further recommends that this committee continue to study and promote legislation and other measures that will promote automotive safety and an all-out attack on the waste of human life and resources on the highways of our state.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

COMMUNICABLE DISEASES & IMMUNIZATION

The committee met frequently during the period 1964-1965. Several important public health problems were thoroughly discussed and final opinions obtained.

The polio problem and recommendations were carried over from the following year. Dr. Leo Bernstein believes that Salk vaccine is the drug of choice in preference to Sabin oral vaccine. A controversy persisted between certain members of the committee. This resulted in forming a Polio Committee to investigate the safety and effectiveness of these vaccines. The committee concluded: (1) We are still in potential trouble from Type III polio. (2) Sabin (oral) vaccine should be pushed to completion for routine immunization of infants; a booster at time of pre-school examination should be given. (3) Older children and adults who had Salk vaccine or Sabin I and II during Operation Swallow should receive Sabin trivalent vaccine as the vaccine of choice.

Measles immunization have made strides in recent years. These vaccines are made available in both killed and live-attenuated forms, the latter being the vaccine of choice. Killed vaccine is temporary. Live-attenuated gives permanent immunization. The Department of Health requested a budget adequate to give 11,000 doses for child health conference. The live-attenuated vaccine be given to infants aged nine months and older. This committee supports the Department of Health's venture to supply measles (live) vaccine to its Well Baby Clinics 1965.

The efficacy of typhoid immunization for the future was challenged. Dr. Stephenson, Vice Chairman of the committee, believes it is time that this mandatory procedure be abolished. The systemic reactions, evidence of the medical literature of its ineffectiveness, and improved sanitation suggest its uselessness. Dr. Hirschy, Department of Health, and others, recommend a broader discussion of this important problem. The committee voted to defer action until further research material was available.

The use of gamma globulin furnished by the Department of Health was discussed. It was suggested that indiscriminate injections of gamma globulin be eliminated. Recent data disclose that gamma globulin does not reduce the risk or lessen complications in pregnant women exposed to rubella during the first trimester of pregnancy.

For the future it is recommended that this committee:

1. Continue to support polio immunization with special emphasis in the use of Sabin III oral vaccine.
2. Investigate the efficacy of typhoid and smallpox immunization.
3. Support the Department of Health in obtaining Federal grant funds to cover DPT and polio immunization, and measles vaccine (live) for indigent and medical indigent cases.

HAROLD M. JOHNSON, M.D.

Communicable Disease and Immunization and Venereal Disease Committee

Your Reference Committee recommends the following changes: Paragraph 1, the statement relative to Dr. Bernstein's statement on the use of polio vaccine should be corrected, inasmuch as it is not a true statement of his belief. We believe it is a misquotation. An expression of his stand on the use of polio vaccine is contained in the July 7, 1964, Communicable Disease Report of the State Department of Health: "I encourage the use of poliomyelitis vaccines and recommend that they be used by physicians in their office practice. Until adequate evidence of efficacy and suitable trial time is allowed, no general statement of choice will be made between the inactivated (IVP-Salk) and oral (OVP-Sabin) vaccines. Both have helped towards eradication of this crippling disease."

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Paragraph 3, the efficacy of typhoid immunization for the future was challenged by Dr. Stephenson, Vice Chairman of the committee, who believes it is time that the mandatory procedure be abolished. Since the matter of the efficacy of typhoid immunization is still under study, it is felt that the idea of abolishing typhoid immunization in our State would be premature.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Recommendation 1. The Reference Committee recommends that the recommendation to continue to support immunization with special emphasis on the use of Sabin III oral vaccine be changed to read: "continue to support polio immunization with special emphasis on the use of oral vaccine."

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Recommendation 2. Your Reference Committee heard testimony to the effect that venereal disease is a problem that requires continued vigilance and would like to suggest that the Communicable Disease and Immunization and Venereal Disease Committee study the situations contributing to the resurgence of venereal disease and make recommendations to the membership concerning tighter control.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

HEART

This committee inquired about establishing minimum standards for cardiovascular disease clinics in Hawaii. A handbook published by the American Heart Association entitled "Recommended Standards for Cardiovascular Clinics" was used as the basis for the criteria for these clinics. These standards are used in establishing the method of recording data, diagnostic equipment, personnel qualification, etc. The Heart Committee reviewed and subscribed to the idea mentioned but felt that it is not feasible to set up such standards in our clinic at this time, but it is something that can be aimed for in the future.

The committee discussed establishing a registry for all rheumatic fever cases in Hawaii. Dr. Katherine J. Edgar of the State Health Department reviewed this matter and stated that there are about 290 cases registered with the Department of Health. These are patients followed up at the age of 21 in the Cardiac Clinics in Oahu and on neighbor islands. In order to have a complete registry of all private cases, rheumatic fever would have to be a reportable disease. Until the objectives of a registry can be established and need can be proved, it would be difficult to convince anyone to establish a registry. This matter was referred to the Hawaii Heart Association. The chairman of the Rheumatic Fever Committee of the Heart Association reported that they were not ready to consider the establishment of a rheumatic fever registry. However, they do have a drug program whereby patients with rheumatic fever are provided a low cost prophylactic penicillin. Presently participating are 375 patients who have had rheumatic fever. They are under the direction of 100 physicians.

The committee discussed the creation of a research file center whereby all cardiovascular research conducted in this community may be kept on file available to all institutions. The purpose is to avoid duplication. This matter was referred to the Medical Library Committee and they reported that they would probably be able to set up a card file on all cardiovascular research. It is recommended that the Library Committee notify all institutions conducting cardiovascular research of the establishment of this service.

The following letter dated March 16, 1965, was received from Dr. Fred I. Gilbert:

In accordance with our letter to you dated November 20, 1964, we requested and have received a compilation of all nationally funded on-going research in Hawaii recorded with the Service Information Exchange in Washington. This information is available to the Hawaii Medical Association as well as any interested individuals or groups. If you wish to compile a listing of locally financed medical research, we will be glad to assist in any way we can.

This committee does not have any recommendations for future programs or policies. However, the chairman recommends that closer liaison be maintained between the State Department of Health and the Heart Committee of the Hawaii Medical Association in view of the many service programs which are provided for the physicians and people of this community.

COOLIDGE S. WAKAI, M.D.

Heart Committee

Your Reference Committee recommends acceptance of the Heart Committee report. The committee is active in developing and improving cardiovascular clinics in our State and its work is to be commended. Your reference committee wishes to recommend that the Heart Committee accept responsibility for the study and implementation of a law which appears certain to pass Congress this year. This law relates to the development and strengthening of programs to develop model cardiovascular disease programs in our nation.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MENTAL HEALTH

Activities of the committee this year have been largely in relation to legislation or proposed legislation. The bills for 48-hour emergency admission of patients on the certification of one physician were worked out with the Health Department. A bill for certification of psychologists was revised in cooperation with a committee from the Hawaii Psychological Association. A proposal that the Medical Practice Act be amended was discussed with the HMA ad hoc committee. Bills on all these subjects have been introduced into the Legislature, where the Chairman and other committee members have testified. The committee also studied the budget request of the Health Department and recommended that HMA do all possible to reverse action of the Budget Review Bureau in order to obtain appropriations for the Divisions of Mental Health and Mental Retardation at the level of the Health Department's original request. At the same time, after reviewing the request for supplemental funds of approximately $500,000 for the State Hospital sponsored by the Hospital Auxiliary, it was decided not to endorse the request at this time, but to await the Comprehensive State Mental Health Plan due September 1, 1965. A total revision of the Mental Health laws was recognized as necessary, and the one prepared by members of the Mental Health Association and the Hawaii Psychiatric Society was favored by the committee. However, knowing the attitude of the Health Department toward this document and believing that it would have little chance of enactment by the Legislature against administration objections, it was decided to cooperate in a committee composed of members from all the organizations concerned to draw up a revised proposal.

Several members of this committee continue to work with committees and task forces in the Comprehensive Planning for Mental Health and the Comprehensive Planning for Mental Retardation. Endorsement of a proposal that the Health Department coordinate and administer a program for family planning was requested of the HMA by the State Planning Committee for Mental Health and referred to this committee and the Maternal & Perinatal Mortality Study Committee. A joint statement endorsing the program in principle with some added suggestions was prepared and submitted.

A statement of the functions of this committee was prepared for the Bylaws Committee.

Some improvement in insurance coverage of mental illness was noted in that HMSA reduced the deductible from $500 to $200 in major medical policies in its Federal Plan. A summary of the insurance plan worked out between the American Psychiatric Association and the United Automobile Workers was sent to insurance companies, and at this writing HMSA is engaged in discussions with a committee of Honolulu psychiatrists to develop a plan of coverage for outpatient care of mental illness for Federal employees and their dependents, subject to approval of the Federal Civil Service Commission.

The matter of loss of accreditation for psychiatric residency training at Hawaii State Hospital and The Queen's Hospital created much consternation in the medical community. The committee's investigation turned up mostly that there had been semantic difficulties, primarily differences in interpretation of questionnaires by the two training directors and misunderstanding of the local situation by the examiner, as well as low morale in the hospital at the time of the examination. There has been considerable correspondence among the HMA President, Gov. Burns, the AMA, and the State Health Department. Relative calm returned with the assurance from Chicago that there would be another site examination, and the possibility that the order rescinding accreditation could, but not necessarily would, be changed. We await the Board's decision.

Because the committee was not allowed a budget last spring, it was unable to plan any follow-up to the 1963 Mental Health Conference. We sought permission to approach local eleemosynary foundations for funds to send delegates to the Second A.M.A. Congress on Mental Health and were permitted to seek travel funds for one delegate, which were obtained. Dr. Edward Furukawa reported when he returned: ". . . to make significant progress in lessening the ravages of mental illness . . . we must have support from all physicians, regardless of specialty, plus the services of skilled nonmedical personnel. . . . There is a shortage of manpower in the psychiatric field, but . . . physician(s), by increasing skill in matters affecting the psyche can add an important dimension to the practice of preventive medicine."

By reason of the same lack of a budget, the committee was unable to send a representative to the meeting with the American Psychiatric Association on comprehensive mental health planning, or the AMA Conference of State Mental Health Representatives.

An application for a grant from the National Institute of Mental Health to provide for a series of seminars on the psychiatric factors specific to the several medical specialties was prepared for HMA. Reber VanMatre, M.D., and Eli Rubinstein, Ph.D., from the Training Branch, NIMH, made a site visit the day before Thanksgiving, interviewing HMA officials, and psychiatrist-teachers and physician-students of prior courses given by Western Interstate Commission for Higher Education and the Hawaii Psychiatric Association. Decision on the grant application should be made known about May 1.

Salaries of psychiatrists employed by the State are still a matter of grave concern, for all the reasons previously noted. With permission of Dr. Leo Bernstein, a copy of the letter written him comparing local salaries with those in other states was sent to the Speaker of the House, who has indicated an intention to review the matter thoroughly.

Recommendations: (1) That the committee continue with its present programs concerning mental health legislation, insurance coverage for mental illness, and comprehensive mental health planning in conjunction with other organizations, and remain in readiness to take advantage of any opportunity to improve salaries of psychiatrists employed by the State.

(2) That the Mental Health Committee, and more specifically its Chairman, be responsible for the administration of a training program in psychiatry should the application for a grant from NIMH be approved.

(3) That the committee be allowed to dissolve its subcommittee on Narcotics and Drug Addiction which has been inactive for two years and for which there appears to be no outstanding need.

(4) That HMA approve a budget of $750 to the Mental Health Committee for (a) costs of a follow-up project to the 1963 Conference on Mental Health, (b) expenses for one delegate to the Annual Conference of State Mental Health Representatives in February, (c) other worthy causes, should there be any savings, or another cause appears more valuable than either of these.

GEORGE F. SCHNACK, M.D.

Mental Health Committee

Your Reference Committee recommends acceptance of this report, except that Recommendations No. 2 and No. 4 be disapproved. The basis for disapproving Recommendation No. 2 is that the report does not describe the nature of the grant applied for and, therefore, does not have information necessary to recommend approval of Recommendation No. 2. The basis for disapproving Recommendation No. 4 is that community interest in mental health and mental disease is now very high and it is felt that there are many sources of funds outside the State Association for budgeting conferences on mental health, expenses for a single individual to attempt an annual Mainland conference, and other worthy causes that the Mental Health Committee is interested in.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

SCHOOL HEALTH

Sex Education in Schools: The committee invited Mrs. Sylvia Levy of the Mental Health Association to report on sex education in the schools and to make recommendations on how the members of the Association may assist the schools in sex education. After a thorough discussion of the subject, it was recommended that the physicians be encouraged to make themselves available on an individual basis, instructing or helping teachers or the PTA with sex education programs in their areas. It was also recommended that the Speakers' Bureau offer volunteers for workshops for sex education instruction.

School Physicals During the Birthday Month: The committee approved the idea of physical examinations required by various private and public schools during the child's birthday month. A letter was sent to explain this concept and to suggest how to carry this out. The public schools and several of the private schools have agreed in principle with the concept and several have instituted this program for the coming year. A widespread utilization of this concept will promote a more orderly performance of these examinations, and hopefully more thorough examinations and immunizations of the children in question.

Personnel in the Public Schools: The committee attempted to assess the impact of the discontinuation of the School Health Coordinator program. It was concluded that there has been considerable difficulty in administering the program without this personnel. The difficulties were apparently recognized by the school administration and as a result a request was made in this year's budget for teacher assistants and teacher aides with some training in health matters to recrystalize the school health program during the coming year. The committee gave its complete support to the request for this personnel through the Association's Legislative Committee.

School Examinations for the Medical Indigent: The committee noted that there is no specific plan to provide for the physical examinations recommended by the public schools to indigent children with such needs. It was decided by the committee that until the Health Coordinator program, or its equal, is again available, it will be difficult to set up a program for such individuals.

Recommendations to the Public Schools: During the year, several opinions were requested by the schools on certain items. The following specific recommendations were made:

(1) The Ready-splint emergency kit should be purchased for public schools. (2) Weight and height measurements should be done in the schools on a voluntary basis as a means as instructing pupils; however at the present time, with the absence of health coordinators, there is no one officially using this information. (3) It was recommended that any child participating in intramural or interscholastic sports should have a physical examination no less than three months before the start of school.

Vaccinaiton Assistance Act: It was felt by the School Health Committee that the State should be encouraged to utilize funds provided by this Act for immunizing the indigent and medically indigent.

Venereal Disease Education: It was noted that venereal disease instruction is not included in the curriculum of the public schools. It is recommended that this matter be used as a future project of the committee.

Summary: The committee feels that the most important contribution during the past year has been the institution of the school examinations during the birthday month. In most instances teachers aides in the schools would improve the school health program and it is hoped that the Legislature this year will implement this program.

JAMES L. MERTZ, M.D.

School Health Committee

Your Reference Committee recommends acceptance of the report and a commendation for the work of the committee, with special reference to the institution of the school examinations during the birthday month.

ACTION:

The Chairman moved adoption of this portion of the report. Attention was called to a contradiction in the report: in one portion it recommends birthday-month physicals and in another it states that "any child participating in intramural or interscholastic sports should have a physical no less than three months before the start of school." The Chair ruled that the Committee's attention be directed to this contradiction. The Reference Committee's report was adopted.

CRIPPLED CHILDREN

Since the Health Department is in the process of changing its organization and is involved in the governmental economic drive, it was not possible for the Committee to recommend or advise the Crippled Children's Service in its various activities. The problem of converting Leahi Hospital into a Rehabilitation Center for Crippled Children was discussed but not pursued any further because of the apparent lack of cases to be referred there.

The procedure of assigning cases to specialists and assigning specialists to the various clinics between CCS was discussed with Dr. Edgar. It was felt that the basic formula for distribution of cases seemed to be sound and that the criteria used for selection of the specialists, such as the heart team, seem to be fair and should be complied with.

After spending much of the time becoming acquainted with the services of CCS and its related organizations, such as the retarded centers and the Shriner's Hospital, it was felt that this committee should continue to be a standing committee and act in an advisory capacity to the Crippled Children's Service.

Recommendations: In order to facilitate its work and also to be able to acquire a quorum more easily, it is felt that the number of committee members should be reduced by one-half.

The committee met with representatives of the California Elks Major Project, Inc., regarding their intentions to start a mobile speech therapy unit on Oahu. The committee felt that this was a worthwhile project and felt the Hawaii Medical Association should give its wholehearted support and approval to the project.

ALLAN LEONG, M.D.

Crippled Children Committee

Your Reference Committee recommends acceptance of the report with the suggestion that the recommendation for reducing membership of the committee to one-half be reconsidered by the committee. Your Reference Committee is aware of the fact that the needs of crippled children cut across a great many different medical specialties. Your committee feels that the committee, of necessity, may need to be large in order to cover the many different areas. It is the understanding of the Reference Committee that there is nothing in the Bylaws that requires that a quorum of committee members be present at all meetings. If such were required, the effectiveness of the committee would be impaired.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CANCER

The Cancer Committee of the Hawaii Medical Association held two meetings during the 1964-1965 fiscal year, and the following matters were discussed:

1. The Cancer Detection Clinics established by the State Health Department in the outpatient departments of St. Francis Hospital, The Queen's Hospital, and Kapiolani Maternity Hospital are providing cervical cytology and pelvic and breast examinations on indigent and medically indigent female patients. Mammography is done on some; the cost is underwritten by the Health Department. During the first seven months of operation 322 patients were examined; no unsuspected cancers were discovered. Though lukewarm generally about this type of activity, the committee recommended continuation until July 1, 1965, with further review at that time.
2. The committee disapproved of the establishment of a local chapter of the Hematology and Leukemia Foundation, Inc., a new health agency originating in Utah, because activities in these areas are being carried on satisfactorily by the Hawaii Division of the American Cancer Society, and by the Hemophilia Society.
3. The committee went on record as disapproving legislation such as SB No. 118 introduced in the Hawaii State Legislature in 1964 (SB 351 in 1965) which would provide free cytologic services at governmental expense.
4. The committee discussed briefly a uniform State Food, Drug and Cosmetic Bill which would curb cancer quackery. A National Committee of the American Cancer Society is working now on a revision of such a bill. No action was taken.
5. The possibility of delegating additional authority to the Hawaii Cancer Commission in matters relating to cancer control was considered. The Cancer Commission was created by a 1959 action of the HMA House of Delegates to operate and supervise the Hawaii Tumor Registry. No action was taken.

Recommendation: That further consideration be given to giving additional authority to the Hawaii Cancer Commission which consists of six members—two each from Hawaii Medical Association, the Department of Health, and the American Cancer Society—in day-to-day matters relating to cancer control, reserving the larger Cancer Committee of the HMA for determination of policy on matters affecting organized medicine.

I. L. TILDEN, M.D.

Cancer Committee

Your Reference Committee recommends that the sentence beginning on line 9 "Mammography is done on some; the cost is underwritten by the Health Department," be changed to read, "the cost is underwritten by the American Cancer Society."

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

Concerning the Cancer Committee's report, under recommendations, it is recommended that the Cancer Committee of the Hawaii Medical Association continue its interest and activities in the day-to-day matters relating to cancer control and that the Hawaii Cancer Commission continue to confine its activities to the functions of the Hawaii Tumor Registry. Your Reference Committee, therefore, recommends disapproval of the recommendation in the report to change the functions and the authority of the Cancer Commission and the Cancer Committee.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

TUBERCULOSIS

The following items were referred to the committee and action was taken as indicated:

A. The Tuberculosis Committee was invited to send a member to sit with the Legislative Committee meeting of the Tuberculosis and Health Association of the State of Hawaii. Dr. Dudley Seto volunteered to attend the meeting and did so. He reported later at the next meeting of

the Tuberculosis Committee and discussion will be reviewed in Part II of this report.

B. A letter was received from Dr. Randal Nishijima, Secretary of the Hawaii Medical Association, asking for a statement from the Department of Health outlining their policies for patient referral and outpatient care of active tuberculosis cases. This question was reviewed with Dr. Marks and he stated that the patient is always referred to his private physician, if at all possible. If a patient does not wish to be treated by his private physician or does not have a private physician, the Lanakila Health Center undertakes outpatient care and follow-up. Patients who are cared for privately are followed by periodic post card reminders from Dr. Marks.

C. The Hawaii Medical Association's Council asked that a review be made of the forms used in referring tuberculous cases. Dr. Marks brought in all of the patient forms that he has in use and these were reviewed individually. He has designed most of them himself and in all instances the format of the forms and the wording seems appropriate and proper. These forms were submitted to Dr. Nishijima for his information.

D. The question was also asked by the Hawaii Medical Association if a study to determine if modification and implementation of the State's Tuberculosis Program might be in order at this time. The Committee discussed this with Dr. Marks and it appears that the question is a little too nonspecific to be answered directly. However, the State Department of Health is continually modifying its program within the limits of its budget and personnel with the emphasis being placed on the early detection and prevention of tuberculosis with the ultimate goal in the near future being in strengthening the outpatient care program of tuberculosis cases.

II. The following projects and programs for discussion were initiated by the committee and action was taken as indicated:

A. The Tuberculosis Eradication Project was reviewed with Dr. Ira A. Hirschy. This is concerned with the initiation of prophylactic therapy of certain high-risk and infected persons found in the Tuberculosis Eradication Project area. Some modification of the form letter was recommended and the suggestions were adopted. Some modification of the procedure of notification of the patient's private physician was also recommended prior to the initiation of chemotherapy, and the recommendation will apparently be followed.

B. The representative to the Tuberculosis Association Legislative Committee reported on topics discussed, and this committee went on reocrd as supporting some and rejecting other portions of the program. It was particularly noted that the Tuberculosis Association. in many instances, has become deeply involved with matters almost entirely unrelated to tuberculosis control. and it was a recommendation of the Tuberculosis Committee that funding and use of personnel of the TB Association be directly applied to tuberculosis control only. The committee also went on record as being very much in favor of an expanded program for case detection and for help to operate a clinic. In order to better control high-risk patients and those presently "at large" but not being followed and to provide better controlled outpatient therapy for patients, an increase in personnel and budget will be required.

C. Considerable discussion was undertaken concerning the providing of antituberculous drugs by the State to anyone regardless of need, In general, the committee was against this philosophy except in the area of being better able to control the long-term treatment of patients if the drugs are supplied from a single source. On this basis alone, the committee agreed to support the concept of governmental provision of drugs for all persons. if by doing so, control of these patients and proper follow-up is tightly maintained.

D. Functions of the State. National, and County Tuberculosis Associations were discussed concerning their various roles. It was noted that there is no clear-cut distinction between them and that control is not well defined. There apparently is some revision forthcoming of organization and control, but the ultimate outcome of this is unknown. The committee feels that this should be better delineated.

E. Budget requirements of the Lanakila Health Center were discussed at some length. It was voted to support in principle the budget to be submitted which asks for increased funds to support the established program because of experienced increased utilization and work load.

F. The First Grade Tuberculin Testing Program on Oahu was discussed. This program was initiated for a five-year period starting in January, 1965, the goal is to perform tuberculin skin tests on all first-grade children on Oahu. Follow-up of positive reactors will be handled by the Lanakila Health Center. It was noted that there seemed to be no comprehensive provisions at this time to coordinate the results of the skin tests for future reference. The committee went on record as supporting wholeheartedly the tuberculin testing program.

G. Prolonged discussions were undertaken concerning the role of Leahi Hospital in tuberculosis control. It was generally felt by the committee that Leahi Hospital is in a position to provide first-class care of tuberculous patients and that it does so. However, it was noted that there is no provision in the State of Hawaii for using State funds for short-term hospitalization and that there is no hospitalization of active cases of tuberculosis except at the discretion of the physicians at Leahi. Present policy at Leahi appears to concentrate on prolonged hospitalization in the majority of cases. It was felt that any eradication program or any effective reduction of cases in Hawaii would come about only if there were provisions made for short-term hospitalization and outpatient care. This matter was discussed at some length with Dr. Gilbert Ching and reviewed by him with Dr. Maurice Brodsky. Further discussion was had after this review. There is apparently no plan to modify the present hospitalization procedures and care for tuberculous patients or the operation of an outpatient department at Leahi.

Representative John C. Lanham introduced HB-1290 concerning an appropriation for research on asthma and allergies and disseminating of information thereon. The committee did not have a chance to meet following introduction of the bill. The following opinion is only that of the Chairman:

Although the State of Hawaii has widely varying climatic conditions. the size of the State almost precludes utilizing specific areas that may be more beneficial for relief of asthma and other allergies. It would require confinement to these areas and the areas would be different for different individuals so that centralized treatment facilities or hospitalization arrangements would not work for all. The majority of asthmatic and related conditions are controllable by medical management and this is probably the best way at this time to care for this type of problem. It is my personal opinion that further research and attempts to find specific locations to benefit asthma and related conditions would not be particularly useful in over-all care in these problems.

Recommendations: 1. Provision for more adequate outpatient care of tuberculosis patients after minimal, in some cases no hospitalization, with the State providing physicians' services and drugs.

2. More private physician participation in decisions concerning the therapy, hospitalization, and care of complicating illnesses in patients hospitalized at Leahi.

3. Mandatory State licensure* of State employed physicians who deal directly with patients or who render decisions directly affecting patient care.

4. Expansion and modernization of tuberculosis detection and prevention facilities and programs.

5. A bolstering of outpatient facilities for treatment and follow-up of tuberculosis cases at the expense of present inpatient facilities in both personnel and funds.

6. Further critical study into the most effecitve role of Oahu Tuberculosis Association and its relationship to the State Tuberculosis Control Program.

JAMES J. BALL. M.D.

* Subsequently corrected to read "Mandatory HMA membership."

Tuberculosis Committee

Your Reference Committee went into detailed discussion on the Tuberculosis Committee Report. Dr. James J. Ball, the Chairman of the committee, was called in for the discussion and the Reference Committee was helped in its deliberations on the report by physicians with considerable experience in the field of tuberculosis. There are a number of comments and changes which your Reference Committee felt should be brought before the House in the interest of a more concerted effort to both treat and eradicate tuberculosis. Paragraph B states, "if a patient does not wish to be treated by his private physician or does not have a private physician, then Lanakila Health Center undertakes outpatient care and follow-up."

Your Reference Committee learned that total and complete outpatient care cannot be said to be available at the Lanakila Health Center because this Center is not budgeted for complete antimicrobials such as streptomycin. A better description of the functions of this Health Center would be to describe it as an excellent follow-up center with limited outpatient treatment facilities.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

In Paragraph C of the report, Dr. Nishijima's name is mentioned. To avoid confusion, it is recommended that Dr. Nishijima's full name be included to state, "these forms were submitted to Dr. Randal A. Nishijima for his information."

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

With reference to Paragraph D, a sentence in the middle of the paragraph says, "the committee discussed this with Dr. Marks and it appears that the question is a little too nonspecific to be answered directly." This sentence was attributed to Dr. Marks in answer to a question raised by the Hawaii Medical Association as to whether a study might be made to determine if modification and implementation of the State's TB program might be in order.

Since testimony heard by your Reference Committee indicated a real need for a study to determine how the State's TB program might be modified and integrated, it is felt that the question was not "nonspecific" and Dr. Marks's statement could be better interpreted to mean that the question involved a very comprehensive answer.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

With reference to Paragraph B, Section II, which indicates that the TB Association might be getting somewhat involved in activities not clearly related to TB control measures, your Reference Committee learned that such is not the case, but rather, the enthusiasm of the group in a few instances gave the mistaken impression that the enthusiasm represented over-involvement in nontuberculosis items. Your Reference Committee is satisfied that the TB Association is in fact fulfilling the purposes for which it was organized and obtains support.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

With reference to Paragraph D under Section II concerning the roles of state, national, and county TB Associations, it has been learned by your Reference Committee that these heretofore divided functions have become integrated for the desired effectiveness of their individual functions.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Under Paragraph F, Section II, your Reference Committee recommends the insertion of "search for the sources of their infection" in the third sentence, which describes the functions of the Lanakila Health Center in this project.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Paragraph G, under Section II. Your Reference Committee recommends that the words "State of Hawaii' in line 6 of this paragraph be changed to the words "Leahi Hospital." Your Reference Committee heard much discussion which was the background for the composition of Paragraph G. Your Reference Committee was led to believe that the hospital treatment of the tuberculosis patient at Leahi was of good quality but that there was little chance for modifying the philosophy of treatment at that hospital when physicians who are knowledgeable in the total management of the tuberculous patient feel that inpatient confinements could be abbreviated without disadvantage to the patient or to the community.

Your Reference Committee learned that overzealous confinement to a hospital of a patient with minimal tuberculosis produces family hardships and creates rehabilitation problems. Your Reference Committee also learned that there are no avenues open for modifying Leahi's hospitalization procedures and that there is a real need for better integration of all inpatient and outpatient programs which are being so heavily supported by State funds on the Island of Oahu.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Finally, with reference to the recommendation of the Tuberculosis Committee Report, your Reference Committee recommends that the last eight words in the first recommendation, "with the State providing physician's services and drugs" be deleted because they are redundant.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

Under Recommendation No. 2, your Reference Committee learned that on Oahu there is little or no communication, or information, concerning the hospitalized tuberculous patient, given to the family physician. Your Reference Committee learned further that physicians are seldom advised that their patients have developed either minor or major complicating illnesses of nontuberculous origin and have been treated by the consultive staff of the hospital without knowledge of the family physician. This practice is to be discouraged since it violates well-established physician-patient relationships.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

With reference to Recommendation No. 3, which recommends that state licensure (which was corrected to read HMA membership) be required of State employed physicians who deal directly with patients or who render decisions directly affecting patient care, it is recommended that this recommendation not be approved because it would not necessarily accomplish better communication of Oahu physicians of the State Society with the State-supported Leahi Hospital.

ACTION:
The Chairman moved adoption of this portion of the report. The recommendation of the Tuberculosis Committee relative to HMA membership was questioned. It was noted that this was sent out as a correction to the original report. The Reference Committee does not recommend man-

datory State licensure or HMA membership, because it did not feel that to insist that Leahi physicians become members would improve communication. The Reference Committee's report was adopted.

Recommendation No. 5, which states "a bolstering of outpatient facilities for treatment and follow-up of tuberculosis cases at the expense of present inpatient facilities in both personnel and funds." Your Reference Committee realized that the intent of this recommendation is to bring about a better integration of inpatient and outpatient treatment programs for the tuberculous patients of Oahu. Your Reference Committee supports strongly the intent of this recommendation and urges the Tuberculosis Committee to develop avenues of communication with Leahi Hospital, the Lanakila Health Center, and the Oahu TB Association to insure a better distribution of State funds so that the deficiencies in outpatient care programs can be met with the savings on the unnecessarily long inpatient programs at Leahi.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

DIABETES

The major activity of this committee has been to facilitate the annual diabetes survey. Other items discussed have included the possibility of establishing a diabetes registry, the promotion of physician and public education for the detection and diagnosis of diabetes, and the clarification of the role of this committee in the annual diabetes survey.

Although it was felt that a diabetes registry would be advantageous from a public health and academic point of view, detailed investigation of such a registry revealed that it was not feasible at this time. The time and expense of establishing and maintaining such a registry was believed neither feasible nor of primary importance in the prevention and control of diabetes.

In the opinion of the committee emphasis on prevention and control of diabetes on a statewide level could be best achieved by greater physician and public education during the period of the annual diabetes survey.

The role of this committee in the annual diabetes survey was modified because of the loss of a budget. The actual work of conducting the surveys was delegated to the individual counties. The primary role of this committee was to coordinate and facilitate the survey program.

The annual diabetes survey this year was believed to be the most successful because of the greater participation of the general public and greater publicity from various media. Physician education was encouraged by suggesting to various hospitals and county medical societies that some phase of diabetes be discussed at their meetings during Diabetes Week.

This resulted in better understanding of diabetes and the diabetes survey, particularly in Honolulu County. Reports from physicians in this county indicated greater physician participation and better methods of diagnosis were utilized in comparison to previous surveys. This year, through the media of the newspapers, radio, and television, wider public education was achieved. Other committees of the HMA were very cooperative in making possible the discussion of diabetes in the "Message of the Month"; the television program, "Call the Doctor," the radio program, "Ask the Doctor"; and the news feature in "Medicine at Work." The following results have been obtained from the survey conducted by Honolulu County as of this date:

Number tested	5,961
Number positive	435
Number studied and reported by physicians	368
Number diagnosed as new diabetics	101
Number of established diabetics participating	63
Number of nondiabetics	204
No report	58

The survey was also successfully conducted by Kauai County and the results are as follows:

Number tested	2,587
Number positive	264

Surveys are now being planned for the counties of Maui and Hawaii and should be completed before the summer of this year.

Recommendations: (1) Publicity of the annual survey has greatly improved but it should be expanded for future surveys. (2) Although the present method of conducting the diabetes survey appears adequate, alternative methods should be studied. (3) The consideration of a budget of $300 to facilitate recommendations (1) and (2) should be considered by the House of Delegates. (4) All counties are urged to conduct their annual surveys during the latter part of each year when statewide publicity is emphasized during Diabetes Week in order to achieve greater public participation.

WINFRED Y. LEE, M.D.

Diabetes Committee

Your Reference Committee recommends that the report be accepted and that the work of the committee be commended for its success.

Your Reference Committee feels that the $300 budget for facilitating recommendations of the committee be supported by the House of Delegates. The Reference Committee became convinced that the sum of $300 would bring great return in our attempts to help bring this important disease under control.

ACTION:

The Chairman moved adoption of this portion of the report. The value of a program that had such a low return of positives was questioned. It was noted that even a 1% return would make the program worthwhile and that the public relations and public education aspects were of great importance. The Reference Committee's report was adopted.

THE MATERNAL AND PERINATAL MORTALITY STUDY

The major activities of the committee are as follows:

1. The committee studied in detail three maternal deaths. The first of these deaths occurred in the postpartal period and was due to cardiac disease of unknown etiology. The committee was unable to classify this death because of lack of an autopsy. The second maternal death was classified as an indirectly obstetrical death and possibly preventable. The third maternal death was classified as a directly obstetrical death and not preventable. The provisional maternal death rate for the State in 1964 was 1.2 per 10,000 live births, which is far lower than the national average.

2. The subcommittee on Perinatal Mortality, chaired by Dr. Donald Char, met at monthly intervals which were in addition to the regular monthly meetings of the committee as a whole. This subcommittee selected perinatal deaths on the basis of information extracted from birth and death certificates, upon requests for study of particular deaths by members of the Association, and for other pertinent reasons. Sixteen deaths were studied by the subcommittee and, out of these, seven cases were considered noncontroversial and either not preventable or preventability could not be determined because of lack of information, and so the studies were terminated in the subcommittee. Of the nine cases presented to the committee as a whole, five cases were considered pediatric deaths of which four were considered practically preventable and one case was considered not preventable; two cases were considered obstetrical deaths and both of these deaths were considered practically preventable; and two cases were considered combined obstetric-pediatric

deaths, of which one was considered practically preventable and one was considered unclassifiable.

The provisional infant death rate of 1,000 live births for 1964 was 19.8. This rate is below the national average.

3. Since the passage of Act 109 by the State Legislature (relating to information received by medical study committees and in-hospital staff committees engaged in making studies to reduce morbidity and mortality) this committee has been submitting case studies for publication in each issue of the JOURNAL of the Hawaii Medical Association. In spite of the fact that this Act protects records of medical investigative committees from subpoena, a member of the Association has expressed fear that section 3 of Act 109, which prohibits the use of findings, conclusions, or summaries in any legal proceedings, may be found to be unconstitutional. This fear would appear to be without firm foundation in view of the fact that the lawyers who drafted this law were confident that such was not the case. We wish to inform this member and any other member who is still fearful of malpractice suits resulting from publication of case studies, that the cases that are published in the JOURNAL are at least two years old and past the statute of limitations. We have also taken the precaution (in compliance with the Law) to remove all the identifying information from the case histories so that the identity of the cases cannot be made unless the attending physicians themselves read the case reports and fill in information which is essential for identification. Other than this one objection, the case studies are well received by the members of the Association. In conformity to the statute cited above, new forms for classifying maternal and perinatal deaths were adopted.

4. We wish to report that public and professional support for providing family planning services to the indigent and medically indigent is overwhelmingly in its favor. We wish to thank the news media, their editorial staffs, and Morgan Beatty, news analyst and commentator for the National Broadcasting Company, for giving favorable publicity in this endeavor. The State Planning Committee on Comprehensive Mental Health Planning adopted and has recommended to the State Department of Health that: "In order to promote the mental and physical health of pregnant women, infants, and their mothers, it is recommended that the State Department of Health, in conjunction with public, voluntary, private agencies, and physicians, develop and administer a program providing appropriate services in the field of family planning. . . . The State Planning Committee further recommends that in the implementation of this program by the Department of Health, the various interested segments of the community be involved in considering acceptable approaches to meeting the need for family planning services of those segments of the population who cannot secure these services through private physicians and procedures for assuring that the religious and moral tenets of those seeking family planning services are considered."

5. The enthusiasm of members of this committee to travel to neighbor islands to carry on the educational objectives of this committee has been considerably dampened by the action of the House of Delegates in deleting the budgetary request for this purpose at the last annual meeting of the Association. We feel it is highly regrettable that we were unable to meet the request of Hawaii County to conduct the scientific part of one of their monthly meetings in the area of perinatal mortality study. Asking members of this committee or visiting professors to participate in these scientific sessions without an allowance for transportation and per diem is most difficult and unfair. If the House of Delegates cannot see its way clear to grant this committee's request for funds, we would like to request that the Officers of the Association be empowered to subsidize neighbor island educational trips by representatives of this committee when so requested and that funds up to $300 be made available for this purpose.

6. This committee, in cooperation with the Legislative Committee, prepared and had introduced in the Third State Legislature a bill providing for a statewide medical examiner system. The purpose and the need for such a system are recognized by the Legislators, but because the bill will enter into the area of State and County relationship, passage of the bill during the current session may be doubtful.

GEORGE GOTO, M.D.

Maternal and Perinatal Mortality Study Committee

Your Reference Committee recommends that the report be accepted with one modification. Concerning reassurances to members of the Association who may be fearful of malpractice suits resulting from publication of case studies in the HAWAII MEDICAL JOURNAL, the statement that the publication of the case studies two years after the fact would be beyond the statute of limitations may not be entirely true. The statute of limitations is thought to begin at the time that the facts have come to light. Your Reference Committee, however, has learned that there is even stronger reassurance that malpractice suits from the publication of the case studies through protection offered by the recently passed legislation, Act No. 109. This was a carefully developed piece of legislation to advance medical science and improve medical practice through helping and protecting institutions and practitioners. Among other things, identities of those concerned cannot be made public and attorneys are prohibited from using data gained from these studies for purposes of suit.

Mr. President, with the above modifications, your Reference Committee recommends acceptance of the report and a commendation for the work of this committee. Your Reference Committee heard votes of confidence on the activities of the Maternal and Perinatal Mortality Study Committee from three neighbor island society representatives, including the Island of Maui. Your Reference Committee heard further that the recent press release concerning a Maui hospital had not actually hurt anyone concerned, but rather had furthered the cause of good medicine. The Reference Committee further recommends that the travel funds for this committee be approved as requested.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

STATEMENT REGARDING THE MATERNAL AND PERINATAL MORTALITY STUDY COMMITTEE OF THE HAWAII MEDICAL ASSOCIATION

As I relinquish the chairmanship of the Maternal and Perinatal Mortality Study Committee to my successor, the comments below seem to be necessary in order to clear any misunderstandings and questions members of the Association may have concerning the objective and functions of this committee and to enable the new chairman to proceed with the committee's functions unhampered by past actions on my part.

Please be advised, however, that I am not apologizing for carrying out the actions of the committee. To do so would not do justice to the integrity of the members of the committee who have given their valuable time in the interest of improving the standards of medicine in maternal and infant care.

When I was appointed to chair this committee five years ago (1960), the committee was already knee deep in controversy regarding unsatisfactory or nonexistent autopsies on deaths that fell within the jurisdiction of the coroner's physician and the medical examiner. Progress is being made in resolving this problem, because the statewide medico-legal investigative system patterned after the model act published by the National Municipal League may become a reality soon. You can be assured that efforts to push this important legislation shall be continued until the statewide medico-legal investigative system becomes an accomplished fact.

Another objective of the committee when I assumed the chairmanship was to have a law enacted to protect members of this committee and in-hospital staff committees, those who furnish information to these committees, and the records of these medical investigative committees from unjustified legal action. As you all know we accomplished this aim in 1963 when the governor signed Act 109 into law.

The task of being chairman of this committee has been gratifying and I am indebted to all the members of the committee (past and present) for their faithful attendance in both the perinatal study subcommittee and the committee as a whole. Without the unqualified cooperation of the members of this committee, its vital work would not have been accomplished and cannot be accomplished in the future. It may be presumptuous for me for saying so, but I believe part of the gratifying decline in the maternal and perinatal mortality rate in Hawaii has been through the educational efforts of this committee and its cooperation with in-hospital staff committees.

The task of being chairman of this committee has also been difficult and sometimes frustrating because one does not necessarily make friends of the doctors who receive the reports of the committee's deliberations. It saddens me to reveal that I have been accused of carrying a personal vendetta against the incumbent medical examiner in the City and County of Honolulu by respected members of the Association. As all of the past and present members of the committee know, there can be no justification for this accusation. I have been criticized for taking certain actions arbitrarily contrary to the wishes of the committee or contrary to the best interest of the medical profession. Nothing can be farther from the truth, but if I unknowingly did so, my humblest apologies. Please be assured, however, that whatever actions I have taken have been based on the primary objective of the Maternal and Perinatal Mortality Study Committee, which is "to improve the production of normal human beings."

Because the integrity of members of the committee, and particularly the chairman, has been challenged I would like to remind the officers of the Association that the members of this committee are dedicated to the highest ideals in patient care and together with the Maternal and Child Health Section of the State Department of Health carry on necessary functions. These functions must remain on a medical level. To allow any member of the committee to become a victim of expediency would nullify the effectiveness of the committee. I know that the President of the Association has been formally requested by a member of the Association to demand my resignation as chairman of this committee. If he is doing so because the committee criticized the management of one of his patients, I feel his letter was written in very poor taste. I would rather believe that his criticism stems from lack of understanding of the committee's functions. I believe our President has the intestinal fortitude to do what he feels is just, but I am deeply disturbed to learn that any member of the Association would stoop to tactics of this type to discredit another member of the Association. If the Association tolerates conduct of this type, the very foundation of the self-policing policy of the medical profession will be disturbed.

Since I do not wish to continue as chairman of this committee, I would like to comment on the composition of the committee. In Honolulu where attendance at meetings is easier the chiefs of the obstetrical and pediatric services of all the major hospitals have been and should continue to be persuaded to become members in order to maintain a direct line of communication from the committee to the hospitals involved in maternal and infant care. The President of the Association would do well to consider selecting the chairman from among the members of the committee following review of past actions with the Chief of the Maternal and Child Health Section of the State Department of Health. To do otherwise may lead to poor and disorganized functioning of the committee, since the administrative and secretarial work in large part is provided to the Association through the cooperation of the Director of Health and the Chief of the Maternal and Child Health Section of the State Department of Health.

GEORGE GOTO, M.D.

Dr. George Goto's Statement Regarding the Maternal and Perinatal Mortality Study Committee

Your Reference Committee had an ample opportunity to review the statement and quiz Dr. Goto concerning items in his comprehensive statement. If there is any concern on the part of the delegates concerning Dr. Goto's steerage of the committee's functions and the importance of the continued activity of the committee, the testimony gathered convinced the Reference Committee that Dr. Goto was representing the best interests of the Association and good medicine in his work with that committee. The work of a committee of this nature can be misunderstood by oversensitive members of our Association, but your Reference Committee believes that Dr. Goto has acted in good faith in fulfilling his functions with that committee.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CHRONIC ILLNESS & AGING COMMITTEE

Doctor Shoyei Yamauchi, our chairman, has been the champion of the Association's interest in developing and strengthening a permanent Commission on Aging. The organizational structure has actually been completed and the positions filled since the interim meeting of the delegates of the Association. The Commission must be the vehicle for intelligent action concerning the many problems of our senior citizens of our State. At the time of the writing of this report, Dr. Yamauchi is in Okinawa on important medical work.

Also, in Washington, the recommendations of the American Medical Association for comprehensive medical care programs for senior citizens have been found desirable by the committees charged with the responsibility for developing a law. To hope that the funding and, therefore, the controls would be kept at the State level are more than dim thus a giant step toward socialized medicine is being taken. The forces inside and outside of government that have argued that the social security system of taxation is the only practical solution for financing medical care were active or passive contributors to any of the shortcomings in state-level medical care programs of Hawaii. Your committee has reason to believe that the people of Hawaii, under the proposed federal law, will pay more without getting more than they could get under an adequately funded Kerr-Mills Law.

The energies of this committee and other committees have been dissipated during the past three or four months by an unselfish fight to keep American medicine free of bureaucratic controls in Washington. The cleverness of our adversaries has twisted the intent of our fight to a self-centered one with monetary gains as our goal. The future will disprove their charges and, locally, the collective energies of the Association and the specific efforts of the committee must set themselves to the task of providing the highest type of programs under the new law of the land.

The committee has studied and endorsed a variety of programs and acts of the State legislature. Members of the committee have talked with well-oldster groups on important issues between the interim session and the current session of our meeting. Our committee has had two joint meetings with the Indigent Medical Care Committee to keep informed and plan the last minute effort to keep American medicine free of federal control. The results cannot be blamed on any lack of energy on the part of the members of the State Association and their wives and the professional staff of the Association.

The work of the committee is perhaps even more clearly cut out than before. We need no longer concern ourselves with the issue of how medical programs for the senior citizens are to be paid for, we may now concentrate on the quality and the utilization of the programs. The committee of physicians might well establish some priorities for its work. This committee will have to delegate responsibilities because the facets of chronic disease and aging cut across a great many medical and nonmedical areas. We have looked into and support, in principle, a number of important issues such as enabling legislation for insurance carriers of our State to join the Western Sixty-Five program. We have stimulated and participated in senior citizens' conferences which help pinpoint unmet needs. Our committee has been a studying and recommending committee and with the establishment of priorities it may be worthwhile to turn our attention to ways and means of implementing some important action. A categorization of these actions may be helpful under functional medical headings such as: A. The prevention or retardation of disabling effects of chronic disease in nonhospitalized patients. B. Development of workable, acceptable systems of controlling the utilization of acute and chronic unit beds so as to have the right patient in the right place at the right time. C. Since chronic illness and aging present not only physical problems but invariably present social problems to the victims, their families, and the communities, the committee should study ways to educate and interest physicians and our hospitals in the importance of having qualified medical social workers to assist the physicians in the management of victims of chronic disease and aging.

Only through the prevention of disability and the control of the use of medical services based on criteria set forth by physicians can the quality of care be maintained, the cost kept down, and manpower shortages in the paramedical and medical fields kept to a minimum.

R. Frederick Shepard, M.D.

ADDENDUM

The community-coordinated Home Care Program at St. Francis Hospital continues to make good progress. During the past year, 3,650 home visits were made. The average monthly active case load is now 55 to 60 patients. Since the program began, a total of 215 different physicians have made referrals. The estimated number of physicians who might be expected to use the program is 350. The grant from the USPHS was completed on December 31, 1964, and the name of the program has therefore been changed to Honolulu Home Care Program. It is recommended that the Hawaii Medical Association reiterate its support of this program.

Shoyei Yamauchi, M.D.

Chronic Illness and Aging Committee

Your Reference Committee recommends acceptance of the report with the further recommendation that the Committee on Chronic Illness and Aging give its support and urge members of the State Association to continue their support for the newly established permanent Commission on Aging as the best instrument for effecting intelligent action concerning the many problems of our senior citizens of Hawaii.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

WATER SAFETY

The newly formed Water Safety Committee of the Hawaii Medical Association had three meetings in 1965—February 12, March 12, and April 9. The purposes of this committee are: (1) To promote general education of the public in regard to water safety, (2) to encourage enactment of legistlation which will provide better protection to the people who participate in water sports and activities.

Positive action taken by the committee at these meetings included endorsing House Resolution H.R. 65 which is a resolution to look into a means of obtaining a beach alarm system for the various beaches on Oahu and around the State. Endorsed H.B. 777 which would allow the sum of $50,000 to be made available to the several counties of Hawaii on a basis of a 50-50 matching fund plan to be used for shark hunting. We hope to have more support from the HMA in regards to this bill.

Other matters of interest to this committee was community representation to get a coordinated approach to water safety. Guest members are present at every meetnig. So far we have had representation from the Police Department, Fire Department, Department of Education, the Red Cross, and the Hawaii Surf Association. A member of the Hawaii Life Guard Association has not as yet joined our committee.

We have sent out letters of inquiry to Australia, the state of California and Florida in regards as to how they handle their water safety and answers from them are pending. At present some action in regards to the Health Fair to be held in October are being thought of in regards to having a water safety session.

W. O. Kirker, M.D.

Water Safety Committee

Your Reference Committee was pleased to learn of the establishment of this important committee and commends the Chairman for integrating various community activities into the work of this committee.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

RESOLUTION NO. 4

Re: Maternal and Perinatal Mortality Study Committee

WHEREAS, The Maternal and Perinatal Mortality Study Committee is to be commended on the excellent work it has done during the past years; and

WHEREAS, The work of this Committee should not be hampered by unfavorable publicity and poor public relations; and

WHEREAS, Every effort should be made to avoid the dangers of erroneous press releases; and

WHEREAS, The effectiveness of this committee would be seriously damaged if the reports of the cases it reviews become easily available to the press or to the lay public; now be it

Resolved, That the practice of publishing case reports on maternal and infant deaths in the Hawaii Medical Journal be ceased; and be it further

Resolved, That the Maternal and Perinatal Mortality Study Committee confine the circulation of its minutes, reports, conclusions, and recommendations exclusively to the individuals concerned with the case being reviewed.

Submitted by Hawaii County Medical Society

Resolution No. 4

ACTION:

It was voted not to adopt this Resolution.

RESOLUTION NO. 9

Re: Bronchial Asthma

WHEREAS, There appears to be an extremely high incidence of chronic bronchial asthma, especially in the children of Hawaii; and

WHEREAS, Bronchial asthma is extremely disabling and predisposes to great loss of time from school and work,

and contributes considerably to cases of chronic, irreversible pulmonary emphysema; therefore be it

Resolved, That the House of Delegates of the Hawaii Medical Association support the establishment of a registry for asthmatics in Hawaii in order that the data gleaned from this registry may be utilized by interested physicians for the study and treatment of this potentially crippling disease.

Submitted by GEORGE H. MILLS., M.D.
MARVIN A. BRENNECKE, M.D.

Resolution No. 9

The Chairman recommended that this resolution be adopted.

ACTION:
It was voted to adopt this resolution.
The Chairman moved to adopt the report as a whole. It was adopted.

RADIATION

No specific action has been taken by the committee this year. Two major items of interest are under discussion. (1) *Survey of x-ray equipment.* The Hawaii Department of Health has been given a $15,000 yearly grant from the USPHS to conduct a survey of x-ray equipment in Hawaii. One full-time staff person is just finishing a survey of the dental x-ray equipment, and will be starting later this year on a survey of the medical equipment. Cooperation for this important survey is needed. (2) *State control of manmade radioisotopes.* The U. S. Atomic Energy Commission is encouraging states to take over control of manmade radioisotopes. The committee will consider this matter in the coming year.

ROBERT NORDYKE, M.D.

Radiation Committee

The Reference Committee did not comment on this report and so it stands as submitted.

PARLIAMENTARY AFFAIRS REFERENCE COMMITTEE

The Reference Committee Chairman asked for a ruling relative to the delegate who was unseated and who had previously participated fully in the Reference Committee work. The Chair ruled that since there were no minority reports and since there were seven people who served on the Committee whose report must be acted upon by the House, there was no problem.

ARRANGEMENTS

The Arrangements Committee first met on August 28, 1964, at which time general plans for the 1965 Annual Meeting were discussed, subcommittees formed, and duties were assigned to the following members, who are responsible for their various functions: Exhibits, Dr. R. DeHay; Golf, Dr. R. Chun, together with Drs. William Ito, J. Bell, A. S. Hartwell, and A. Ho; Banquet, Dr. Robert Ballard; Picnic, Dr. Henry Yokoyama. Later, a Tennis Tournament was added, under the direction of Dr. Charles Judd. Subsequent meetings were held on February 2, March 5, and April 1, 1965.

Scientific Program Committee: The format of the Annual Meeting was discussed, and suggestions were made to the Scientific Program Committee. It was noted that the recent custom of attaching a theme to the Annual Meeting tended to result in a rather narrow field of interest. It was suggested that more diversity be sought in planning a scientific program.

Registration Fee: The Chairman again reiterated his opinion that every effort should be made to eliminate completely the registration fee for bonafide members of the Hawaii Medical Association, feeling that more members would attend at least some of the functions of the Annual Meeting. It was noted that many members had complained about the high fees at recent previous meetings. After considerable discussion, it was agreed to reduce the registration fee for this year to $5.00. It is the recommendation of the committee that registration fees be abolished in future years. Registration fee for nonmember physicians has been raised to $35.00.

Exhibits: To compensate for the loss of income from registrations, it was agreed to raise the charge to commercial exhibitors for booths; the charge was raised from $100.00 to $150.00. It is hoped that these changes will result in greater attendance by members at this year's meeting.

Banquet: Because of the lack of interest in the Annual Dinner-Dance, this year's committee, in cooperation with the Woman's Auxiliary, has decided to hold a luau at a private home in Kuliouou. The charge will be $5.00 per person; drinks will be sold separately by chit. Professional entertainment will be provided.

Golf: All play will be at Waialae Country Club. Because of tax rulings, it will be necessary to arrange foursomes, so that Waialae members are represented in the majority. Outside play has been restricted. The entrance fee will be $2.75, and the green fee for nonmembers of the Waialae Country Club will be $7.75. Contributions for prizes have been obtained from several drug houses. Some objection was raised by some of the officers to the custom of asking the President to purchase a trophy from his personal funds.

Tennis: At the suggestion of Dr. Charles Judd, who later agreed to be chairman of this event, a tennis tournament will be held at the Waialae Country Club at the same time the golf tournament is being held. Arrangements have been made to use nearby private tennis courts, if necessary. This should be a welcome addition to the program of the meeting.

Picnic: The Annual Picnic will be held at the home of Dr. Harry Arnold, Jr., on Sunday afternoon. Prizes for golf and tennis tournaments will be awarded at the picnic.

Hobby Show: At the suggestion of some members, a reinstitution of a Hobby Show will be added this year. Exhibits will be placed in the area used by voluntary health agencies. No prizes will be offered.

It is sincerely hoped that the new policies adopted this year by your committee will succeed in improving the attendance and interest at the Annual Meeting.

F. B. WARSHAUER, M.D.

Arrangements Committee

Your Reference Committee first considered the report of the Arrangements Committee and accepts the report with the following revisions: (1) The recommendation that the registration fee for members of the Hawaii Medical Association be abolished in future years be not accepted. (2) Your Reference Committee recommends that the registration fee be maintained at $5.00 for members and $35.00 for nonmembers.

Your Reference Committee notes the inclusion of a tennis tournament as part of the social activities and comments favorably on this.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

HAWAII MEDICAL JOURNAL

The four-year downward trend in advertising support for the JOURNAL has certainly slowed and may even have

reversed; total advertising pages for the past six issues averaged 42, four more than the previous year. An additional two pages (on the average) of text material—reports of Council and House of Delegates' meetings—has brought the average issue for this year up to 92 pages, the same size as two years ago.

The tabulation shows the average page distribution for the past five years:

	1960-61	1961-62	1962-63	1963-64	1964-65
Scientific	19	17	19	18½	18½
Features	17	24	23	27	29
Technologists	2	2	2	2	2
Advertising	60	53	48	38½	42
Total	104	100	92	86	92

Signed book reviews are up, under the direction of our new Book Review Editor, Dr. Winfred Y. Lee, from 49 to 53; unsigned capsule reviews are down from 99 to 43. Books received have been donated to the Hawaii Medical Library, as in the past. We suppose they are grateful.

The Academy of General Practice page has continued to serve as a forum for a viewpoint not always quite in line with our own, and we believe this serves a useful purpose and should be continued. In Memoriam, Reports & Snorts, and Maternal and Perinatal Deaths, as well as the recently added page from the Bureau of Medical Economics, have all been continued. A recently received adverse comment on the Maternal and Perinatal Deaths article has been referred to the Publications Committee.

One article of above average publishing cost, a review of the accuracy of roentgen diagnosis of gastric cancer, was financed by a grant from the Straub Medical Research Institute. Because of our large backlog of articles, and the educational importance of the material, it is proposed to secure financial support to defray the cost of publishing a symposium of three articles on ciguatera fish poisoning in the near future. It is also proposed to publish a supplemental Festschrift issue to honor a distinguished scientist, Dr. Max Levine, the recently retired Chief of Laboratories at the Department of Health. Dr. John R. Stephenson, whose special interest in microbiology and admiration for Dr. Levine led him to suggest this, has already amassed from former students and friends of Dr. Levine a fine group of articles, and has been asked to act as Guest Editor for this special supplement. It will be financed independently of the regular issue, including any additional time spent on it by employees of the Association, by a grant from a foundation.

The financial picture for the JOURNAL can be reviewed in the Treasurer's report, as usual. It will be noted that a 5 per cent increase in printing costs went into effect during this fiscal year. It is suggested that a bill for the JOURNAL should be sent to new transfer members whose dues are waived for the balance of their first year here by reason of their having been paid up in the society from which they transferred. This is not now being done.

Dr. Henry N. Yokoyama has performed most capably in the position of News Editor and has indicated his willingness to continue with this arduous task, for which we are most grateful.

The controversial issues which had to be dealt with editorially this year were the JOURNAL's position on the resignation of Dr. W. Harold Civin, which we regretted through the voices of Drs. Grant Stemmermann and Joseph Strode, and the Stokes Report, which we supported in an editorial composed jointly with Dr. Robert T. Wong and Dr. Samuel D. Allison, Presidents of the Honolulu County Medical Society and the Hawaii Medical Association, respectively.

Continued publication of the JOURNAL on the same basis as last year is recommended. It is also recommended that the Publications Committee be continued.

HARRY L. ARNOLD, JR., M.D.

Hawaii Medical Journal

Your Reference Committee wishes to take this opportunity to commend the Editor of the HAWAII MEDICAL JOURNAL for his untiring efforts in maintaining the excellent standard of the Association's Journal.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

BYLAWS AND PARLIAMENTARY

This committee is submitting to the House of Delegates the following proposals for changes in the Bylaws:

Additions are in UPPER CASE and ~~deletions~~ are in *italics.*

Chapter VIII, Section 3. Appointment of Committees. The President shall appoint all standing committees and advisory committees of the Association, except the Nominating Committee, and designate the chairman. THE TERM SHALL BE FOR ONE YEAR, UNLESS OTHERWISE EXPRESSLY PROVIDED. THE PRESIDENT-ELECT MAY DESIGNATE A VICE CHAIRMAN. AN OFFICER OR COUNCILOR SHALL BE APPOINTED TO EACH COMMITTEE AND SHALL REPORT TO THE COUNCIL AND THEIR COMPONENT SOCIETIES THE ACTIVITIES OF THE SEVERAL COMMITTEES ASSIGNED TO THEM. EACH COMPONENT SOCIETY SHALL HAVE AT LEAST ONE MEMBER ON EACH COMMITTEE, AND WHENEVER POSSIBLE, A DELEGATE SHALL BE APPOINTED TO EACH COMMITTEE. THE PRESIDENT-ELECT SHALL MAKE THE COMMITTEE ASSIGNMENTS PRIOR TO THE ANNUAL MEETING. AFTER HE IS INSTALLED AS PRESIDENT, he shall have a list of appointments circulated to the membership. THE OFFICERS, CHAIRMAN OF EACH COMMITTEE, AND THE PRESIDENTS OF EACH COMPONENT SOCIETY MAY BE INVITED TO REVIEW THE ASSIGNMENTS PRIOR TO THEIR FINALIZATION TO ASSURE ADEQUATE REPRESENTATION OF THEIR VIEWS.

Chapter III, Section 4. Each component society shall be entitled to send to the House of Delegates of this Association one delegate, or his alternate for every twenty-five active members, and one for every fraction thereof, except that each component society which has otherwise complied with the requirements set in these Bylaws shall be entitled to at least one delegate. At a meeting prior to the Annual Session, each component society shall elect such delegates *and alternates* to serve for a term of not less than two years, AND ELECT ALTERNATES TO SERVE FOR ONE OR MORE YEARS.

Chapter IV, Section 1 (b). At a meeting prior to the annual meeting each component society shall elect such delegates *and alternate delegates* to serve for a period of not less than two years, AND ALTERNATE DELEGATES FOR ONE OR MORE YEARS.

Chapter IV, Section 4 (d). After an Alternate Delegate has been seated, he cannot be replaced EXCEPT IF HE IS UNABLE TO BE PRESENT ON ACCOUNT OF SICKNESS OR ANY OTHER EMERGENCY.

Chapter III, Section 1. The officers of the Association shall be the President, President-elect, *one or more Vice Presidents,* the Secretary, the Treasurer, and the immediate Past President. There shall be six Councilors who, together with the President, President-elect, Secretary, Treasurer, and immediate Past President of the Association, shall constitute and shall be known as the Council.

Chapter V, Section 1. (e). The Council shall consist of six councilors and the President, the immediate Past President, the President-elect, the Secretary, and the Treasurer. EACH COMPONENT SOCIETY IS URGED TO SEND ITS PRESIDENT TO ATTEND ALL COUNCIL MEETINGS.

Chapter VIII, Section 4. The Legislative Committee shall consist of at least five members in addition to the following ex officio: the President, the immediate Past President, the President-elect, *the Vice Presidents,* THE PRESIDENT OF EACH COMPONENT SOCIETY, and

the chairmen of the Legislative Committees of the component societies. It shall represent the Association in securing and enforcing legislation in the interest of public health and advancement in the standards of medical practice. It shall keep in touch with professional and public opinion, and shall endeavor to shape legislation so as to secure the best results for the whole community.

We are presently gathering information regarding the specific functions of each committee and will submit these for approval when completed.

CARL H. LUM, M.D.

Bylaws and Parliamentary Committee

At its meeting, this Reference Committee was pleased to have the counsel of the Chairman of the Bylaws & Parliamentary Committee who was very helpful in the Committee's deliberations. Your Reference Committee notes with pleasure the activity of the Bylaws & Parliamentary Committee in detailing the specific functions of the numerous committees of this Association, and recommends that the Hawaii Medical Association Bylaws proposed in this report be approved.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted. It was later noted that the provisions for announcing proposed Bylaw changes had been complied with and a motion to approve the changes as circulated, was seconded and passed.

NURSES' LIAISON

There were two meetings during the fiscal year, which afforded an opportunity to become acquainted with the representatives of the various activities of the nursing profession.

In keeping with one of the purposes of this committee, a survey of the practicing physicians was made, requesting their opinion and criticisms, if any, regarding the efficiency of the present practice of nursing in our hospitals. The response was, unfortunately, very poor and not elucidating. Further surveys along these lines were contemplated, but it was not possible to assemble the committee.

It seems that there is sufficient liaison with the nursing profession in legislative committee, etc., and existence of this committee as a standing committee may be superfluous.

THOMAS F. FUJIWARA, M.D.

Nurses' Liaison Committee

Your Reference Committee was informed that the Bylaws & Parliamentary Committee is reviewing the structure of the Nurses' Liaison Committee. Your Reference Committee recommends that the scope of the activities of the Nurses' Liaison Committee be enlarged.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PRESIDENT'S REPORT

This report was given orally.

President's Report

The Report of the President made two specific recommendations: (1) Consideration be given to expanding the communications system between the Hawaii Medical Association office and the President; and (2) that the President-elect attend the Annual Meeting of the American Medical Association, and that officers of the Association be sent to the AMA Headquarters for indoctrination. Since both of these proposals require the expenditure of funds not currently budgeted, your Reference Committee recommends that the President's recommendations be referred to the Council for further study.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

RESOLUTION NO. 3

Re: Scientific Speakers for Neighbor Islands

WHEREAS, Inexpensive transportation between Honolulu and the neighboring islands is unavailable; and

WHEREAS, The cost of bringing speakers from Honolulu to the neighboring islands is a serious threat to the solveney of the various county societies' treasuries; and

WHEREAS, The physicians of the neighboring island are not often able to leave their patients and travel to Honolulu to attend scientific sessions; and

WHEREAS, It is in the best interests of the health of the people of Hawaii that the physicians in all areas have made available to them the knowledge and up-to-date information being brought into this State by visiting medical authorities; and

WHEREAS, The Charter of the Hawaii Medical Association sets forth the purposes of the Association and states that one of the purposes is to federate and bring into one compact organization the entire medical profession of the State of Hawaii; and

WHEREAS, Another purpose of the Association set forth in its Charter is to extend medical knowledge and advance medical science and to promote the betterment of public health; therefore, be it

Resolved, That the Hawaii Medical Association regain its position of leadership in medical education and provide scientific speakers, either through the courtesy of the pharmaceutical companies or through an appropriation in the Association's budget, to provide to its various component county socities men of prominence to present scientific papers to the members of county medical societies which express an interest in obtaining speakers; and be it further

Resolved, That the Hawaii Medical Association sponsor at least three speakers to the Island of Hawaii each year.

Submitted by HAWAII COUNTY MEDICAL SOCIETY

CONVENTION AND SEMINAR

During the past year a special seminar following the AMA San Francisco meeting took place in Honolulu. I believe that much credit is due my predecessor, Dr. John Felix, for the excellent planning. However, the local attendance was poor. This is unfortunate, because the seminar covered a wide range of topics with excellent speakers. There was no registration fee for the local members.

I believe that the above points out a problem with which we are all concerned. Both this committee and the Scientific Program Committee are aware of this problem. The problem boils down to too many meetings competing for the time of the busy practitioners. The meetings are conducted by the individual specialty groups as well as the different institutions with their visiting professorship programs. The solution to this problem can come only from the cooperation among physicians involved in the planning of programs.

In the past year, this committee has also considered various means of publicizing Hawaii as a place for special seminars and looked into means whereby it would be engaged in the planning of the scientific programs. The problem is not as simple as it appears. The planning of scientific programs and their execution is not without expense. The reimbursement for this expense can only be assured if this committee is involved in the original planning of the convention. The difficulty arises in determining whether or not this committee plays a primary or secondary role in the over-all planning.

The Hawaii Visitors Bureau is interested in the planning, but we are not certain at what point they are willing to let this committee take over. In our meetings with Mr. Fowler of HVB, we were told of the "machinery" which they have to publicize meetings and to contact the various

medical organizations. He stated that they can also make the travel arrangements. He also stated that some funds should be available for the arrangement of meetings.

It is my belief that this committee must be prepared to undertake two to three years of advance planning and publicity. In other words, it is a feeling of this committee that we should be thinking of seminars for medical organizations in 1967 and 1968 or even later.

Finally, again, I must emphasize that the success of this committee will depend very definitely on the cooperation between this committee and the various specialty groups within the profession.

PAUL Y. TAMURA, M.D.

Convention and Seminar Committee and Resolution No. 3

Your Reference Committee next considered Resolution No. 3 regarding scientific speakers for neighbor islands, and the report of the Convention & Seminar Committee. Your Reference Committee notes the work of this Committee. There is, at present, considerable confusion in the minds of the members of the Association as to the specific function and the interrelationship of the Convention & Seminar and Scientific Program Committees. Your Reference Committee supports the suggestion of the Convention & Seminar Committee that it be a long-range planning committee, and be responsible for coordinating all of the scientific programs in the State. This Committee should work very closely with the various specialty societies and the various county medical societies and also hospitals. This Committee should function as a clearing house for all scientific programs in the State.

Since there is to be a long-range planning committee and should have continuity, your Reference Committee recommends that committee members be appointed for three-year terms.

Your Reference Committee considered Resolution No. 3, submitted by the Hawaii County Delegation. Your Reference Committee moves that Resolution No. 3 be adopted, with the substitution of the following for the last Resolved:

> ***Resolved.*** **That the Hawaii Medical Association, through its Convention & Seminar Committee, make suitable arrangements for the availability of scientific speakers to all county medical societies.**

ACTION:

The Chairman moved adoption of this report. A motion to amend by inserting the words "and also hospitals" after "various county medical societies" in the Reference Committee report was passed. The report as amended was adopted.

SCIENTIFIC PROGRAM

The Scientific Program Committee began early in May, 1964, to plan for the scientific portion of the 109th Annual Scientific Meeting of the Hawaii Medical Association. Charged with the responsibility of developing a scientific program which would have broad appeal to the varied and diverse interests of our increasing membership, but whose attendance at the annual meetings has not increased proportionately, the committee spent the early months discussing the following: reasons for lack of physicians' interest and participation, probable topics that would appeal to the entire membership, changes in format of our Annual Meeting to one composed of various specialty sections, and the problems of conflicting meeting dates. Then the problem of financing arose. Financial support, which should not have been a major problem, suddenly assumed overwhelming proportions. Anticipated financial underwriting of the speakers was not available due to other commitments. The Council was requested and agreed to underwrite the Annual Meeting for costs up to $4,000 if the necessary funds could not be obtained. However, due to the splendid cooperation of Wyeth, Upjohn, E. R. Squibb Companies and their local representatives, the Hawaii Thoracic Society, the American Cancer Society and its Hawaii Chapter, the scientific program of the 109th Annual Meeting was finalized without using any of the above-mentioned $4,000.

The basic general theme for the Annual Meeting will be "Chemotherapeutics"—a subject which should appeal to all physicians practicing in Hawaii. The scientific meetings will be held at the Princess Kaiulani Hotel. Free coffee and breakfast rolls, cost to be borne by HMA, will be served prior to the meeting.

The scientific program will include presentation of papers and one panel discussion. Speakers and their sponsors for this meeting are: F. J. L. Blasingame, M.D. (AMA); Murray M. Copeland, M.D. (American Cancer Society & Hawaii Chapter of ACS); Windsor C. Cutting, M.D.; Sidney Finegold, M.D. (Upjohn); Moses Grossman, M.D. (Wyeth); Donald E. Pickering, M.D.; Elmer C. Rigby, M.D.; and Mr. George Squibb (E. R. Squibb & Sons).

The Hawaii Thoracic Society will sponsor its Fireside Chats on the evening of April 28, 1965.

Due to problems encountered in 1965, the Chairman, with the approval of the committee, has already commited Geigy Company to underwrite a major, if not the entire amount, of the scientific program for the 1966 Annual Meeting. Upjohn Company has also agreed to some financial support in 1966. Further details concerning speakers, topics, etc., will be worked out by the incoming committee.

To prevent future conflicting schedules of scientific meetings, the Chairman submitted a resolution to the special January 16, 1965, meeting of the House of Delegates, which was adopted and circulated as recommended.

It is strongly suggested that the scientific program be in the planning phase at least 12 to 18 months prior to the time scheduled for the meeting in order to obtain the best selection of speakers. It is also urged that financial arrangements be secured at least 12 months in advance of the meeting.

There was considerable discussion regarding registration fees for the participating guest speakers of our Annual Meeting. It was the general feeling of the committee that the registration fees should be waived and the following recommendations are submitted:

(1) Waiver of registration fees for all guest speakers, including HMA members, participating in the Scientific Program of the Annual Meeting; (2) change in format and location (possibly to HIC) be reconsidered in 1966.

ROBERT P. C. HO, M.D.

Scientific Program Committee

Your Reference Committee notes the recommendation in the Scientific Program Committee that registration fees for all guest speakers, including HMA members participating in the Scientific Program of the Annual Meeting be waived. Your Reference Committee accepts this recommendation with the exception of that portion which reads "including HMA members."

Your Reference Committee further noted that the Scientific Program Committee recommended the change in the format and location of the Annual Meeting in 1966 and approves this recommendation.

Your Reference Committee further recommends that consideration be given by the Scientific Program Committee and Arrangements Committee to holding the Annual Meeting on other islands.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PENSION & INVESTMENT

This committee met to discuss the three matters referred to it: (1) Investment of Association and Physician Benevolent Fund reserves. (2) Pension plan for employees. (3) Salary structure for staff.

With reference to the first assignment, letters have been

sent to each of the three oldest trust companies in Hawaii asking for consultation and recommendations. At the time of this report, only one reply has been received and the committee does not have sufficient information at hand to enable it to make a recommendation. The purpose of this investigation is to determine if it would be advisable to transfer a portion of the present reserves from the savings and loan accounts where they are now kept to another type investment. With reference to the pension plan, Wyatt & Company has been engaged as an actuary to set up the basic foundation of a true pension plan and to do all the necessary work to make it operable, including IRS approval. No investment vehicle has been chosen. With reference to the third assignment, agreement for salary increments was reached and the increases are reflected in the 1965-66 proposed budget.

HERBERT H. Y. CHINN, M.D.

Pension and Investment Committee

Your Reference Committee noted the report of the Pension and Investment Committee, and accepts the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

TREASURER'S REPORT

The income for the 1964-1965 fiscal year, which will end June 30, will probably be slightly less than the amount estimated in the budget due to two items: (1) The Journal costs may be higher than anticipated and (2) the Arrangements Committee reduced the annual meeting registration fee from $15 to $5. However, total expenses should be less than amount budgeted.

The monies requested by the individual committee chairmen are set forth in the budget presented below and do not necessarily reflect the recommendation of the Council or the Treasurer. The income is figured on an extremely conservative basis; i.e., the dues income is based on the total dues-paying membership as of March 31, 1965, rather than on an anticipated increase. The annual meeting income is somewhat lower than in the past and reflects the recommendations of the Arrangements Committee (that there be no registration fee for HMA members) and on the recommendation of the Scientific Program Committee (that serious consideration be given to holding the meeting at HIC, which has excellent facilities but which is more expensive). This year's experience with the lower registration fee and different format should be helpful to the delegates in making a determination of policy for subsequent meetings.

The following committee requests were made and are combined in one figure in the budget: Careers, $300; Diabetes, $300; Hawaiian Academy of Science, $150; Legislative, $7,860 (Clerical, $1,000; Counsel, $5,000; Entertainment, $1,000; Mailings, $650; Taxes, $60; Today's Health, $150); Medical Care Plans & Fees, $800; Public Relations, $10,530 (Counsel, $6,000; Miscellaneous Newspaper Ads, $500; Dues, $10; Miscellaneous Printing, $150; Miscellaneous, $50; Message of the Month, $1,110; Entertainment—press, etc., $100; Photo Costs, $50; Press Awards, $110; TV Sunday Ads, $600; TV Moderator, $1,040; TV Films and Visual Aids, $500; TV Postage, $30; TV Miscellaneous, $30; Travel for PR Committee Members and Counsel, $250); Mental Health, $750; Maternal & Perinatal Mortality, $300.

Slight savings were noted in the 1964-65 budget for Council meetings. One meeting was supplanted by a special House of Delegates meeting and another by a post card poll. However, the cost of holding the meeting on Maui, although partially subsidized, ran the total up close to the amount budgeted.

An increase for the bookkeeper was approved by the Council and this is reflected in the anticipated expenses. It might be noted that the accounting system is in very good shape and reports are coming in on time. Delinquent accounts receivables are being listed and there is only one account that is more than 90 days old—Hawaii Ambulance, for a JOURNAL advertisement.

The budget for postage will run over the anticipated amount due to the increased mailings and a more expensive way of handling the annual meeting reports, the printing costs of which will be reflected in the annual meeting account.

While the President did not use his contingency fund, I feel that the amount should remain unchanged. There were several expenses which were authorized and which were not budgeted. These include:

Plane fare to PR Conference for Mr. Dodge	$ 378.54
Expenses to send Dr. Moore to special AMA Meeting	581.50
Medical Care Plans & Fees Final Meeting	170.00
	$1,130.04

The telephone and cable costs are somewhat less than anticipated and, in general, savings were made in almost every committee account item not involving salaries, which should result in a savings of about $4,310.

Recommendations: 1. *Budget:* That the budget that follows be accepted by the House of Delegates with whatever amendments they elect to make on the requests of the committees. 2. *Dues:* Even though there is an anticipated loss, there should be no increase in dues in 1966. This year's gain will offset next year's loss; all concerned should be cautioned to exercise economy. 3. *Annual registration fee:* A definite policy should be set and followed for the registration fees for members and nonmembers at the annual meeting. 4. *Auditors:* Our present auditors, Leong & Leong, have continued to serve us well and should be retained.

HERBERT Y. H. CHINN, M.D.

BUDGET

	1965-66 PROPOSED	1964-65 ANTICIPATED	1964-65 BUDGETED
INCOME			
Membership Dues	$63,610.00	$63,000.00	$63,000.00
JOURNAL	(2,550.00)	(2,680.00)	(1,660 00)
Annual Meeting	2,560.00	5,570.00	6,640.00
Interest Income	2,700.00	2,400.00	2,200.00
Miscellaneous Income	900.00	900.00	750.00
Assessments	.....	.....	
Miscellaneous Scientific Meetings	200.00	150.00	
Assessments			
TOTAL INCOME	$67,420.00	$69,340.00	$70 930.00
EXPENSES			
AMA Convention	$ 2,690.00	$ 3,220.00	$ 3,220.00
Audit & Accounting	2,000.00	1,850.00	1,580.00
Auto Expense	600.00	600.00	600.00
Council Expenses			
Travel	780.00	340.00	380.00
Meals	240.00	120.00	280.00
Per Diem	400.00	240.00	240.00
Donations	20.00	20.00	20.00
Entertainment			
Staff Expenses	400.00	400.00	
Guest Expenses	150.00	150.00	
Insurance	500 00	500 00	760.00
Library Contribution	100.00	100.00	100.00
Miscellaneous	200.00	250.00	400.00
Postage			
Stamps	1,200.00	1,400.00	1,000 00
Bulk Mailing	300.00	550.00	300.00
Permit	30.00	30.00	30.00
President's Contingency Fund	500.00	.....	500 00
Rent	3,170.00	3,170.00	3,170.00
Repairs & Maintenance	200 00	200.00	200 00
Retirement	3,150 00	2,550.00	2,550.00
Salaries	31,470.00	28,600.00	28,600.00
Stationery, Printing & Supplies	1,400 00	1,600.00	1,500.00
Subscriptions & Dues	830.00	810 00	810.00
Special Authorized Expenses	.....	1,130.00	.....
Taxes	1,120.00	1,050 00	1,120 00
Telephone & Cable	1,400 00	1,400 00	2 000 00
Travel	300.00	300.00	500.00
Woman's Auxiliary	3,180.00	3,150.00	3,150 00
Furniture & Fixtures	600 00	.....	600.00
Committee Expenses	20 990 00	19 610 00	23 920.00
Less JOURNAL Reimbursement	(7.000.00)	(7 000.00)	(7 000.00)
TOTAL EXPENSES	$70,920.00	$66 340 00	$70 930 00

Treasurer's Report

Your Reference Committee noted the report of the Treasurer and commends him on the superior performance of his duties. Your Reference Committee accepts the recommendations in the budget and accepts the budget as proposed. Your Reference Committee notes with pleasure that there will be no increase in the dues. Your Reference Committee has already commented on the amount of annual meeting registration fees and concurs with the recommendation of the Treasurer that they should be maintained as established.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PUBLICATIONS

This committee was established to carry on five principal duties: (1) Present nomination for editor of the HAWAII MEDICAL JOURNAL to the Council annually. (2) Set editorial policies. (3) Assist the editor in reviewing manuscripts for publication. (4) Determine fiscal policy of JOURNAL. (5) Determine acceptability of advertising copy. Except for the first duty outlined, questions of policy are taken up only after a request for assistance has been made by the Editor, or a suggestion for change has been instituted by a member of the Association.

The committee reviewed one scientific paper which was published after suggested revisions had been made. It approved the insertion of a Peace Corps advertisement without charge to the Corps. The acceptance of an advertisement offering office space was not referred to the full committee since it did not deviate from the established policy of accepting copy from buildings who want to attract doctors as occupants. Ordinarily letters to the editor are published regardless of whether they are complimentary or critical. Just this week, however, a letter has been received which might present a legal problem and the committee is being asked whether or not it should be carried in the usual manner under "Correspondence."

RANDAL A. NISHIJIMA, M.D.

Publications Committee

Your Reference Committee accepts the report of the Publications Committee.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

SECRETARY'S REPORT

The total active membership of the Association, as of December 31, 1964, was 677, an increase of 17 over December 31, 1963. The inactive members, reported only through Honolulu County, numbered seven, and there is no longer a problem in the reporting of these members. Of the 677 active members, 54 were granted dues waiver, an increase of eight over the previous year.

The total number of licenses issued to physicians to practice medicine in Hawaii as of December 31, 1964, was 1,128, an increase of 69 over last year. Of these, 327, or an increase of 34 over the previous year, were nonresidents. The civilian population of the State of Hawaii, excluding service personnel but including dependents, was 674,951, an increase of 3,992 over the previous year.

	ACTIVE DUES PAYING	ACTIVE DUES WAIVED	TOTAL
Hawaii	47	11	58
Honolulu	536	40	576
Kauai	10	1	11
Maui	30	2	32
TOTAL	623	54	677

Two nonaffiliated physicians were reported by Hawaii, 122 by Honolulu, 4 by Kauai, and 2 by Maui.

Six members died during 1964: A. G. Schnack, Nils P. Larsen, R. J. McArthur, Jay Kuhns, Frank C. Spencer, and Dorothy Kemp.

Since the last annual meeting there have been two Council meetings, one of which was on Maui, plus a special meeting of the House of Delegates which was called in January to determine a legislative platform and to advise the Medical Care Plans & Fee Committee relative to its negotiations with HMSA. The officers have been meeting regularly, usually on the second and fourth Wednesdays at 4:30 P.M., and the decisions made at these meetings have been transmitted to the Council in the Secretary's report. The following is a report of some of the more important actions taken by the Council since the last annual meeting. A resumé of the officers' meetings which have taken place since the last Council meeting is also included.

At the August 17 Council meeting, held at the Sheraton-Maui, the Mental Health Committee was given permission to solicit funds to send one member to a conference in Chicago. It was agreed to ask the county societies to include HAMPAC membership solicitation in their regular dues billing. It was voted to separate the Association and Honolulu County telephone lines. The decision to send Mr. Dodge to the Chicago PR Conference was made. County presidents were asked to refer three matters to their societies for discussion: (1) possible changes in the Medical Practice Act, (2) the establishment of hospital utilization committees on a county level, and (3) statewide participation in Careers Day. Dr. Harold L. Arnold, Jr., was reappointed Editor of the JOURNAL and commended on the fine job he has been doing over the years. Dr. H. Q. Pang circulated several reports on the Mabel Smyth Building operations and was present to answer questions. The previously-approved retirement fund was discussed and it was voted to leave the selection and type of investment program for the retirement fund to the discretion of the officers. Pending completion of the RVS, it was voted to sign the ODMC contract with the necessary changes in the tympanoplasty section. It was decided to extend a formal invitation to the AMA to hold a clinical meeting in Honolulu.

At the November 17 meeting, the Council was advised that a new agreement had been reached with Mr. Ajifu and the Treasurer's recommendation that the $125 fee be accepted was agreed upon. It was voted to defer the matter of the $30,000 reserved for improvements to the Mabel Smyth Building pending Honolulu County's decision on what they propose to do. It was voted to have the Tuberculosis Committee obtain a statement from the Department of Health concerning its policies relative to patient referral and outpatient care of active cases, (2) consider advisability of modification and implementation of the Department's program, and submit to the Council copies of forms which are normally sent to the patients. The matter of the Medical Examiner's bill was referred to the Legislative Committee for review and report to the House of Delegates at the January meeting of the House of Delegates. It was recommended that each councilor remind his committee chairmen of their position and that policy matters should be referred to the HMA officers and, if possible, to the Council members. It was recommended that the Hawaii Medical Association act as a "clearing house" for proposed scientific meetings. The Scientific Program Committee was guaranteed $4,000 in the event it could not obtain outside financing for the annual meeting program. It was voted to run a Peace Corps ad in the JOURNAL. Dr. H. Q. Pang gave a supplemental report on the Mabel Smyth Building. The Council voted to strongly endorse the principle of school health physicals during the birthday month. Future negotiations of the ODMC contract were delegated to the Medical Care Plans & Fees Committee. The President was authorized to sign the VA contract using 5.00 as a conversion factor.

Since the last Council meeting the officers have met to discuss a number of matters and have made the necessary decisions. They concurred on appointments to HMA and other committees, all of which have been listed in the monthly *Newsletter*. Drs. O. D. Pinkerton and George

Goto were sent as HMA representatives to the AMA December legislative conference. They referred the matter of a retirement plan to the Treasurer for investigation. The matter of investment of HMA funds, including the Physicians' Benevolent Fund, was discussed and the President-elect appointed a committee to investigate this matter. It was agreed that there should be no expansion of facilities to be visited by students participating in the Careers Day program. The Secretary was asked to take up the matter of establishing a review committee within the Medical Care Plans & Fee Committee. It was thought that after the completion of the fee survey this committee could take on added responsibilities. It was decided that except for visiting dignitaries, the "Notes & News" feature in the JOURNAL should be confined to HMA members. The Stokes's report, the University's proposed Biomedical Science School, and the difficulty of procuring government physicians in some areas were among the topics discussed at the January 6 meeting. The officers made recommendations to the Awards Committee relative to the criteria it was formulating. The Chronic Illness & Aging Committee was asked to review the new criteria set forth in the King-Anderson Bill and to determine how this criteria would affect Hawaii. The question of a possible overlap between the activities of the State and County Civil Defense activities was raised and Dr. Chinn was asked to check to see that no conflict exists. After advice from Mr. Thorson that he was unable to expand the activities of the HCMS Speakers Bureau and that he would prefer to keep the County's activities purely scientific, it was decided that a duplicate program was needed for the present and Mr. Dodge was asked to reactivate the HMA's Speakers Bureau. The President and members of the Automotive Safety Committee attended a meeting at City Hall relative to ambulance sirens and Mr. Thorson was asked to act as liaison between the City & County and HMA. It was decided that there should be a special meeting to see what could be developed in Hawaii that would be similar to the comprehensive health care bill being proposed in California. Salary structure matters were referred to the newly formed Pension and Investment Committee. Dr. Chinn advised the officers of Honolulu County's building plans. At the March 10 meeting the officers approved the Awards Committee's selection for the 1965 Robins Award. They decided upon a wooden bowl as a return present to the doctors of Gifu, Japan. The appropriateness of the President purchasing a trophy for one activity that takes place during the annual meeting was questioned and a letter was sent to the Arrangements Committee advising that this practice would be discontinued. It was decided that the Association should absorb half the cost of the physicains' lunches at the annual party for the Legislators.

When the AMA called a special meeting, the officers decided that in lieu of calling a Council Meeting to decide on how the HMA should participate, that the members be asked to vote by a post card poll. The Council voted to send the HMA delegate to the meeting with the instructions that the AMA implementation of an educational program, the AMA position on current legislation, and the extension of the Kerr-Mills support to all needy regardless of age be supported. It was also voted that the AMA should finance its program from reserves rather than by a raise in dues or by a special assessment.

At the last officers' meeting reference committee assignments were made. HAMPAC's recommendations for sending Drs. John Chalmers, George Goto, L. Q. Pang, Mr. William Dodge, and Mrs. Donald Jones to the May 22-23 AMPAC meeting in Washington were noted. Permission was given to the Medical Care Plans & Fees Committee to pay the members' expenses incurred in holding a dinner meeting of the full committee. A letter from Dr. Hamilton, in response to the Association's suggestion that it be consulted before its members are asked to serve on University committees, advised that he concurred with this procedure and it would be followed if the advisory committee were reactivated. However, with reference to the incident referred to in the HMA letter, he was anxious that there be no official positions presented.

In answer to a post card poll on next year's annual meeting, there was an incomplete vote. However, there being a majority return, it is recommended that the House of Delegates set the dates and place for the 110th Annual Meeting for the second week in May and that it take place in Honolulu, and that the Council be given premission to change the dates if unforeseen problems develop in scheduling the meeting for the dates selected.

RANDAL A. NISHIJIMA, M.D.

Secretary's Report

Your Reference Committee last considered the report of the Secretary and your Reference Committee wishes to commend the Secretary upon his comprehensive report and the conscientious performance of his duties.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

Chairman's Remarks

Your Reference Committee would like to thank all of those who appeared at its meeting and whose advice and counsel contributed so much to the preparation of this report.

Your Reference Committee Chairman would like to thank the members of this committee for their assistance and guidance.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

The Chairman moved adoption of the report as a whole as amended. It was adopted.

INSURANCE & MEDICAL SERVICES REFERENCE COMMITTEE

MEDICAL CARE PLANS & FEES

The bulk of the work of this committee has been carried out by the two hard-working subcommittees under the able chairmanship of Drs. George Mills (Fee Survey) and Chew Mung Lum (HMA/HMSA Negotiations). These two groups have spent many long hours on the projects assigned to them and they should receive special thanks and commendation for what they are accomplishing. Their reports will be submitted separately pending receipt of further information.

There were seven meetings of the committee as a whole of which the following is a resumé of the more important actions taken: (1) The HMSA was advised that any discussions relative to a "hybrid" full-service plan should be carried on direct with the Honolulu Foundation for Medical Care and HMSA was asked that this committee be kept informed of the progress. No further information has been received. (2) The matter of establishing fees for unlisted procedures in the Medicare Schedule of Allowances was referred to the Fee Survey Subcommittee, and further action is awaiting completion of the RVS. (3) The objections of the hospitals to the HMA's establishing fee schedules for radiology and pathology were discussed. The committee wishes to ask the House that it reaffirm the philosophy that it is the right of the Association to establish fees as it has done in the past. (4) Dr. Allison, upon request of the committee, wrote to HMSA reaffirming the HMA's position relative to the authority to negotiate with HMSA. Each county was advised of this action. (5) The HMSA's special plan for students and the proposal to reduce to 19 the maximum age for participation in a parent's plan was discussed. The HMSA originally requested consideration of lowered physicians' fees for the student plan. The committee did not agree to this suggestion. The committee compared the HMSA plan for

students with the plan now being offered at the University of Hawaii.

In addition to the above, the committee reviewed the HMSA Subcommittee's report and modified it slightly before it was presented at the January meeting of the House of Delegates.

At one of its meetings, both Mr. Veltmann and Mr. Yuen of HMSA were present.

At its last meeting, the committee reviewed the changes the HMSA proposes to ask for in the Federal Plan. HMSA was advised of the points on which there was agreement and on which there was disagreement. There will be an addendum to this report advising the House whether HMSA accepts the HMA's proposals as a basis on which to negotiate the new Federal Plan contract.

R. D. MOORE, M.D.

Medical Care Plans & Fees Committee

With reference to the first report of the Medical Care Plans & Fees Committee, your Reference Committee recommends approval of the committee's disagreement with the HMSA plan for the University students.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

FEE SURVEY DIVISION ADDENDUM

For the past three years, this committee of the Hawaii Medical Association has been working on a statewide Relative Value Study. This study was initiated through adoption by the House of Delegates of the Hawaii Medical Association of Resolution No. 1 at the 106th Annual held on Maui, May 3, 1962.

The study is now complete, therefore, it is the recommendation of this committee that (1) this study be called the Hawaii Relative Value Study; (2) the study be accepted, printed, and distributed immediately; (3) this study be re-evaluated at least every three years so that it may be kept current.

As chairman of this committee, I would like to thank all the members for their diligence, effort, and contribution of thousands of hours of their time to make this study complete.

GEORGE H. MILLS, M.D.

Fee Survey Division Addendum

Your Reference Committee recommends approval of the report, and the following recommendations: (1) this study to be called the Hawaii Relative Value Study; (2) the study be accepted, printed, and distributed immediately; (3) this study be re-evaluated at least every three years so that it may be kept current.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MEDICAL CARE PLANS & FEES ADDENDUM

FEDERAL PLAN: On April 14 the committee addressed the following letter to HMSA:

The Medical Care Plans & Fees Committee met to consider the proposals relative to the Federal Plan outlined in your letters of March 19 and reached the following conclusions:

1. *Dental Surgery:* The Committee does not concur with the proposed increase of benefits to include coverage of services of dental surgeons and hospital services necessary for dental surgery when ordered by a physician. It noted that this coverage is now provided in accidental injury cases, and the committee has no comment on current coverage.

2. *Physician Allowances for Intensive Care While Patient is Hospitalized:* While the proposal reflects some improvement, the fees proposed are still inadequate and we respectfully request that the allowance be brought up to the current going rate in the community; i.e., $25.00 an hour for intensive inhospital medical care.

3. *Hospital Visits for Medical Cases:* The concern of the Committee is that the total fee be fair and equitable. The Committee requests that the total fee for follow-up hospital visits be set at $5.00 and that the total fee for the initial hospital visit for medical cases be set at $15.00.

4. *Physical Examinations—Well Patients:* The Committee requests that the following fees be instituted in the Federal Plan for routine physical examinations in well patients:

(1) Routine Physical Examination (kindergarten through high school), $7.50; (2) Routine Physical Examination (University or college level), $10.00; (3) Routine Physical Examination (Adult, Well Patient), $10.00.

It is further recommended that the extent of these examinations be restricted to the procedures presently listed in the HMSA handbook except that the inclusion of urinalysis be eliminated; that the fees allowed for laboratory work should be in addition to the fees allowed for the examinations themselves.

5. *First Office Visit:* The Committee asks that the fee allowed for the first office visit for an old patient, new illness, be increased to the fee currently being charged in this community; i.e., $7.50. The proposal that the total allowed for subsequent, routine office visits, $5.00, is acceptable to the committee.

6. *Mental Care Benefits:* The Committee has no comments to make on this proposal. Your letter of April 9 relative to outpatient care was received after the committee meeting.

7. *Surgical Fee Schedule:* The proposal of the HMSA that the fee schedule for the Federal Plan be changed from the current level to the 1960 CRVS converted at $4.50 a unit is not acceptable. The Committee asks that until such time as the Hawaii RVS is completed that the surgical fees be based on a schedule that more closely approximates the going rate in the community and that they be based on the 1960 CRVS converted at $5.00.

8. *Hospital Intensive Care Units:* The Committee concurs with the proposal as outlined in your letter.

In addition to the above, the Committee feels very strongly that the words "if billed" should not appear in any fee schedule, prospectus, contract, or notices referring to the Federal Plan.

The Committee would appreciate receiving additional information relative to the requirements of the Federal Plan. (1) Does the Civil Service Commission set the exact amounts that the patient pays on coinsured items? (2) Is the contract HMSA signs with the Federal Government on a statewide basis? (3) Must it provide equal benefits throughout the State? (4) Since practices and facilities vary from area to area what provisions are made to equalize these variances?

We hope that we can reach an agreement on the provisions of the new Federal Plan soon because, as you know, the HMA's House of Delegates meets the end of this month and the Committee will make its report to them at that time.

In a telephone conversation with Mr. Veltmann, your chairman was advised that the answer to the first three questions is yes and that the answer to the fourth is that there is no provision to equalize variances. Mr. Veltmann also stated that although the HMSA must provide equal benefits throughout the State to the subscribers, the contract does not require that they pay the same fee to all physicians and that the fee schedule may vary from area to area within the State. He expressed doubt that the fees requested for medical services were actually the going rates. A review of the fee survey taken two years

ago substantiated our claim that the fees requested do in fact reflect the going rates in the community. With this information at hand, the committee will again reiterate its April 14 request. It should be noted that although we have not been officially notified, there have been increases in the indemnified amounts in the Federal Plan which have effected a savings in the patients' out-of-pocket costs.

VETERANS CONTRACT: The committee has been advised that the following has been accepted for the fiscal year 1966 based on the California RVS: Surgery (except ophthalmology (5400-5411)) 3.9; Surgery, 5400-5411, 5.0; All other sections, 5.0 except that the unit value for 9020 (initial routine hospital visit) has been reduced from 3.0 to 2.0. The committee plans to protest the proposed reductions and hopes to reach an acceptable agreement with the VA.

RICHARD D. MOORE, M.D.

Medical Care Plans & Fees Committee Addendum

With reference to the Medical Care Plans & Fees Committee addendum, your Reference Committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HMA/HMSA NEGOTIATING DIVISION ADDENDUM

The subcommittee received a letter from HMSA dated April 26, 1965, in which they replied to the suggestions for changes which were made by the Association which followed the mandate of the House of Delegates (see page 304 of the March-April issue of the HAWAII MEDICAL JOURNAL). Negotiations of this subcommittee were with HMSA staff members who reported to their Advisory Committee (Messrs. William M. Bush, Robert W. Chatterton, John A. Driver, and Willard Wilson, plus Dr. Robert Y. Katsuki) who made recommendations to the HMSA's Executive Committee (Messrs. William M. Bush, Robert W. Chatterton, John A. Driver, Richard Robb, and Willard Wilson plus Drs. Robert Y. Katsuki and Randal A. Nishijima). The HMSA's Board of Directors, which includes the seven members of the Executive Committee, voted to accept the Executive Committee's recommendations.

The HMSA expressed appreciation to the HMA for the time that was spent and advised that the "HMSA believes it would not be proper to delegate to another party its own primary responsibility to its members, and to acquiesce to the HMA's requests would result in such improper delegation of responsibilities. Furthermore, in the interest of efficient business management, HMSA is reluctant to entertain changes which might interfere with sound practices in a highly competitive market. We feel a lot has been accomplished to improve some of our Administrative Operating Procedures and are confident that much more can be accomplished in these areas through further exploration to find equitable solutions."

In this same letter the HMSA listed its stand on matters on which the House of Delegates previously voted, and divided these into 12 areas for comment. It should be noted that there has never been any discussion of fees with the HMSA and the negotiations have concerned themselves exclusively with administrative relationships between the HMSA and the physicians.

Of the twelve areas listed by the HMSA, they agreed to two of the HMA recommendations—to delete the word "unusual" in relationship to procedures requiring the skill of more than one physician, and to set a specific termination date for the master contracts. They recommended that 90 days' written notice be given and that if no written notice is made by either party, the contract would continue for an additional contract period. They did not comment on the HMA's suggestion that the contracts be for periods of two years nor did they include the present provision that a contract may be canceled by either party at any time with specifically designated written notice.

The HMSA asked for deferral of one item pending discussion of the fee schedule—endoscopic services.

The HMSA asked for deferral of another item in order that they could have more time to analyze its administrative and legal aspects—that the HMSA transfer to the Physicians' Benevolent Fund the amounts deducted from physicians' checks as penalties for late submission of claims.

The HMSA asked for a compromise on one item—nominations for vacancies. Their letter states: "We feel that the HMSA Nominating Committee should maintain its rights to select candidates from the medical profession in the same general manner as used in selecting other members representing other groups, and suggest the following alternate proposal:

"'When more than one physician vacancy exists, HMSA will accept a total slate averaging two (2) names per vacancy.'

"This does not change the present procedure when only one vacancy exists."

The HMSA stated that they still wish to make two changes in the Administrative Operating Procedures which the HMA believes should remain unchanged—elimination of anesthesia services and elimination of indemnity items. It should be noted that under the existing contract the HMSA is not supposed to make any changes in indemnity allowances without first obtaining permission from the counties with which it contracts.

The HMSA stated their refusal to make any concessions on the following items which the House instructed this committee to return and to try once again to reach an agreeable solution: (1) Provision for a patient to assign benefits to a nonparticipating physician if he so desires. (2) No change in the individual physician agreements. It should be noted that the only change requested was that the individual physician agreements automatically terminate with the termination of a master contract. (3) Separate agreements for physician participation in the Federal Plan. (4) Prior notice to the county societies of proposed changes in the Physicians' Handbook. It should be noted that this request was made after HMSA asked to transfer certain portions now in the Administrative Operating Procedures (where they cannot be changed without the Society's approval) to the Physicians' Handbook (where they may be changed at any time without conferring with the physicians). (5) Approval of new plans which the HMSA plans to offer. It should be noted that the present contract calls for Society approval of new plans only if they are at variance with provisions of the HMSA schedules of compensation or the Administrative procedures and although this is a part of the master contract, the HMSA has made changes in these areas of some of its plans without notifying the county societies.

This subcommittee reported to its parent committee the contents of this HMSA communication. It was noted that several years have been spent in trying to reach an agreement with the HMSA and the subcommittee asked for instructions. After discussion of the action taken at the last meeting of the House of Delegates, it was voted to recommend that the county societies terminate their contracts with HMSA and that they in turn recommend to their members that they terminate their individual contracts with HMSA. There was one dissenting vote.

In view of the action of the Medical Care Plans and Fees Committee, this committee asks that the House of Delegates recommend to each county society that it terminate its contract with the HMSA and that the county society in turn recommend to its members that they terminate their individual contracts with HMSA. It should be noted that the present contracts with HMSA state that the Society "may actively discourage its members from entering into or continuing to be parties to any individual agreements offered by HMSA which are not approved by the Society. If either HMSA or the Society

has given notice of termination of this agreement, the Society may then also actively discourage its members with respect to such individual agreement."

CHEW MUNG LUM, M.D.

HMA/HMSA Negotiating Division Addendum

Your Reference Committee recommends the following: (1) To accept HMSA's offer of specified expiration date on the Master Contracts, with reopening of negotiations also specified. (2) To inform HMSA that we intend to accomplish a tie-in of Individual Contracts to the same termination date of the Master Contract. (3) To inform HMSA that we have rights involved in any change of plans, administrative operative procedures or schedule of compensation. (4) To inform HMSA that the Federal negotiations must be based on the HMA relative value study. (5) To inform HMSA that the doctors do not wish to run HMSA and, as an act of good intention, will relinquish our demands for

(a) Assignment of benefits.
(b) Election to a panel for HMSA directorship.
(c) Return of penalty of late claims.

ACTION:

The Chairman moved adoption of this portion of the report. The Reference Committee Chairman was asked to clarify several items in the report.

It was voted to amend the motion to adopt this portion of the report by deleting Section 5 (c).

A motion to amend the motion further by inserting the words "for the present time" after "demands" was lost.

It was moved and seconded to amend Section 2 of this portion of the report.

The Chair declared a 10-minute recess and asked the Reference Committee to reconvene and come back with more specific recommendations.

The motion before the House prior to the recess was withdrawn.

The Reference Committee amended its report to include a motion to accept the recommendation of the Medical Care Plans & Fees Committee that the House of Delegates recommend to each County Society that it terminate its contract with the HMSA and that the county society in turn recommend to its members that they terminate their individual contracts with HMSA. The motion was lost.

The Chairman moved adoption of Section 1 of this portion of the report. It was adopted.

The Chairman moved to adopt Section 2 without change. The motion was amended to change Section 2 to read that each county society be advised to ask each participating physician to write a letter on May 3, 1965 to HMSA stating his intention to terminate his individual contract if and when the master contract of his county society is terminated. The motion to amend was passed. The motion as amended was passed.

The Chairman moved adoption of Section 3 without change. The motion was lost.

The Chairman moved that Section 4 be changed to read "To inform HMSA that the Federal Civil Service Plan and all HMA/HMSA plan negotiations must conform to the Hawaii Relative Value Study."

The Chairman moved the adoption of Section 5 of this portion of the report as originally presented. The motion was amended to change Section 5 to read "To inform HMSA that the doctors do not wish to run HMSA, and that they have always acted in good faith in the past and will continue to act in good faith." The motion as amended was passed. A motion to move the previous question on all pending questions was passed. A motion to substitute the following for Section 5 "To inform HMSA that the doctors do not wish to run HMSA, that they have acted in good faith in the past, and will always continue to act in good faith" was lost. The Chair ruled that Section 5 in its entirety was deleted.

RESOLUTION NO. 10

Re: HMA Contracts Involving Fee Schedules

WHEREAS, The Hawaii Medical Association after several years of study has now developed a relative value fee study that reflects the values of procedures performed in this State; and

WHEREAS, From time to time it is obligatory for the Association to sign a contract with a third party which binds the participating physicians to a fee schedule; and

WHEREAS, There should be no difference in the treatment rendered patients of the physicians of Hawaii regardless of whether the services are rendered under a contract or on an individual basis; and

WHEREAS, A relative study may be used as the basis of a fee schedule if an appropriate conversion factor is applied to it; therefore be it

Resolved, That the Officers of the Hawaii Medical Association authorized to negotiate and sign contracts in the name of the Association be ordered not to execute any contract which binds participating physicians to a fee schedule unless that fee schedule is based on a relative value study adopted and approved by the House of Delegates of the Hawaii Medical Association.

Submitted by B. A. RICHARDSON, M.D.

Resolution No. 10

Your Reference Committee recommends that this Resolution be adopted.

ACTION:

The Chairman moved adoption of this resolution. It was adopted.

FEDERAL MEDICAL SERVICES

The Federal Medical Services Committee has met approximately once every two months. The meetings are held usually to review Medicare claims that are sent in by doctors. Unfortunately, an acceptable fee schedule that can be distributed to the membership has never been authorized. As a result, much time is spent by the committee reviewing medical claims which involve special reports or unsual requests and charges that are not in keeping with the fee schedule, which is kept at the Hawaii Medical Service Association or at the HMA offices. Until such time as an acceptable fee schedule is made available, this committee will be kept busy reviewing claims. We are hopeful that the Hawaii Medical Association can soon complete its relative value schedule so we can proceed to negotiate an acceptable conversion factor.

In closing, I wish to thank all the hard working members of this committee. I especially would like to thank those members from the neighbor islands who have faithfully attended the meetings in Honolulu.

B. ALLEN RICHARDSON, M.D.

Federal Medical Services Committee

Your Reference Committee recommends approval of this report.

Your Reference Committee recommends no change be made in the present handling of the Medicare (ODMC) Schedule of Allowances, but that when the HMA relative value study is completed that this be used with negotiations with the ODMC.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HOSPITAL

This committee began meeting in June, 1964, at which time the committee functions were defined as: 1. Act as liaison between physicians and hospitals in questions of physicians' individual rights. 2. Act in conjunction with existing community committees dealing with hospitals; i.e., Department of Health, Health Planning Facilities Council, Department of Social Services, etc. 3. Have access to recommendations of hospital accreditation surveys and, if possible, meet with their representatives. 4. Strive for liaison with the State on a review of political appointments to State and Federal boards and commissions.

The committee met monthly and reviewed the following problems:

1. Complaint from a neighbor island physician regarding unconstitutional actions of a hospital administrator against said physician. Action: Settled at County Society level in the form of a resolution to the Hospital Trustees and Administrator criticizing the administrator's actions and warning against future infractions.

2. Complaint of a physician against The Queen's Hospital regarding defranchisement of said physician's privileges. Action: Letter sent to Board of Trustees, Medical Advisory Committee, Credentials Committee, and the Administrator of The Queen's Hospital advising correction of this situation if facts agreed with physician's complaint. The Queen's Hospital response to the letters of inquiry were varied. The gist of them being that the physician concerned could resubmit his application for privileges and it would be given due consideration. This communication was forwarded to the involved physician.

3. Complaint of another physician regarding denial of hospital privileges at four hospitals in Honolulu County. The committee found no evidence of breach of constitutional procedure at any of the four named hospitals.

4. Met with the Hawaii Hospital Association on four occasions. As a result of these meetings, the committee recommended legislative support for the hospitals' proposal of fee-for-service care of both in- and outpatients of the Department of Social Services. The hospitals in turn have not endorsed the principle of Eldercare as opposed to Medicare in answer to a formal request from this committee.

At present this committee is studying a proposal by the hospitals to discontinue courtesy discounts. The hospitals fear these discounts may jeopardize their nonprofit tax status. We are awaiting an opinion from the legal department of the AMA.

It is this chairman's opinion that these meetings have for the most part resulted in a free flow of information and planning in areas of joint concern to both hospitals and physicians; it is also this chairman's opinion that hospitals are not as dependent on physicians' suggestions in areas of education, nursing, and facility planning as they once were and your chairman would urge all doctors to actively participate in hospital committees and in hospital organization lest we lose more prerogatives by default.

Unfinished business: 1. The problem of courtesy discounts by the hospitals. 2. Ethical hospital contracts with physicians. 3. The Stokes's report and its alternatives.

An insurance company complaint of overutilization of hospitalization on a neighbor island was referred to this committee. No information was received from the county involved and no action was taken by this committee.

I would like to thank the members of this committee who have worked hard to establish this committee as a functioning unit and who have given honest, objective opinions on some very difficult problems.

KEITH F. O. KUHLMAN, M.D.

Hospital Committee

Your Reference Committee recommends approval of the report.

Your Reference Committee recommends that the HMA support in principle fee-for-service hospital care for indigents.

Your Reference Committee recommends that all doctors be urged to actively participate on hospital committees and in-hospital organizations lest we lose prerogatives by default.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

INDIGENT MEDICAL CARE COMMITTEE

The meetings of the Indigent Medical Care Committee have been joint meetings with the Chronic Illness and Aging Committee and the energies of this committee have been spent as described in the Chronic Illness and Aging Committee report.

R. FREDERICK SHEPARD, M.D.

Indigent Medical Care Committee

Your Reference Committee recommends approval of this report.

Your Reference Committee further recommends that the over-all problem of reimbursement of physicians for medical care of the indigents and medical indigents be studied by the Indigent Medical Services Committee.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

LEGISLATIVE

A complete report of the Legislative Committee's activities cannot be made at this time inasmuch as the processing of legislation is just beginning. An addendum report will be presented to the House of Delegates before it meets. In the meantime, the committee would like to recommend that the Association retain Mr. Edwin Honda as its Legislative Counsel, if he is willing to continue, and that the budget for the coming fiscal year remain the same as for the present year with the following reductions which can be effected because of the shorter session that will take place in 1966: Clerical assistance, reduce from $1,400 to $1,000; Legislative Counsel, reduce from $7,000 to $5,000; Entertainment, reduce from $2,000 to $1,000.

THEODORE T. TOMITA, M.D.

Legislative Committee

Your Reference Committee recommends approval of this report.

Your Reference Committee recommends that the Association retain Mr. Edwin Honda as its legal counselor and that the budget as presented for the coming fiscal year be granted.

ACTION:

The Chairman moved adoption of this portion of the report. The motion was amended to read "The Association retain a legislative counselor to be determined by the Council." This portion of the report was adopted as amended.

LEGISLATIVE COMMITTEE ADDENDUM

At the time of the cut-off date for entering new bills, 1,072 Senate and 1,368 House bills were introduced in the Third State Legislature's general session. Of these 75 Senate and 85 House bills relating to health and medicine were followed. Many of these bills are duplicates. A list of these bills and the resolutions was circulated to

the membership with a request that the Legislative Committee be advised of any measures in which a member or Society had a particular interest. No requests were forthcoming. Included in the mailing was a run down on all bills on which there had been any action, 53 (including duplicates). As is customary, few of the so-called "private" bills—those not introduced by the Administration—and, as a matter of fact, many of the administration bills not on the Governor's program, become law.

Unless the session is extended, probably only two or three of the bills will be sent to the Governor. As of April 27 when this addendum is being written the only bills on which action may result in passage are the following:

SB-178—Which would prohibit filling of prescriptions written by doctors outside the United States.

SB-427—Provides for emergency hospitalization in general hospitals. HD-1 making it necessary for in-hospital examination by a psychiatrist, is up for third reading in Senate.

SB-656 (not previously listed)—The omnibus tax bill which includes the provision that nonprofit medical, hospital indemnity associations will be made taxable. The tax is based on the gross premiums and it is proposed to raise this from 2¼% to 2¾% for local companies. At one time there was a possibility that this rate might go up to 12½%.

SB-680—This would permit incorporation of optometrists to provide contract group vision service plans. The HMA has protested its passage unless it is amended to provide safeguards to assure guarantee that members of the plan have access to doctors of medicine for care of visual problems and eye diseases.

HB-78—Original bill would require that at least one person on every regulatory board not be connected with profession or business of board. It was rewritten to increase this from one person to one-third of the Board. The HMA has protested this measure on the grounds that professional training is needed to judge the qualifications of applicants for licensure to practice a profession.

HB-101—Relates to air pollution control. No position taken by HMA.

HB-102—Relates to water pollution control. No position taken by HMA.

HB104—Increases to $2400 the amount a pensioner can have as outside income and still receive free medical care and hospitalization at county expense. The HMA did not protest this type legislation this year.

HB-106—Relates to research and programs on problems of the aged. No stand taken by HMA.

HB-144—The operating budget. This contains sections relative to PKU testing, payment for medical services, and teachers aides to help with health work.

HB-179—Mental Retardation revision. Dr. K. Y. Lum appeared to support this bill.

HB-489—An administration bill seeking support for permitting insurance companies to pool their risks and join Western-65. Supported by HMA.

HB-881—Mandatory PKU testing at State expense. The HMA protested making this test mandatory and requested that those who could afford to pay for the test be asked to do so. These refinements were not included in the bill that passed third reading in both the House and Senate

HB-1170—Revises the law relating to private mental and general mental hospitals caring for psychiatric cases. Dr. K. Y. Lum appeared to support this legislation.

HB-1310—Willing of eyes. HMA requested that the documents not be filed with the Director of Health. This deletion was not made in House. Now in Senate.

The final results of the session will be reported to the membership immediately after expiration of veto period.

THEODORE T. TOMITA, M.D.

Legislative Committee Addendum

Your Reference Committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PHARMACY

Your Pharmacy Committee has met on several occasions throughout the year to discuss pharmacy matters with respect to hospitals and more recently with respect to pending pharmacy legislation. It has also met more recently with the retail pharmacists and members of the Board of Pharmacy in an attempt to work out reasonable legislation with respect to the "over-the-counter" sale of certain drugs. At the time of this printing there is no definite word as to the type of bill which is being drawn up by the representatives of the Attorney General's office with respect to the control of this over-the-counter sale of drugs.

It is good to report that the relationship with the Board of Pharmacy and the Pharmacy Committee of your Association and with the retail druggists has improved considerably in the past year. There has been a better understanding of our mutual problems and a spirit of cooperation which definitely has been lacking over the past four or five years. It is earnestly hoped that this relationship will continue in the future, particularly in view of the fact that all of the allied fields of medicine must work in close cooperation with each other in solving our mutual problems.

I would like to thank the members of the committee for the time that they have given to the meetings and to the research which has been involved in some of the legislative problems.

JOHN F. CHALMERS, M.D.

Pharmacy Committee

Your Reference Committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

KAUAI COUNTY

What is progress? In which direction shall we make progress? How are we as a society influenced by progress? In medicine progress is made in the following manners, such as, in the effort to bring forth life, elimination of illness, extending life and delaying death. To these all are dedicated, but what are the answers to the other perplexing questions? These provocative questions were stated by the newly installed President, Dr. Kenneth K. Fujii, at the first meeting in 1964. Other officers who were also installed to serve during 1964 were Drs. Webster Boyden, Vice President, and Yonemichi Miyashiro, Secretary-Treasurer.

The opening guest spaeker of the year was Dr. A. Cockett, urologist from the U.C.L.A. Medical Center, who spoke on "Renal Hypertension."

The role of the physician in genetics brought the Society its February speakers, Drs. Virginia Apgar and Donald Char, who spoke on "Birth Defects" and "The Birth Defect Center Programs." This meeting was held jointly with the Kauai Nurses Association. In addition to the above two speakers the society heard from Mr. John Pompelli, AMA Field Director, who spoke briefly on the

role he played in bringing to the societies and associations in his area reports of the work of the AMA, including its legislative work in the Congress of the United States. Also, he stated, he could be considered an ear, to which societies, associations, and doctors could speak of their problems which in turn he would pass on to the AMA.

Like February, March again brought a joint program with the Kauai Nurses Association. The special speaker was Dr. Oscar Auerbach who spoke on the "Effects of Smoking on Various Respiratory Conditions." It may be stated now, the Society and its guests received early firsthand information preparing them well for the forthcoming national campaign against smoking. In advance of President Johnson's Health Program against heart disease and cancer the Society members moved to do their part by supporting the Department of Health's proposed Heart Survey.

In the area of cancer, four distinguished speakers were brought to Kauai by the American Cancer Society, these being Drs. R. Nordyke, C. Boyer, A. Leong, and E. Jim who reported on the progress being made in the field of cancer in regard to diagnosis. In the area of treatment of cancer they discussed the uses of chemotherapy, radiation, and surgery.

May was ladies' month as the Society was joined by members of the Kauai County Woman's Auxiliary. Guest speakers was Mrs. C. Rodney Stoltz, President, Woman's Auxiliary to the AMA. In addition, Mrs. Arlene Young, Field Representative and Instructor for the American Red Cross, spoke on the proposed mother and baby classes to be held on Kauai, which the Society heartily endorsed with an offer to support.

In July, progress brought forth an increase in membership. The names of Drs. R. Emrick, O. K. Eichman, and J. R. Warner were listed as potential members. Dr. Emrick's arrival was a sign of progress for it meant the island now had a full-time pathologist—the goal for which the Society had long been working.

July likewise brought to Kauai the 2d Hawaii Medical Seminar from the National meeting of the AMA in San Francisco and with its came two distinguished speakers and a evening of fellowship.

August was the month of reawakening. It is said that medical practice in hospitals requires the close coordination of many professionals and nonprofessionals. Although the individual physician is responsible for his hospitalized patient, he must depend on many others to provide supplementary care and services. Hospital organizations require a unique arrangement where responsibility and authority are concerned. The physician must assume the heavy burden of responsibility for the patient's welfare. However, the hospital practice requires in itself a sharing of responsibility and authority with others even to the restriction of a physician in his freedom of action.

In September, President Fujii reported on his attendance at the Council meeting of the Hawaii Medical Association which was held on Maui, and, recommended that a poll be made of the members as to their opinions on the Medical Practice Act and its proposed changes, with final recommendations to be forwarded to the Hawaii Medical Association.

In a recent issue of the *Hospital Topics Journal,* an article appeared entitled: "The Pre-Medical Student, His Identity," in which was discussed the premedical students and their decisions, after one year in college, whether or not to continue on as premedical students. Dr. Boyden, member for Kauai on the Careers Committee, reported that of the five students the Society had sponsored to Honolulu, only one remained in premedicine, three others were in biological science, and one was still undetermined. This we may state is in keeping with the statistics of the article.

October brought the Society the honor of hearing from both the Hawaii Medical Association President, Dr. Samuel Allison, and Dr. O. D. Pinkerton, President-elect.

November brought a discussion of polio and diabetes and the Society's support of the Diabetes Detection Program and poliomyelitis immunization.

This month also reminded the members that the year was coming to a close, the Credentials Committee was therefore instructed to prepare a slate for the nomination of the officers for the coming year.

To summarize the year's activities progress in the Society was seen in its growth of membership, continued education, and understanding of the responsibility required of a society.

Kauai County Society Report

Your Reference Committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HAWAII COUNTY

Dr. "Rudy" Wipperman took over as president of this society in January, 1964, with devotion and enthusiasm that inspired the majority of the members with remarkable cooperation and excellent attendance. This was not just a spontaneous "burst," but was maintained to the end of the year, when the leadership was turned over to me. He is going to be a difficult man to follow.

Instead of giving a month-to-month summary (which can be read in the minutes submitted by our Secretary, Dr. E. W. Best) I would like to merely skim over the highlights. We had a total of sixteen meetings. Ten of these included excellent, well-known guest speakers from the mainland. The scientific portion of two of our meetings was presented by our own pathologist, Dr. Best, and roentgenologist, Dr. Bracher. Dr. Waite and Mr. Veltmann presented an outline of the functions and operations of HMSA at one of our meetings. At two of our meetings the president and president-elect—Dr. West and Dr. Allison, later Dr. Allison and Dr. Pinkerton—gave us both scientific sessions as well as very interesting and constructive talks on the activities and functions of the HMA. The annual meeting was held in December at the Hilo Yacht Club and was attended by 64 people. The new officers for 1965 were presented: Dr. R. T. Eklund, president; Dr. Ed Helms, vice-president; Dr. E. W. Best, secretary; and Dr. Paul Caldwell, treasurer. The latter two are serving their second consecutive terms.

The highlight of our year was the meeting held June 4, 1964, at the Naniloa Hotel. Dr. Annis, President of the AMA, was our guest speaker. There were 230 people in attendance. In addition to our members, this included leaders and representatives in all branches of our county. Dr. Annis was such an interesting and forceful speaker that when he concluded, the standing ovation he received was tremendous. This meeting proved to be one of the best public relations events we have ever had, and people are still talking about it.

Our Scholarship Fund, under the chairmanship of Dr. George Bracher, has made fantastic progress, so that at present we have approximately $18,000 in it. We hope that it will be the means of encouraging worthwhile students to pursue medical and paramedical careers. To date we have helped two medical students, one of whom will graduate this year with high scholastic honors.

Finally, there was a situation which I am not sure, but which may be unique to this Society. One of our members failed financially to make a success of his practice, even though he was well qualified and very conscientious in his particular field. We did not become aware of his situation until he became destitute. He had no money for food or the essential utilities for himself and his family. He was so deeply in debt he could not afford to move and make a new start some place else. As a society we helped him out to the sum of over $500 for the mere necessities of life. When our treasury became depleted at the beginning of this year, we asked members to contribute voluntarily to help this family. We received a 99 per cent response from our entire membership. With these additional funds we were able to send this doctor back

to the mainland in hopes that he would find a new position. In the meantime we are continuing to feed his wife and children until he is able to send for them.

Although the above may seem to be a problem which should be handled locally, we, as a society, feel that this should and could be handled on a State level. At least it should be given some serious thought and consideration. This situation may never happen again, but if it should, think how much more could be done, not only on a financial basis but on a guidance basis if the entire membership of the Hawaii Medical Association were in back of it. Would it not be possible to include this type of catastrophe in the Physicians' Benevolent Fund? Certainly, as members we should be as enthusiastic about building up such a fund as we are about our scholarship funds. We can protect ourselves by insurance from disability, death, fire, and many other things, but there is no insurance for failure. Welfare and bankruptcy should not be the answer in our profession. It is my hope that many members will read this story, and will come forth with some constructive suggestions.

It was twenty years ago that I held this same position as President of the Hawaii County Medical Association. It is with a feeling of pride and honor that I am being given the privilege to serve again. We have had many compliments from mainland speakers regarding the conduct and attitude of our members during the business part of our meetings. As a County Society, the State Association can be assured of our continued support in all its programs and policies.

R. T. Eklund, *President*

Hawaii County Society Report

Your Reference Committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HONOLULU COUNTY

The growth of the Honolulu County Medical Society continued from the standpoint of numbers and it is anticipated that early in 1965, we will pass the 600 mark.

Growing pains, particularly in the subsidiary corporation, the Bureau of Medical Economics, stimulated the society into the exploration of the possibility of a new building. An ad hoc committee was formed to study the matter and progress is continuing to the point that it appears probable that construction of a major building project will be under way during the late months of 1965.

The Diabetes Committee accepted the return of the program from the State committee and conducted a very successful diabetes detection drive with the cooperation of the State Health Department. Nearly 6000 persons were tested during the period of the drive. Stations were established in the various sections of the island to accommodate the population and a very heavy public relations program was maintained, with the main promotion material being furnished through Hugh Lytle, HMA Public Relations Director. The Woman's Auxiliary was responsible for manning the registration desks at the stations.

The Speakers Bureau, under the Public Relations Committee, furnished speakers on diverse topics to service clubs, schools, churches, civic clubs, and others. A film on medical education from the AMA was shown at the various schools to stimulate interest in Careers Day.

Hospitals were urged to implement their utilization committees and assistance was offered them in organizing an effective program.

A Disaster Planning Committee was newly formed and made into a standing committee. It prepared and implemented a practice run through for the activation of an emergency hospital. Plans continue to provide staffing for first-aid stations and emergency hospital units. It is apparent that if any planning is to be done to meet the needs of the civilian population in the event of a disaster, that the medical profession will have to take the lead in providing such a program. This challenge is being met.

The Medical Practice Committee has continued its busy function of protecting the profession and the public against unjust accusations and against unfair practices. Its activity insures the maintenance of a high level of professional ethics in the community. Sound and cooperative relations have been built with the legal profession to the point that the committee is the first step in the event of any doctor-patient dispute.

The Inter-Professional Relations Committee has negotiated and reported for approval a Code of Conduct between the medical and the legal societies. The code will provide a working basis for the settlement of disputes and sets forth the manner in which each profession will conduct itself in relation to the other.

The society continued its active participation in community affairs, working closely with the University of Hawaii Biomedical Research Center in its development of a Medical School and with the Oahu Health Council. It has maintained a close relationship with the HMSA through the Board of Directors. The Foundation for Medical Care appears to be destined to become an active and effective force in the field of prepaid health services.

Regular and postgraduate programs of high quality continued during the year insuring a high level of attendance at Society meetings.

Robert T. Wong, M.D., *President*

Honolulu County Society Report

Your Reference Committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MAUI COUNTY

The President of the Maui County Medical Society advised that he could not present a written report since the previous president had all the records.

ACTION:

A motion to approve this as a report from the Maui County Medical Society was passed.

MEDICAL PRACTICE ACT

The ad hoc study committee reported to the House of Delegates at its January meeting but received no instructions from the House at that time.

The report of this committee was not voted upon and the House referred the matter of changes in the Medical Practice Act to the Legislative Committee without specific instructions.

Subsequent to the last meeting of the House of Delegates, a post card poll of HMA members was taken which asked only whether or not the one-year residence requirement should be deleted from the Act. The response indicated that 266 favored its retention and 200 its deletion. Some of each group had additional suggestions for change.

HB-880 and SB-635, which incorporated changes essentially the same as those contained in this committee's report to the last session of the House, were introduced by the Administration. The Chairman of the Legislative Committee, Dr. Tomita, and the President, Dr. Allison, appeared and presented the Association's views as they were expressed during the last meeting of the House of Delegates; i.e., that there is nothing wrong with the present Act except for the distribution of doctors and the difficulty in getting doctors in other than urban areas. A letter was written respectfully requesting that the section which would permit temporary licensure of physicians for no specific reason be deleted from the bill. Neither bill has passed third reading as of the time this report is being made.

Inasmuch as this committee has not met since the last session of the House of Delegates and there would appear to be no reason for it to meet at any time in the foreseeable future, it is requested that the House of Delegates order it disbanded.

RICHARD D. MOORE, M.D.

Medical Practice Act Ad Hoc Committee

Your Reference Committee recommends approval of this report, except that your Reference Committee recommends that the ad hoc study committee on the Medical Practice Act be continued as a standing committee.

ACTION:

The Chairman moved adoption of this portion of the report. A motion to amend this portion of the report by adding that the House of Delegates go on record as favoring the retention of the paragraph in the Medical Practice Act which allows for temporary licensing of physicians who are working under the direction of licensed physicians, provided that they pass the examination within 18 months, was lost. The motion to adopt the Reference Committee's recommendations was passed.

RESOLUTION NO. 8

Re: Medical Practice Act

WHEREAS, Every year bills are introduced in the State Legislature which would change the Medical Practice Act; and

WHEREAS, The bills that are introduced in the Legislature are not introduced under sponsorship of the Hawaii Medical Association; and

WHEREAS, It has not proved feasible to supervise unlicensed physicians who may or may not be practicing legally under the so-called "loophole" clause of Section 1 Chapter 64 of the 1955 Revised Laws of Hawaii; and

WHEREAS, It is the intent and purpose of the Hawaii Medical Association to safeguard the health of the people of the State of Hawaii; therefore be it

Resolved, That the Hawaii Medical Association does condemn the practice of medicine in this State by any physician not examined by the Board of Medical Examiners of the State of Hawaii and found to be of good moral character and professionally competent; and be it further

Resolved, That the Legislative Committee be mandated to exert every effort to have passed by the Hawaii State Legislature during the current session by having introduced amendments to Senate Bill 635 or House Bill 880 refinements which would effect the intention of this resolution; and be it further

Resolved, That the amendments to said bills include deletion of the proposed amendments in the current bills which provide for limited and temporary licenses as set forth in sections 64-2.5, (a) and (c), and that (b) of said section be changed to reduce the period of temporary licensure from 18 months to 6 months; and be it further

Resolved, That amendments to said bills be introduced which would delete from the 1955 Revised Laws of Hawaii 64-3 (b) in its entirety and (f) paragraphs two, three, and four; and be it further

Resolved, That the changes to said bills include the addition of an additional amendment under 64-5 that no person holding a license under this chapter shall be permitted to re-register if he has been out of the State for a period in excess of three years unless such absence is recognized by the board of medical examiners as necessary to further the medical education of the registrant.

Submitted by THEODORE T. TOMITA, M.D.

Resolution No. 8

Your Reference Committee recommends that this Resolution not be adopted.

Your Reference Committee further recommends that Resolution No. 8 be referred to the Medical Practice Act Committee.

ACTION:

The Chairman moved adoption of this portion of the report. A motion to amend the recommendation to favor some mechanism whereby an unlicensed physician can practice under the direction of another physician until he is able to attain his permanent license if the one-year clause remains in effect with an 18-month time limit was lost. A motion not to adopt the resolution was passed.

A motion to refer Resolution to the Medical Practice Act Study Committee was passed.

The Chairman moved adoption of this report as a whole as amended. It was adopted.

AMA-ERF

No items were referred to the committee which required official action. No projects, programs, or discuscussions were initiated by the committee during the year, except that two different communications were sent to each member of the Association explaining the AMA-ERF project and urging its support.

It is recommended that at least three members of current Committee be reappointed as holdover members as a method or technique of spreading information and interest.

Our records indicate a total known contribution from Hawaii of $5,408.72, of which $143.17 is credited to the Auxiliary. We have no information from the physician donor or the recipient school as to the amount of contributions made directly to schools.

We urge continued effort to encourage physicians and nonmedical individuals and firms to make regular contributions to the AMA-ERF fund.

F. J. PINKERTON, M.D.

AMA-ERF Committee

Your Reference Committee recommends that this report be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AWARDS

The mission of this committee is to recommend for certain awards the name or names of physicians who are to be honored by the Hawaii Medical Association and other organizations for outstanding work and abilities.

The committee met on four occasions and formulated the following criteria for the selection of nominees for the various awards which is herewith submitted for approval of the House of Delegates.

1. Nominees for specific awards shall be living members of the community.
2. There should be a continuity of activities.
3. The service should have been performed voluntarily.
4. The nominee should be a respected member of the community and of the medical profession.
5. Personal factors should play no part in the evaluation.
6. All nominations shall be submitted to the officers of the HMA through the President sixty days prior to the presentation of the award.
7. The President, or a designated officer, shall present such awards.

In the area of the Robins Award for "Outstanding Community Service by a Physician," the committee met and discussed the physicians who were recommended by the counties and members of the committee. One physician was recommended for the award.

In connection with this choice, the committee strongly recommends that next year's Awards Committee consult the chairman of the previous committee in order to be appraised of the fine men who were considered previously so that these names will not be inadvertently missed in the consideration of the succeeding committee's determination.

R. Varian Sloan, M.D.

Awards Committee

Your Reference Committee recommends acceptance of this report and approval of the criteria set forth.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CAREERS

The primary work of the committee this year has been the organization of the Hawaii Health Fair to be held in the Honolulu International Center in October, 1965. Plans are rapidly taking shape, and it seems assured of some success. The Honolulu Chamber of Commerce has contributed $5,000 to help defray the cost of the Fair. Mr. Bill Dodge of the HMA office has been appointed the coordinator of the project.

The Third Annual HMA Career's Day Program on February 22 met with its usual success. The selection of students this year was better due in some measure to our increased efforts in working with the school counselors. The selection of proper students for this program remains one of the greatest problems. Another problem is the recruiting of physicians to participate, with the committee always having to make last-minute telephone calls to recruit enough physicians for the program. The reverse of this is that the committee is always faced with an overwhelming demand from students and their counselors to participate in the program. There were approximately 140 students this year, including five from Kauai. Other counties were invited to send students but declined.

The committee was asked to nominate two University of Hawaii students for grants from Mr. Rama Watumull for work in the field of biological sciences. The committee consulted with Dean Bitner and Dr. Benedict of the Department of Microbiology, and two students, Mrs. Woldbesser and Miss Taniguchi, were nominated on behalf of the HMA.

The committee recommends that the conduct of the Health Fair, if it is to be continued on an annual or biennial basis, be separated from this Career's Committee inasmuch as it does not fit in well with the other activities of the committee. Perhaps another subcommittee of the Public Relations Committee could better handle it.

The committee asks that this committee again be allotted $300 to carry on the work of the annual Career's Day Program. It is hoped that the Chamber of Commerce's contribuiton will carry the Health Fair even though a large portion of this money will go towards the rental of the HIC facilities.

John R. Stephenson, M.D.

Careers Committee

Your Reference Committee recommends that this report be accepted and concurs that the Health Fair Program should be placed under a subcommittee of the Public Relations Committee of the Hawaii Medical Association.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted. The President of Maui County asked whether the counties which conduct their own Careers Day programs could draw on the budget alloeated to this Committee. The Chair ruled that the counties could draw on the Association funds.

DISASTER

Functions: 1. To maintain liaison between the HMA and the Hawaii Civil Defense Agency's medical authority which is vested in the State Department of Health; 2. to coordinate disaster planning activities of the various ancillary medical professions, paramedical organizations, and health or rescue agencies; 3. to act as an advisory and correlating body for the various county medical societies' disaster committees, including the Rural Area Command Sectors of Oahu; 4. to direct participation in planning and training programs as required, particularly where such programs apply to all of the islands and require certain performance standards; 5. to represent the HMA at the annual AMA conference on Disaster Medical Care.

Activities: 1. The committee participated in the preparation of a series of 15-minute television programs by the University of Hawaii designed to explain and promote the Medical Self-Help Training course; 2. worked on the establishment of a demonstration exhibit of a 200-bed packaged Disaster Hospital at Fort Ruger, and carried out a rehearsal of a disaster drill using equipment; 3. presented four panel discussion meetings to describe the activities, preparations, and plans of the medical profession for disaster medical care. These meetings were directed in particular towards key individuals in the paramedical, health, law enforcing, CD, and rescue organizations or agencies. This is a continuing program with plans to extend these meetings to neighbor islands during the year; 4. there was participation in hospital disaster plan rehearsals with current planning directed towards a large scale Honolulu hospital exercise on May 21, 1965, in conjunction with the CD "Operation 550."

Comments: While many meetings were held with various medical groups no joint meeting of the entire committee, representing all islands, was considered essential. The committee also represents the medical profession at the Governor's Emergency Resources Planning Board which met in January, 1965.

Recommendations: 1. Continuation of current programs on an expanded basis; 2. encouragement of component medical societies to devote one membership meeting annually to the subject of disaster medical care.

Edward W. Boone, M.D.

Disaster Committee

Your Reference Committee recommends acceptance of this report and recommends its approval in its entirety.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HAWAIIAN ACADEMY OF SCIENCE

The chairman, W. H. Civin, of this committee left for the mainland and no one was appointed to take his place. Liaison with the Academy was maintained through the Vice Chairman, Robert A. Nordyke, and the Association's awards at the Hawaii Science Fair were handled through him. Each of the three prize winners wrote a thank-you letter to the President.

In the absence of the chairman, and the vice chairman, who would normally make the request and in view of the past actions of the House of Delegates, it is suggested that the House of Delegates vote to continue its support

of the Hawaii Science Fair in the same amount as in the past; i.e., $100 for support of the project and $50 for prizes.

Hawaiian Academy of Science Committee

Your Reference Committee recommends acceptance of this report and further recommends that the Association consider increasing the amount of the contribution for prizes in the next session of this House of Delegates.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MEDICAL EDUCATION

The committee had three regular meetings during the year, one in July, one in November, and one in January. At the first meeting, an attempt was made to redefine the role of this committee. The general consensus was that the committee should be a liaison between the University of Hawaii and the medical community and that it should be concerned with activities of the committee implementing the Michael-Uhl report. Further discussion dealt with the developments of the six-year biomedical program at the University of Hawaii.

In November a dinner meeting was held at the Oahu Country Club and Dr. Windsor Cutting and Dr. Robert Lockwood were guests. They gave a progress report on the developments of the proposed biomedical program at the University. Dr. Cutting outlined the curriculum, which is a flexible one, and then described some of the planning regarding building and appointments. He stated that last year's Legislature had given its blessing to the proposals, provided funds could be acquired from foundations. Further discussion regarding the role of the physicians in the medical community and the role of the local hospitals took place.

At a meeting of the HMA on December 7 it was pointed out that the Medical Education Committee might be a clearing house for all medical education efforts in the community so that conflicts and overlaps might be avoided. There has been some question whether this should be under this or the Convention and Seminar Committee.

The members of this committee were invited by the University of Hawaii to lunch at the East-West Center on December 17 to meet with a site inspection team from the American Association of Medical Colleges who were here for a two-day survey of the University's six-year program. The physicians on the team, Drs. G. Wolf, Wayhne, Wm. Longmire, Ruhe, and Maloney, had an opportunity to confer with the members of the Medical Education Committee specifically with regard to the relationship with the University and the medical community.

As the developments at the University of Hawaii progress, this committee expects to continue to be a liaison with the physicians in the community.

A final meeting was held in January. On this occasion, the committee reaffirmed its recommendation of last year to the House of Delegates; i.e., that it was in favor of the proposed six-year biomedical program of the University of Hawaii, provided it was a program of excellence and properly funded.

C. S. Judd, Jr., M.D.

Medical Education Committee

Your Reference Committee recommends acceptance of this report and makes the following recommendations: (1) That the Convention and Seminar Committee contact all interested parties, including hospitals, concerning the clearing with and cooperation with the Hawaii Medical Association regarding visiting professors in order to avoid overlapping of lectures and programs. Your Reference Committee further recommends that a copy of this report be forwarded to all hospitals, chiefs of staff, and clinical services for their information.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PUBLIC RELATIONS

In the 1964-65 fiscal year the Public Relations Committee activities have continued to grow in number and comprehension. A division of these many activities into subcommittees has proved to be a valuable organizational step. Many of the activities of the subcommittees have been fairly routine, and have run more or less automatically with only occasional help from the weekly executive committee.

Organization: 1. The large, policy-making committee meets monthly. It consists of the officers of the Hawaii Medical Association, chairmen of the major committees, chairmen of the subcommittees of the Public Relations Committee, and the Editor of the Hawaii Medical Journal. At this meeting policy matters are discussed and programs of the various subcommittees reviewed, both as to past and future projects. 2. There are monthly meetings of each subcommittee. At these meetings future activities are planned in detail. 3. There are weekly meetings of the executive committee which consists of the Chairman and Vice-Chairman of the Public Relations Committee, the President and President-elect of the Hawaii Medical Association. Hugh Lytle and Bill Dodge attend all these meetings. At this meeting the special projects of the Public Relations Committee, not included under the subcommittees, are discussed and planned. This group reviews and takes care of the many immediate problems which come up during the week and which involve our Association—newspapers, television, radio, hospitals, members of our association, etc. Subcommittee chairmen attend these weekly meetings when it is possible for them to do so.

The following is a summary of the activities of the subcommittees:

Television and Radio: Walter Y. M. Chang, Chairman.

The weekly "Call Your Doctor" hour-long program continues to be produced between 8:00 and 9:00 P.M. on Sunday over KTRG-TV. We now have over 130 shows to our credit, with some 200 physicians and guests participating. These programs are planned at least four to six weeks ahead of time, at the monthly meeting of the subcommittee. Our efficiency has improved by establishing one committee member as the program coordinator for each program. After the subject and the participants are chosen, the program coordinator is responsible for the smooth production of the program. The use of a program coordinator and the excellent leg work done by Bill Dodge and Hugh Lytle have allowed these programs to run fairly automatically.

We still have the following problems: 1. Changes in management at KTRG-TV. 2. Limited audience, due to the short-range transmission of this station. 3. We still have difficulty obtaining movies for these programs. Films are extremely valuable to help enhance the attractiveness of this program. Frequently these movies can be obtained for as little as $5 to $10, but occasionally they cost as much as $40. It is not necessary to have a movie weekly, but it is nice to be able to pay for a very desirable movie at least once a month. The budget item should be maintained. 4. Active members on this committee are indeed too few. We are seeking more active members to participate in the work of planning and producing this program. Hugh Lytle continues to produce the 15-minute KGU "Ask The Doctor" program which is rebroadcast at 7:05 P.M. each Wednesday. This program is taped in advance. The subject usually deals with the topic presented on the previous Sunday's television program. One physician, with Hugh Lytle as the moderator, participates. We have reviewed the desirability of this program

recently. KGU likes this program, and wishes that it continue.

HMSA has offered us a 5-minute television spot weekly. We are presently planning ideas to take advantage of this time.

NEWS MEDIA: Henry N. Yokoyama, Chairman.

Under this excellent ambitious chairman, many programs proposed in the past are now functioning, and more activities are presently being prepared. Through these programs, newspaper cooperation and our public image has definitely improved.

Our present activities are as follows: 1. "Medicine At Work" is a weekly column that appears in the Honolulu "Advertiser." Through this column, actual case histories of interesting patients successfully treated are presented. A newspaper reporter interviews both the doctor and the patient. This has proved to have excellent public relations value, and has been under our auspices and control for the past ten months. 2. The "Hawaii Doctor" column has been published every Monday for the past four months in the "Star-Bulletin." It is written by Dr. John Roberts. The articles are reviewed by the News Media Committee prior to publishing. Dr. Roberts writes in a very "folksy" style, and the editor of The Honolulu "Star-Bulletin" tells us that it has great desirability. Reader letter response has been active. 3. A weekly news release is prepared by Hugh Lytle following each television program. This news release is printed weekly in the Press papers, and occasionally by the metropolitan dailies, depending upon the subject. It is also printed in some of the neighbor island papers. 4. Dr. Yokoyama writes a medical question-and-answer type column in Japanese in the "Hawaii Times." Mr. Pompelli, our AMA representative, plans to give recognition to this effort in the "AMA News" in the near future. 5. A pediatrics column is presently being prepared by Dr. Gene Ahern. The first two articles are being reviewed by the Editorial Staff of the "Star-Bulletin." This column, we hope, will appear on the Women's Page of the "Star-Bulletin" in the near future on a weekly basis. 6. The Press papers have a great desire for a "Medicine At Work" type column, to be published in their district papers. Doctors in each of these districts will have interviews with reporters and their interesting patients, just as the "Medicine At Work" column operates at present. These columns will appear in that district paper. We are presently organizing this program.

Because of this positive News Media program, the newspapers have come to us frequently regarding information and news items, and have treated doctors with much more cordiality and fairness in medical reporting. The newspapers have used our services frequently to obtain information regarding interesting patients and news items, when they would otherwise have had difficulty in obtaining this information themselves. During the Kerr-Mills and Eldercare promotions much information was provided by our committee to the newspapers for their use. We were able to stimulate interesting discussions on the editorial page, because of this information. Presently our relationship with the newspapers is excellent and has never been better. I certainly would recommend continuing this program. We hope that new active members will be added to the News Media Committee to help take the load off Dr. Yokoyama, who is carrying much of the program by himself, at the present time.

MEDICAL MESSAGE OF THE MONTH: Dr. William F. Moore, Jr., Chairman.

This program has continued successfully over the past year. The distribution of the Messages, which has been the major problem in this program, has been greatly aided by the formation of a Medical Message of the Month, Woman's Auxiliary Committee. Through this committee distribution has been much smoother, and Dr. Moore has had to spend much less time in the mechanics of distribution. Six of these Messages have been paid for by outside sponsors. The Public Relations Committee feels that the remaining six Messages should be paid for by the Hawaii Medical Association, to maintain adequate variability of the Messages. We will be able to decrease our budget this year, because the cost of production of the Messages has been decreased. This system has been extremely valuable for distribution of pamphlets during our Eldercare promotion. We would definitely recommend continuing this program.

OPERATION PACIFIC: Dr. Thomas H. Richert, Chairman.

Our efforts to extend "Operation Pacific" to Western Samoa thus far have failed. Correspondence to Prince Tunia has been conducted. However, it seems to be his feeling that sending Samoan doctors to Hawaii for training is more desirable than having Hawaii doctors go to Western Samoa for this purpose. We have continued, however, to seek new projects in the Pacific area. The surgeon at the Hospital of American Samoa left the hospital three months ago. Since that time Dr. Richert has been supplying surgeons regularly to the hospital. Therefore, our "Operation Pacific" program has definitely been operating during the past year. Drs. Robert Peyton, Robert Johnston, Robert Rose, William Walsh, James Cherry, and Donald Jones have served during the past few months.

JAPANESE SPEAKERS BUREAU: Kazushi Tanaka and Shigeo Natori, Co-Chairmen.

This subcommittee has just been established. For a number of years, Japanese speaking physicians have been appearing on radio on an interval basis on Japanese language programs to answer medical questions called in by the listening audience. In the past month this program has been organized under the auspices of the Public Relations Committee, and we will start a regularly scheduled weekly program on Radio KOHO. Radio KIKI is asking for the same type of program, and we will do our best to arrange it. Subjects for these programs will be planned in advance, and the assistance of various Japanese speaking doctors solicited. Dr. Natori will be responsible for the radio portion of this committee; the news media responsibilities will be handled by Dr. Tanaka. Dr. Tanaka will help write the Japanese column in the Japanese language papers presently being written by Dr. Yokoyama. We have had excellent liaison with the Japanese language papers this year, and have had several informal meetings with their editors who offered to cooperate. Several articles of the "Medicine At Work" type have been given to the Japanese language newspapers for their use. Services of Chinese and Filipino speaking doctors have also been offered to radio stations having programs in these foreign languages. I believe the activities of this new subcommittee will be a wonderful addition to the Public Relations program.

* * *

The Public Relations Committee has also participated in many special projects other than those handled by the various subcommittees. Some of these are as follows:

Press Award: A Press Award of $100.00 and a silver bowl is presented annually to the newspaper writer who produces the best medical articles. This past year it was presented to Tomi Knaefler of the Honolulu "Star-Bulletin"; this award will continue annually and is presented at the HMA Annual Meeting.

Health Fair: We are happy that the Health Fair, to be presented this year just before Community Health Week in October, will finally be a reality. The Public Relations Committee has talked about the value of such a Health Fair for several years. The Careers Committee is doing an excellent job of planning and producing the Health Fair. The Public Relations Committee will work with the Careers Committee on this project and help in any way it can to make certain that maximum public relations mileage will be obtained.

We have worked to try to improve our relations with labor unions, television and radio stations, and health insurance companies. Meetings with all these organizations have taken place during the last year. I am sure that a great deal of mutual benefit will be obtained from these meetings.

PR Display: The Public Relations Committee Display at last year's Annual Meeting we feel was at least a par-

tial success, and will be repeated at the 1965 Annual Meeting. We hope that doctors will be better acquainted with their Public Relations Program through this display.

Letters to the Editor: Through Hugh Lytle and friends of the HMA we have stimulated many letters to the editors of the newspapers. These have been very helpful during the several controversies which have occurred in the newspapers the past year.

November Election: Prior to the November Election, much time and effort was spent on the promotion of the Kerr-Mills Program.

Eldercare Promotion: This committee spent many hours on the promotion of the Eldercare program. Some of the accomplishments of this program are as follows: (a) Fifty thousand pamphlets were distributed through doctors' offices and doctors' billings and the Woman's Auxiliary. An additional 50,000 pamphlets were distributed through HMSA mailings. We congratulate HMSA for its cooperation in this promotional effort. An additional 15,000 pamphlets were distributed through several commercial companies. (b) Informal meetings with HMSA and health insurance associations proved to be beneficial in obtaining their cooperation not only in the Eldercare promotion, but for future mutual efforts. (c) Meetings with a representative of AFL-CIO, Mr. Boranian, and Arthur Rutledge of the Teamsters Union, were conducted. We were impressed with the cooperation Mr. Rutledge showed and his interest in the Eldercare Program. Both of these men appeared to be impressed with our desire to discuss our mutual problems. (d) An Eldercare Speakers Bureau was formed. Five hundred letters were sent to organizations offering the services of this Bureau. (e) An intensive educational program was conducted with the help of the AMA just prior to the time the "Medicare" bill was due to come out of the Ways and Means Committee of the House of Representatives. This consisted of statewide newspaper ads, plus television and radio spots. Members of the Association and of the Woman's Auxiliary were kept advised of the program. The layout for the program was prepared and placed by Nieman Associates, at no additional cost to the Association. Copy and programming were cleared with the PR Committee and the AMA.

A total of twelve requests were filled by various members of this speakers committee, and additional requests are being obtained. On Oahu the HCMS brochure outlining its services was sent out also to these 500 organized groups. Eldercare information was enclosed. If nothing else is gained out of our Eldercare production, we certainly established and improved relationships with the public and the many organizations which we contacted during this period.

In summary, I wish to say that the growth of the Public Relations Committee's activities during the past year has been excellent. We continue to learn as we grow; we have been impressed with the cooperation of the physicians especially during our Eldercare promotion. We hope that it continues. We advise all physicians to become acquainted with their Public Relations program, to participate in it, and to criticize it.

The committee respectively requests that the budget for 1965-1966 remain unchanged except that the allocation for the Message of the Month flyers be reduced to $1,110. This reduction is possible because we have been able to effect lower printing costs and because we expect to receive subsidies to cover the cost of at least half the Messages. Always mindful of the economies the House of Delegates wishes the committee to effect, the full allocations in some instances were not used. The committee will continue to operate on the basis that because money is allotted, it is not to be used unless it is absolutely necessary to carry on the programs and objectives set forth. However, we feel that minimum amounts should be allowed in order that contingencies may be covered.

ANDREW C. IVY, JR., M.D.

Public Relations Committee

Your Reference Committee recommends the acceptance of this report and highly commends the action of this committee and its members for their outstanding work on the Association's behalf. The Reference Committee further recommends that the House of Delegates authorize an appropriation of $550.00 for traveling and expenses of a staff member to attend the Public Relations Institute and the Medical Society Executives Association meeting to be held in Chicago in August, 1965.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

PUBLIC RELATIONS COUNSEL

Physicians of Hawaii no longer are regarded as being an aloof group. They have, in the last three years, taken an increasing part in public education projects, television and radio programs, speaking engagements, public service campaigns, and even political controversies.

Literally hundreds of physicians have appeared on the weekly television program "Call the Doctor" and scores have taken part in the weekly radio program produced by the Hawaii Medical Association. Dozens, working quietly, have contributed educational material to the press and have encouraged newspaper reporters to become better medical writers. On the political scene one physician of Hawaii actually has won election to the Legislature.

That overworked word the "image" certainly has been altered in the last three years. The increasing variety of projects undertaken by the Hawaii Medical Association, which helps account for this, is discussed in detail in the annual report of the Public Relations Committee.

Next October the activities of the medical profession will reach a climax when the first Health Fair will be presented at the Honolulu International Center. This will be the most spectacular educational project to be undertaken by the profession. The aid of the majority of the members will be solicited to the end that this project may be an outstanding one.

HUGH LYTLE

Public Relations Counsel

Your Reference Committee recommends acceptance of this report.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

MABEL L. SMYTH MEMORIAL BUILDING

Members of the Board of Management in 1964 were Drs. H. Q. Pang and Toru Nishigaya. In January, 1965, Dr. B. Allen Richardson replaced Dr. Nishigaya and Dr. A. S. Hartwell replaced Dr. Marshall as alternate. Representing the Hawaii Nurses' Association in 1964 were Mrs. Wilma Amalu and Miss Alison MacBride. Miss Charlotte Dennis replaced Miss MacBride in January, 1965. Mr. A. J. Hebert continues to represent The Queen's Hospital Board of Directors.

Nurses and Physicians Exchange and Radio Page. During 1964 there were a total of 115,949 calls handled, reflecting an increase of 34,214 over 1963. Personnel has been increased to give adequate coverage. There are 238 members, of which 83 use Radio Page. Several members have given up using the Radio Page service because they do not want to be bothered with it. However, they do remain on our regular service. The members who continue to use the Radio Page service seem to like it. On the Radio Page service we lose about $80.00 a month but this is amply compensated by an increase in over-all Exchange membership, many of whom we would not have had except that we were able to offer the two types of service. Several doctors have lost their

Message Mates and so all users have been encouraged to have their instruments covered by insurance.

The membership of registered nurses remains about the same, 105. There are 28 practical nurses on the Exchange.

Mabel Smyth Building. Last year a rate of 41 cents a square foot was set for space in the building. The first six months' experience at this rate was reviewed to determine whether we could operate on such a low figure and it was decided that we can manage for the time being and so the rate of 41 cents was reconfirmed on January 1, 1965.

I attended a council meeting on Maui in August, 1964, to answer questions about Mabel Smyth Building which might come up. One question which was of concern was "What will the status of the Mabel Smyth Building be when the 99-year lease between The Queen's Hospital and the Bishop Museum is up?"

Our attorney wrote that in his opinion there would be no change. The Mabel Smyth Memorial Fund is a charitable trust and as such may continue indefinitely.

"A Charitable Trust may continue indefinitely and may be enforced by the Attorney General of Hawaii, or by any person who has a special interest in the enforcement of the Trust. Therefore upon the expiration of the 99-year lease, when title to the property should pass to Queen's, the building will still be subject to the agreement and if it should be diverted from the general purposes stated in the agreement, the agreement may be enforced by suit if necessary brought by the Attorney General or either the Hawaii Nurses' Association or the Hawaii Medical Association.

In other words, the use and occupancy of the Building should not be affected by the expiration of the 99-year lease, assuming of course that Queen's will continue to observe and perform its obligations as lessee.

The Mabel Smyth Building was the recipient of a beautiful painting done by the Russian artist Kalmikoff. This painting was donated by Dr. J. I. Frederick Reppun in memory of his father, Dr. Carl Frederick Reppun, who for many years was a member of the Medical Association. This picture may be seen in the Mabel Smyth lounge.

On January 26, 1965, the Board of Management received a letter from Dr. Robert Wong, President of the Honolulu County Medical Society, stating that they were exploring the feasibility of constructing an office building. At that time he said no commitments of any funds and no firm action had been taken in any way. He went on to say, "If and when such action is taken, full information will be made available to you." To date we have had no further information from the Medical Society.

H. Q. Pang, M.D.

Mabel L. Smyth Memorial Building Board

Your Reference Committee recommends acceptance of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

WOMEN'S AUXILIARY

The Women's Auxiliary referred one specific item to the Advisory Committee for advice and this was in regard to the proposal by the Hawaii State Hospital Auxiliary to approve of their resolution for more funds for the State Hospital. The item was referred to the President of the State Medical Association and the Chaiman of the Legislative Committee, who advised the women not to sponsor any such proposal.

No recommendations are necessary for further policies as the Auxiliary has been pursuing its course of action with the aims of the Medical Association, always of first consideration.

Herbert G. Pang, M.D.

Woman's Auxiliary Advisory Committee

Your Reference Committee recommends acceptance of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

WOMEN'S AUXILIARY ADVISORY COMMITTEE

Hawaii celebrates the sixteenth year of service in Medical Auxiliary work at our Convention this year. We are honored to have our own Betty Liljestrand, first National Auxiliary officer from Hawaii, to bring greetings to us from our national organization.

We are encouraged by our State Medical Association with full paid membership to our national organization, and two counties have 100 per cent membership by courtesy of the doctors. Through their generosity we were able to carry on our Auxiliary work without a constant struggle with finances. This year we had full representation at our annual National Conference, and at National Convention, which was an inspiration to communicate with the membership more on national programs. Five news letters, *Rx For Doctors' Wives,* with information on National, State, and County activities, were edited by Mrs. Homer Benson, and mailed to all Auxiliary members by Mrs. Leo Bernstein. Honolulu County Auxiliary received National recognition at the National Convention, by winning the first annual Health Mobilization Award, given by the Health Mobilization Division, Department of HEW, for outstanding community service in its Medical Self Help program. Mrs. B. Allen Richardson and her Lay Day Committee, Mrs. Robert Chung, Mrs. Charles Yamashiro, and the entire Auxiliary, merit special credit for this.

Thanks to Dr. Allison, and Miss McCaslin, we were also recognized in resolution, at Convention, as the "Glamour State," for the vandas given to the women attending the meeting, and the leis sent by State Auxiliary for National President, and the President-elect, thus doing our bit for the Hawaii Visitors Bureau.

All counties in Hawaii participated in getting Message of the Month, helpful health hints, to every doctor's office, to be sent out with the monthly bills. This committee also distributed Eldercare pamphlets to all doctors' offices. Information on legislation was published in *Rx For Doctors' Wives* and was sent out by the Hawaii Medical Association to both husbands and wives. Members of Auxiliary were represented on County, State, and National political organizations. Three meetings were held with Mr. John Pompelli, from AMA, to discuss ways of getting backing for good medical legislation. A member of the State Auxiliary Board, Mrs. John Devereux, who is also an elected member of the State Legislature, gave us some insight on what is happening in medical legislation on the State level.

Thanks to the AMA, our State AMA-ERF Chairman, Mrs. Donald Jones, and President-elect, Mrs. Garton Wall, attended the regional workshop for AMA-ERF, at Las Vegas. At our annual State Conference, the priority project for AMA-ERF was presented, attached to a "hula skirt," by the chairman, in Las Vegas costume. A skit, "Miss AMA-ERF Pageant," will be presented at Convention, with Hawaiian embellishments.

The film, *A Cry for Help,* was shown at the "Lay-Day" meeting, in Honolulu, with panel of speakers made up of a psychiatrist, a mental health executive, and representative from the Police Department. Presidents, or representatives, of various women's organizations were invited as guests. As the result of this program, the Police Department decided to show the film as part of its training program. Honolulu County, with joint funds from State, purchased the film to be available throughout the State to all interested groups. All counties are participating in

getting *Mirror of Mind*, a series of records on mental health produced by the AMA, broadcast at all local radio stations in the State. Mrs. Shigeru Horio is chairman of this committee.

We now have five sets of slides and with tapes on the *Poison Goes Hawaiian* program. These have been checked and kept in order by Mrs. John Lowrey this year. The slides, made by the Honolulu Auxiliary with some financial assistance from State Auxiliary, are available for use by all interested groups throughout the Islands. Two sets are at the Department of Health, one at the Medical Library, one at the main Library in Honolulu, and one at the University of Hawaii. The slides show poisonous plants in Hawaii, as well as household poisons. The Honolulu Auxiliary is also doing a survey for the National Council of Safety, in anticipation of getting a Safety Council, affiliated with the National Council of Safety, set up in Hawaii.

Due to the efforts of last year's Disaster Preparedness Committee, Medical Self-Help is being taught in all public high schools. This year's chairman, Mrs. William Natoli, has succeeded in getting the Kamehameha Schools to initiate the program, and three other private schools are considering it for later use. The University of Hawaii presented a TV series on Medical Self-Help. Groups of Boy Scouts were shown the films, *Pulse of Life*, and *If Disaster Strikes*. The Auxiliary chairman has offered to assist Dr. Edward Boone, and Dr. Mor James McCarthy, with the Civil Defense Hospital setup. Mrs. Yamashiro continues to teach the Medical Self-Help course at the main Library in Honolulu.

Mrs. Yen Pui Chang recruited volunteers to assist the doctors at the registration desk for the Career's Day program. She also helped with a workshop, sponsored by the Hawaii League for Nursing. Members assisted with two Health Career Day programs in schools, and a Hospital Day program, where high school students were invited to tour a hospital. The charts and pamphlets on all health careers were explained and passed out to students of Kauai.

The Auxiliary subscribed to two memberships to the project "HOPE." It participated in an aid-to-Laos program that sent clothing and 100 cases of canned milk to Laos. Cartons of clothing were also sent to Suva during their flood. Chairman Mrs. Robert Chung made a tour of world medical welfare centers, and heard how welcome the supplies were.

Our faithful In Memoriam chairman, Mrs. Robert Katsuki, is now on the fourth volume of biographies, with a total of 379 to date. She is still revising, and including new material, and doing a tremendous job.

A two-day workshop for board members was held on Kauai. All organized auxiliaries were represented: Mrs. Joseph Mark Sowers, Maui President; Mrs. Patrick Cockett, Kauai President; and members of the Kauai Auxiliary attended. Discussions and plans for the year's programs were formulated and a decision was made to include more members in our annual conference this year in order to increase interest and knowledge of Auxiliary programs.

Maui and Kauai Auxiliary members participated in many community projects—tuberculin testing, keeping polio immunizations up to date, helping with diabetes surveys at the blood bank, with the tumor survey, opening their homes to East-West Center students and Fulbright scholars. They all assisted with fund drives for Heart, Cancer and Polio, and supported all community measures for better health. Hawaii Auxiliary members-at-large have contributed over $100.00 to the new Geriatric Center in Hilo. They now have over 100 volunteers in the Hilo Peace Corps project, and immunizations are given almost every week.

The Bylaws have been brought up to date, with revisions which conform with the national bylaws. They will be presented at Convention by Mrs. Leslie Vasconcellos, Standing Rules for Budget and the budget for the coming year are ready for Convention.

All officers and committee chairmen assumed responsibility of special tasks graciously, and it has been a joy to work with them. We were especially delighted to be invited by Dr. Edwin R. Ballard to join in with the planning of the HMA's May Day social event. Mrs. Garton Wall, President-elect, and Mrs. Fugate Carty, our Program chairman, were most happy to oblige. This has been a stimulating year, inspired by the associations and friendships of women with a common interest in improving their communities, to make them a happier, healthier place for their children—an inheritance we can be proud to give. I want to express my sincerest aloha, and many thanks to all that have made this Auxiliary year such a pleasure.

MRS. BURT O. WADE

Woman's Auxiliary

Your Reference Committee recommends acceptance of this report and highly commends the Ladies for their outstanding work and help during the past year.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

RESOLUTION NO. 1
Re: First-Aid

WHEREAS, The legislators meet at yearly intervals and conscientiously devote their full and intensive efforts sixty days during the general sessions and thirty days during budget sessions on alternate years; and

WHEREAS, Many of the legislators do not have sufficient time to attend to their ambulatory ailments, general health, and welfare, and thus may impair their efficiency in carefully scrutinizing proposed legislation; and

WHEREAS, Many of the legislators are from our neighbor islands and do not have the services of their own private physicians; and

WHEREAS, The Louisiana State Medical Society's first-aid station at the Capitol building during legislative sessions resulted in the House of Representatives unanimously adopting a resolution expressing the appreciation of the Legislature; and

WHEREAS, The physicians participating in this project will be exposed to the highly stimulating and educational environment of the legislative process; now therefore be it

Resolved, That the Hawaii Medical Association's House of Delegates endorses the voluntary participation of members of the Association in staffing a first-aid station for our legislators; and be it further

Resolved, That no fees be charged the legislators for such first-aid services except that which is allowed under medical insurance policies carried by the legislators, the proceeds of which shall be used to help defray the expenses of the first-aid station.

Submitted by GEORGE GOTO, M.D.

Resolution No. 1

Your Reference Committee recommends the adoption of this resolution with the substitution of the following for the last two resolveds:

Resolved: That the Hawaii Medical Association's House of Delegates endorse the voluntary participation of the members of the Association in rendering health care to our legislators while they are in session, and be it further

Resolved, That this matter be referred to the Public Relations Committee for study and recommendation.

ACTION:

The Chairman moved adoption of this resolution as amended. The motion lost. A motion not to adopt Resolution No. 1 carried.

RESOLUTION NO. 5 AS PROPOSED

Re: "Medicare" and Eldercare

WHEREAS, The American Medical Association has engineered a proposal termed Eldercare which is based on the concept of applying marginal, local relief to proven need; and

WHEREAS, This proposal was introduced in the House of Representatives of the Congress of the United States as the Herlong-Curtis bill H.R. 3727; and

WHEREAS, "Medicare," otherwise known as the Mills bill, H.R. 6675, passed by the House and now under consideration by the Senate, is based on the concept of Federal intervention for those 65 and older who are thereby considered to be in a general condition of indigency; and

WHEREAS, This latter concept is not acceptable to either the 17.5 million oldsters, or the general public, and especially to the physicians of the United States; and

WHEREAS, The necessary tax to support "Medicare" for all 17.5 million elder citizens, those who are rich as well as the poor, will be an oppressive burden especially on the lower-income working man; and

WHEREAS, The passage into law of the Mills bill will mean that the services of physicians will be sold and managed by the Secretary of the Department of Health, Education and Welfare, directly or indirectly, to the detriment of good medical care; therefore be it

Resolved, That the Hawaii Medical Association, through action of its duly constituted House of Delegates here assembled, apprise the President of the American Medical Association that:

1. This House is in favor of Eldercare, the Herlong-Curtis bill H.R. 3727, and will support it if such a bill becomes law.
2. This House is opposed to "Medicare" as proposed in H.R. 6675, the Mills bill.
3. The Hawaii Medical Association will enjoin its members to pledge nonparticipation in "Medicare" either by individual letter or by petition to be transmitted immediately to the American Medical Association, for forwarding to the Congress of the United States.
4. This Association will further enjoin its members to offer their services without charge to those 65 and over who are unable to afford the expense of physicians' services, or might be made destitute thereby, this pledge also to be transmitted as above; and be it further

Resolved, That a copy of this resolution be sent immediately to President Donovan Ward of the American Medical Association, and to the presidents of each of the other 49 state medical associations.

Submitted by J. I. FREDERICK REPPUN, M.D.

Resolution No. 5

Your Reference Committee recommends that this resolution be adopted with the following changes: The first "Whereas" should read: "Whereas, the American Medical Association has offered a proposal termed Eldercare, which is based on the concept of applying marginal, local relief to proven need"; and the fourth "Whereas" should read, "Whereas, This latter concept is not acceptable to all of the 17½ million elders or the general public, and especially to the physicians of the United States"; and the resolved portion should read, "Resolved, That the Hawaii Medical Association, through action of its duly constituted House of Delegates here assembled, apprise the Congressional Delegation of Hawaii and the American Medical Association that this House is in favor of Eldercare, the Herlong-Curtis bill H.R. 3727, and its principles, and this House is opposed to "Medicare" as proposed H.R. 6675, the Mills bill"; and the last "Resolved" should read: *"Resolved,* That a copy of this Resolution be sent immediately to the President of the American Medical Association and to each of the Congressional Delegates of Hawaii: Senator Hiram L. Fong, Senator Daniel K. Inouye, and to the Honorable Spark M. Matsunaga and the Honorable Patsy T. Mink."

RESOLUTION NO. 5 AS ADOPTED

Re: "Medicare" and Eldercare

WHEREAS, The American Medical Association has offered a proposal termed Eldercare which is based on the concept of applying marginal, local relief to proven need; and

WHEREAS, This proposal was introduced in the House of Representatives of the Congress of the United States as the Herlong-Curtis bill H.R. 3727; and

WHEREAS, "Medicare," otherwise known as the Mills bill, H.R. 6675, passed by the House and now under consideration by the Senate, is based on the concept of Federal intervention for those 65 and older who are thereby considered to be in a general condition of indigency; and

WHEREAS, This latter concept is not acceptable to all the 17.5 million elders, or the general public, and especially to the physicians of the United States; and

WHEREAS, The necessary tax to support "Medicare" for all 17.5 million elder citizens, those who are rich as well as the poor, will be an oppressive burden especially on the lower-income working man; and

WHEREAS, The passage into law of the Mills bill will mean that the services of physicians will be sold and managed by the Secretary of the Department of Health, Education and Welfare, directly or indirectly, to the detriment of good medical care; therefore be it

Resolved, That the Hawaii Medical Association, through action of its duly constituted House of Delegates here assembled, apprise the Congressional delegation of Hawaii and the American Medical Association that this House is in favor of Eldercare, the Herlong-Curtis bill H.R. 3727, and its principles and this House is opposed to "Medicare" as proposed in H.R. 6675, the Mills bill.

Resolved, That a copy of this resolution be sent immediately to President of the American Medical Association, and to the Congressional delegates of Hawaii: Senator Hiram L. Fong, Senator Daniel K. Inouye, and to the Honorable Spark M. Matsunaga and the Honorable Patsy T. Mink.

Submitted by J. I. FREDERICK REPPUN, M.D.

ACTION:

The Chairman moved adoption of this resolution as amended. The motion to adopt as amended carried.

RESOLUTION NO. 6

Re: Addition of General Excise Tax to Physicians' Billings

WHEREAS, Both Houses of the Third State Legislature's General Session have sent out omnibus tax bills requesting an increase of the General Excise Tax to four per cent; and

WHEREAS, The General Excise Tax is not a true Sales Tax and is applicable to fees for professional services; and

WHEREAS, The proposed "Medicare" bill (H.R. 6675) which is now being considered by the Congress of the United States and which seems certain of passage in some form which will result in increased Social Security taxes; and

WHEREAS, For the above reasons plus the continued spiraling cost of living and the increases of salaries of professional and nonprofessional help; therefore be it

Resolved, That the House of Delegates of the Hawaii Medical Association in convention assembled recommend to the entire membership of the Hawaii Medical Association that the four per cent General Excise Tax be added to the bills rendered for all professional services and that it be shown as such, instead of being absorbed as it is now being done.

Submitted by JOHN F. CHALMERS, M.D.

Resolution No. 6

Your Reference Committee recommends that Resolution No. 6 be not adopted. However, there will be a minority report on this matter from Drs. Goto and Hartwell.

MINORITY REPORT: For a long time, we have absorbed 3½% General Excise Tax on services without, in our opinion, the general knowledge of the public. In effect, we have paid this tax for them. We feel that the public should be apprised of this fact. We recommend that prior to doing this a notice be sent to each patient with his monthly statement that we no longer feel it proper to do this.

ACTION:

The motion to adopt the minority report was adopted. The Chairman moved adoption of this portion of the report as amended. The motion to adopt this portion of the report as amended carried.

RESOLUTION NO. 7

Re: Compulsory Inclusion of Physicians under Social Security

WHEREAS, H.R. 6675 includes the provision that physicians shall be covered by Social Security benefits; and

WHEREAS, This provision is odious to most physicians in the United States; and

WHEREAS, Compulsory coverage of physicians has been considered only once by the House of Delegates of the Hawaii Medical Association; and

WHEREAS, The only time the House of Delegates voted on this matter was in 1959; and

WHEREAS, The vote on compulsory inclusion of physicians under Social Security was taken on the floor of the House without referral and consideration by a Reference Committee; therefore be it

Resolved, That this House of Delegates at the 109th Annual Meeting of the Hawaii Medical Association support the position of the House of Delegates of the American Medical Association which has consistently voted to oppose compulsory physician coverage under Social Security; and be it further

Resolved, That the position of the Hawaii Medical Association be made known to the American Medical Association, to the Finance Committee of the United States Senate, and to the four Hawaii members of Congress.

Submitted by RICHARD D. MOORE, M.D.

Resolution No. 7

Your Reference Committee recommends the adoption of this resolution. However, there will be a minority report from Dr. Yim.

MINORITY REPORT: I recommend that this resolution be not adopted.

ACTION:

It was moved to adopt the minority report. The motion carried.

The Chairman moved adoption of this report as a whole as amended. It was adopted.

MEDICINE AND RELIGION

The committee is in accord with the philosophy that man as a total being is composed of four factors—physical, spiritual, mental, and social. To maintain the health of the total man requires adequate care of all four factors.

The basic objective of the committee is to create the proper climate for communication between the physician and the clergyman that will lead to the most effective care and treatment of the patient.

Dr. Paul B. McCleave, Director of the Department of Medicine and Religion of the American Medical Association, was in Hawaii August 11-17, 1964. During this period he met with the committee twice to help the committee understand the broad prospective of the committee. Dr. McCleave was introduced to clergymen and doctors at a tea held at the Mabel Smyth Lounge on August 21, 1964. He appeared on television and radio. He also spoke to service clubs and the HMA Council meeting on Maui.

On September 29, 1964 a letter was sent to all doctors requesting information concerning their desires and requesting their help in achieving the objectives of the committee. A questionnaire post card, as well as informative brochures, was enclosed. About 200 of the questionnaires were returned. Nearly 150 doctors felt that there was a need for closer ties between medicine and religion.

Plans are being made for buzz sessions to be held between doctors and ministers on Tuesday, May 18, 1965, from 7:30 to 9:30 P.M. at the Mabel Smyth Auditorium concerning a situation which will be dramatized by an actors guild.

It is hoped that the experience gained from such a program will permit extension of the activities of the committee to the neighbor islands.

SAU KI WONG, M.D.

Medicine and Religion Committee

The Reference Committee did not make any comments on this report and so it stands as submitted.

NOMINATING

The committee was able to select the nominees for officers to be elected at the Annual Meeting at its first and only meeting. After one nominee withdrew, the committee members were circulated by mail and agreed upon a replacement.

The committee has contacted all nominees and each has expressed a willingness to serve if elected. The following slate is presented to the House of Delegates for the election which will take place on April 30, 1965:

President-elect (1 year).....*A. S. Hartwell*
T. T. Tomita
Councillor from Honolulu County (3 years)
to replace Chew Mung Lum.....*J. F. Chalmers*
A. C. Ivy, Jr.
Councillor from Kauai County (3 years)
to replace Burt O. Wade.....*S. R. Wallis*
Treasurer (2 years).....*H. Y. H. Chinn*
P. H. Liljestrand
AMA Delegate (2 years).....*R. D. Moore*
AMA Alternate Delegate (2 years).....*G. H. Mills*

The committee would like to point out that there are a total of six Councillors, three from Honolulu and the balance from the other three counties. In order to maintain continuity, two are elected each year to serve for a period of three years. The terms of all candidates begin at the time of their election except that the AMA regular and alternate delegates' terms begin January 1 of the year following their election.

The Nominating Committee does not feel that it is appropriate for it to select nominees for the Nominating Committee and recommends that nominations be made from the floor at the time of the election. The delegates should be reminded that the HMA Bylaws state that the Nominating Committee shall consist of the following: Five members from Honolulu County Medical Society and one member from each of the other three county societies.

ROBERT T. WONG, M.D.

ACTION:

Past Presidents Harry L. Arnold, Jr., and J. A. Burden, plus the Secretary, Randal A. Nishijima, were appointed tellers. Nominations from the floor were solicited. It was voted to accept the

Nominating Committee report. The Secretary was instructed to cast an elected ballot for the AMA Delegate, the AMA Alternate Delegate, and the Councilor from Kauai.

After receiving Dr. Tomita's resignation as Councilor from Honolulu, the President requested nominations from the floor to complete the final year of Dr. Tomita's term. Drs. Grover Batten, John Chalmers, P. H. Liljestrand, and Carolina Wong were nominated.

The President asked for nominations from the floor for the Nominating Committee. Drs. Keith F. O. Kuhlman, Elmer Johnson, Andrew Morgan, Carl Mason, Richard S. Omura, L. Q. Pang, J. I. F. Reppun, and Robert T. Wong were nominated.

The results of the election were announced as follows:

President-elect.....*Theodore T. Tomita*
Treasurer.....*Herbert Y. H. Chinn* (two years)
AMA Delegate.....*Richard D. Moore* (two years)
AMA Alternate Delegate.....*George H. Mills* (two years)
Councilor from Honolulu.....*Andrew C. Ivy, Jr.* (three years)
Councilor from Honolulu.....*Grover H. Batten* (one year)
Councilor from Kauai.....*Samuel R. Wallis* (three years)
Nominating Committee.....*Keith F. O. Kuhlman*
Carl B. Mason
Richard S. Omura
R. F. Shepard
Robert T. Wong
Robert A. Miyamoto (Hawaii)
Burt O. Wade (Kauai)
Clifford F. Moran (Maui)

The meeting was adjourned at 6:45 P.M. ■

RANDAL A. NISHIJIMA, M.D.
Secretary

LOMOTIL—*Pharmacologic Activity.*

The significant pharmacologic actions of Lomotil are summarized as follows:

Evidence indicates that Lomotil acts directly on the intestinal musculature to inhibit excess peristalsis.

Lomotil is not known to inhibit nonpropulsive intestinal movements.

Roentgenograms demonstrate that this activity occurs within two hours after oral administration and persists for at least six hours.

Comparative studies in the rat show Lomotil to be more effective in inhibiting fecal excretion than either codeine or morphine.

Analgesic, anticholinergic, mydriatic and gastric secretory effects have not been significant.

Reduction of propulsive motility with Lomotil relieves spasm and cramping, allows physiologic absorption of fluid and reduces frequency of evacuations to provide prompt, symptomatic control of virtually all diarrheas.

LOMOTIL® tablets liquid

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride .....2.5 mg.
(Warning: May be habit forming)

atropine sulfate .....0.025 mg.

slows propulsion · relieves distress · stops diarrhea

Precautions: Lomotil is an exempt narcotic preparation of very low addictive potential: more than three million prescriptions have now been written for Lomotil. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia.

Dosage: For full therapeutic effect – Rx full therapeutic dosage. The recommended initial daily dosages, *given in divided doses,* until diarrhea is controlled, are:

Children:
3 to 6 months–3 mg. (½ tsp.* t.i.d.)
6 to 12 months–4 mg. (½ tsp. q.i.d.)
1 to 2 years–5 mg. (½ tsp. 5 times daily)
2 to 5 years–6 mg. (1 tsp. t.i.d.)
5 to 8 years–8 mg. (1 tsp. q.i.d.)
8 to 12 years–10 mg. (1 tsp. 5 times daily)

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) **Based on 4 cc. per teaspoonful.*

Maintenance dosage may be as low as one fourth the therapeutic dose.

Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE *Research in the Service of Medicine*

HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: JAMES YANO, Kaiser Foundation Hospital

Immunologic Competition in a Case of Isoimmunization Due to ABO and Rh Incompatible Pregnancy

Hemolytic diseases of the newborn due to either the Rh or the ABO antibodies have been thoroughly investigated by many immuno-hematologists. However, there have been very few papers written on the detection and identification of a hemolytic disease of the newborn due to a combined Rh and ABO incompatibility between mother and infant.

This paper deals with the problems and findings of a case of hemolytic disease of the newborn infant resulting from a concomitant isoimmunization by both the Rh and ABO antigens.

CLINICAL HISTORY

The patient was a 31-year-old Caucasian woman of good health who had no history of previous blood transfusions. She was gravida IV, para III, with two living children and one stillbirth. She is the youngest (and only female) sibling of a family of three, all delivered with no incidence of blood sensitization. Her father is Group O, Rh-positive and her mother is Group B, Rh-negative.

Her first pregnancy in 1955 resulted in the uneventful delivery of infant girl of group O, Rh-positive, R_2r (DcE/dce). However, in 1959, her second infant girl, Group O, Rh-positive, R_2r (DcE/dce), developed hemolytic disease due to the Rh antibody. Two separate antibody titer determinations prior to the second delivery date showed an increased titer in both the albumin and antiglobulin tests indicative of possible sensitization. It was noted during delivery that the amniotic fluid was greenish-yellow. Hematological studies performed on the infant's blood gave the following results: erythrocytes, group O, Rh-positive; direct antiglobulin (Coomb's) test, positive; hemoglobin, 11.4 gms.%; hematocrit, 35%; total bilirubin, 9.5 mg%; direct bilirubin, 3.8 mg%; and on the blood smear there were 427 nucleated erythrocytes for each 100 leukocytes. After an exchange transfusion of one unit of Rh-negative blood, the child had an uneventful recovery.

In 1960 this woman's third pregnancy terminated in the delivery of a hydropic stillborn fetus. Prior to her delivery date, antibody titers were 1:32 in albumin, negative in saline. A month before delivery, repeat antibody titers revealed 1:8 in albumin and negative in saline. In the 40th gestational week, only eight days prior to delivery, the patient was examined and the fetal heart was audible and of good quality. However, on the day prior to delivery, fetal movements were not experienced and the fetal heart not audible. The patient delivered an erythroblastotic infant girl with hydrops, splenomegaly, adrenomegaly, erythroid hyperplasia of bone marrow, ascites, and right pleural effusion.

PRESENT CASE

The present case is the patient's fourth pregnancy. Laboratory investigation of the patient's blood showed her to be Group O, Rh-negative, r″r(dcE/dce); her husband is Group A, Rh-positive, R_2R_o (DcE/Dce). Her complete blood count was within normal limits and serologic test for syphilis was nonreactive. The antibody titer at 12 weeks' gestation was 1:2 in albumin and 1:64 in the antiglobulin test. One month later, a repeat antibody titer study revealed a rise of 1:16 in albumin and 1:128 in the antiglobulin test. The titers remained the same up to delivery date. (Complete data on the progressive antibody titers is given in Table 1.)

In spite of no further rise of antibody titers, the history of previous stillbirth was of great concern. Consequently, when the infant was judged sufficiently mature at 35 weeks' gestation, termination of pregnancy was felt necessary. However, prior to an induction by amniotomy and pitocin infusion, an amniocentesis analysis was performed with a positive findings of 0.145. (Amniocentesis[5]: Immediately upon receipt of the amniotic fluid, the specimen was centrifuged at 2,500 rpm for ten minutes. The clear fluid was then read in a spectrophotometer using a 12 mm cuvette with a water blank and the optical density (O.D.) re-

Acknowledgment: Special acknowledgment and deepest appreciation is expressed to Mitsuo Yokoyama, M.D., Ph.D., Associate Professor of Genetics at the University of Hawaii Biomedical Research Center, for his valuable assistance, interest, and criticism of the study and manuscript. Also a special gratitude to James Bennett, M.D., Pathologist, Paul McCallin, M.D., and Mary Nakamura, MT. (ASCP), for their assistance.

TABLE 1

DATE	ALBUMIN	ANTIGLOBULIN TEST
7- 8-64	1:2	1:64
8- 6-64	1:16	1:128
10- 9-64	1:16	1:128
10-30-64	1:16	1:128
11-13-64	1:16	1:128
11-20-64	1:16	1:128
12- 1-64	1:16	1:128
12- 3-64	Delivery at 8:20 P.M.	

TABLE 2

Blood group	Group A
Rh typing	Positive, R_oR (Dce/dce)
Direct antiglobulin test	Strongly positive
Hemoglobin	8.0 gm%
Hematocrit	26%
Bilirubin	4.2 mg%
Protein	5.0 mg% (T S meter)
Reticulocytes	17.4%
Smear	30 nucleated RBC's/100 WBC

TABLE 3

DATE	BILIRUBIN *Mg%*	TRANSFUSION *LT, O neg.*	HEMATOCRIT *%*	HEMOGLOBIN *Gm%*
12- 3-64	4.2 (8 PM)	1 unit	26	8.0
12- 4-64	6.1 (7 AM)	....	....	....
12- 4-64	6.5 (7 PM)	....	....	....
12- 5-64	10.0 (7 AM)	....	....	....
12- 5-64	13.4 (7 PM)	....	....	....
12- 6-64	17.3 (7 AM)	....	....	....
12- 6-64	19.5 (7 PM)	....	....	....
12- 7-64	20.4 (7 AM)	....	....	....
12- 7-64	21.3 (3 PM)	1 unit	....	....
12- 7-64	12.4 (5 PM)	....	29.5	9.8
12- 8-64	15.5 (7 AM)	....	32.5	11.9
12- 9-64	17.3 (7 AM)	....	....	....
12-10-64	13.1 (7 AM)	....	....	....
12-11-64	11.2 (7 AM)	....	39	12.8
12-21-64	....	....	32	10.7

corded at 450 millimicron (mμ) and 700 mμ. The optical density reading at 700 mμ was subtracted from the optical density reading at 450mμ. The normal value is an optical density of less than 0.05 difference. Any results over 0.1 optical density difference between the two readings is significant for a prenatal diagnosis of erythroblastosis fetalis).

HEMATOLOGIC DATA

On December 3, 1964, a female infant weighing 6 pounds 7½ ounces was delivered, appearing pale and obviously jaundiced. The complete laboratory data on the cord blood is given in Table 2.

Since the direct antiglobulin test was strongly positive and a control suspension of the infant's cells with albumin showed mass agglutination, the infant's cells were thoroughly washed three times with normal saline and then typed Group A, Rh-positive. A unit of fresh low-titer Group A, Rh-negative blood was crossmatched with cord blood serum. Both the albumin and antiglobulin tests were strongly positive. The crossmatch was repeated with identical results. The possibility of simultaneous Rh and ABO sensitization was now evident.

Another crossmatch with a unit of fresh low-titer Group O, Rh-negative blood proved compatible. Approximately two hours after delivery an exchange transfusion was performed. Results of the hematological investigation before and after transfusion are given in Table 3.

On December 7, 1964, the four-day-old infant required another unit of low-titer Group O, Rh-negative blood due to the appearance of progressive anemia and rise of bilirubin to 21.3 mg%. A week later, the baby was released from the hospital and had an uneventful recovery.

SEROLOGIC DATA

To further confirm the probability of a combined Rh and ABO sensitization in this case study, the following tests were performed:

(1) Maternal iso-agglutinins of anti-A and anti-B were titered using saline washed Group A_1 and Group B cells with mother's serum incubated at room temperature for 30 minutes. The mother's anti-A titer at delivery was 1:1024, but 24 hours after delivery, the titer diminished to 1:112. The anti-B iso-agglutinin titer remained at 1:56 during and after pregnancy. The infant's serum incubated in similar manner with the same washed cells showed positive reaction to the Group A blood cells but was negative to the Group B blood cells.

(2) Both mother's and infant's sera were tested for the possible presence of "immune" anti-A antibodies. A mixture of one volume of serum and two volumes of blood group specific substances A and B were mixed and incubated at room temperature for 30 minutes. An equal volume of neutralized serum and washed Group A_1 and B cells in two per cent saline suspension were mixed and incubated at 37°C for 60 minutes, and later subjected to an indirect antiglobulin test. Maternal serum had a titer of 1:32 of "immune" anti-A antibodies but the infant's serum was negative.

(3) Since the Witebsky[10] slide test has been of value in the detection of red cell sensitization in cases of hemolytic disease, the following three solution mixtures were placed on a prewarmed slide on a viewing box: (a) one drop of albumin-serum mixture prepared from one part of normal adult AB serum and two parts of bovine albumin; (b) one drop of normal adult AB serum; (c) one drop of saline. To all three solutions, one drop of 50 per cent suspension of cord blood in its own serum was added and mixed thoroughly. The mixtures were gently rocked on the viewing box for two minutes and examined for agglutination. The serum-albumin plus cord blood mixture had a

two-plus reaction; the normal AB serum plus cord blood mixture also had a two-plus reaction. The saline plus cord blood mixture was negative as were also normal blood controls for all three solutions. It has been found that the cells from infant's cord blood with ABO hemolytic disease will react most strongly in the normal AB serum but less strongly in the albumin-serum mixture. Also, the reverse is frequently true in Rh hemolytic diseases.

(4) The heat elution technique was utilized to demonstrate any absorbed antibodies on the infant's erythrocytes. A 50 per cent suspension of the infant's erythrocytes was washed thoroughly three times with normal saline. After the last washing, the packed cells were resuspended with one volume of fresh saline and the mixture placed in a 56°C. water bath for ten minutes with frequent agitation. The incubated cells were quickly centrifuged at high speed in pre-heated (56°C.) cups filled with water at 56°C.

The supernatant fluid was carefully removed and tested with washed cells of Group A, Rh-positive, Group A, Rh-negative, Group O, Rh-positive, and Group O, Rh-negative. After incubation and treatment with antiglobulin serum, the eluate exhibited strong positive reactions with the Rh-positive blood cells but negative reactions with the Rh-negative blood cells.

DISCUSSION

In 1945 Weiner postulated that if a Group O, Rh-negative woman were bearing a Group A, Rh-positive fetus, it was expected that she would either produce anti-A alone, or antibodies for A and Rh combined, but not for Rh alone. In his presentation of the competition of antigens in pregnancy, he demonstrated that an experimental animal injected with a mixture of two substances, one a strong antigen and the other a weak antigen, the antigenicity of a weaker antigen is often suppressed. However, since then many cases of hemolytic disease of the newborn with incompatibility of ABO and Rh between mother and infant demonstrated the production of the anti-Rh antibodies alone.

Although in our study the mother's serum demonstrated an anti-A iso-agglutinin titer of 1:1024 with an "immune" anti-A titer of 1:32 and supported by a high titer of anti-Rh antibodies of 1:128, nevertheless, the specificity of the possible existence of a simultaneous Rh and ABO hemolytic disease in our case rests primarily in finding the specific antibodies eluated from the infant's erythrocytes. In a recent article by Yunis and Bridges they mentioned that approximately one chance in three existed for an ABO hemolytic disease in a newborn when the mother's serum contains an "immune" variety of anti-A or anti-B and if her infant is Group A or Group B.

The most important serologic evidence of this case rests in the studies of the infant's serum and erythrocytes, primarily the latter. The infant's serum exhibited a positive reaction with Group A, Rh-negative cells in albumin and antiglobulin testing; however, the eluate from the infant's cells clearly demonstrated the anti-Rh antibodies by showing positive reactions with Rh-positive cells and negative reactions with Rh-negative cells. Unfortunately, the eluate showed no reaction with Group A, Rh-negative cells which would have justified a definitive diagnosis of a combined Rh and ABO hemolytic disease.

There is, however, a plausible explanation for the failure to demonstrate "immune" anti-A antibodies in the eluate of the infant's erythrocytes. Yunis stated that the elution technique is not reliable to detect all antibodies affecting an infant in hemolytic diseases. Also, although the present study will not substantiate this theory, the combined nature of the sensitization of the infant's erythroctyes with both the anti-Rh and anti-A antibodies involved localization of antibodies on the surfaces of the erythrocytes in different concentration which affected the elution method to such an extent that only the anti-Rh antibodies were capable of being eluated, while the anti-A antibodies were still being held in their respective antigenic sites on the erythrocytes or diminished in its activity to react with specific cells since their combination with anti-Rh altered its reactive nature.

In 1958, Levine illustrated the protective effect of an ABO incompatibility with an Rh-hemolytic disease in approximately four to twelve per cent of cases when ABO compatibility existed between mother and infant. It is interesting to note that the statistics give evidence for establishing the diagnosis of combined anti-Rh and ABO hemolytic disease and also illustrate the difficulty in the proper selection of a blood donor for an exchange transfusion. Some workers recommend the use of fresh low-titer Group O blood without addition of group specific substance A and B for replacement transfusion where the infant is affected by either the ABO antibodies or the Rh antibodies, or a combination of both, regardless of the infant's blood grouping. The choice of the blood donor's Rh factor will be determined by the nature of the sensitization.

Although the cases of a combined anti-Rh and anti-A hemolytic disease of the newborn may be statistically very few, nevertheless, because of the problems encountered in establishing the diagnosis

coupled with the unknown variables existing in every case of hemolytic disease of the newborn due to anti-Rh, ABO, or any blood antigens, there is much merit in the recommendation of fresh low-titer Group O blood for all exchange transfusions under these circumstances.

SUMMARY

A case study of hemolytic disease of the newborn due to combined anti-Rh and ABO sensitization to both the Rh and ABO antigenic factors is clearly evident in our case presentation. Although it may not always be possible to establish definitive diagnoses in such cases, the best serologic evidence is the demonstration of the specific antibodies from the infant's serum and erythrocytes. The choice of blood donor is important since in this case blood from a group-specific donor would have aggravated the situation. ■

JAMES R. YANO, B.S., MT (ASCP)

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Notes and News *continued from 463*

Norman, who came here in 1940 as a physician at Kalaupapa Settlement, was presented the traditional gold watch by the Health Dept. staffers. We extend condolences to him, too, on the recent demise of his wife, Catherine. **F. H. Tong,** Maui district health officer, reported 50 cases of influenza on Lanai earlier in the year. **Wilbur Lummis,** affable State Health Dept. official, spoke at the Third State Conference on Aging sponsored by the State Commission on Aging. **Peter Kim,** Polio Chairman for the Kauai County Medical Society, announced that county's oral polio vaccination campaign. The one-day drive to reach everyone on Kauai with Type III vaccine was scheduled for Sunday, May 23.

Travelers

Pediatrician **Mitsuo Tottori,** Internist **Edward Yamada,** OB Gynecologist **Noboru Ogami,** and Surgeon **Shoyei Yamauchi** left March 19 for Okinawa on a two-week mission of "service and health ministry." They held case conferences, assisted with surgery, made ward rounds, and conducted seminars and symposiums. Shoyei, head of the delegation, made a similar trip to Okinawa in May, 1964, when he first conceived the idea of aid to Okinawan physicians.

William John Holmes left on a round-the-world trip including a visit to India where he will instruct in new techniques of eye surgery. **Frank Tabrah** of the Big Island, who has been making lab tests on traditional medicinal plants of the Hawaiians over the past two years, is on a two-month trip to Tahiti to study native medicines of French Polynesia. His trip to Tahiti is sponsored by the Pacific Biomedical Research Center of the University of Hawaii.

In February Senator **James Fleming,** Maui's flying physician extraordinary, returned from Wichita, Kansas, with a new Beech Bonanza for his Valley Isle Aviation. The last leg of his flight from Oakland, California, to Kahului, Maui, took 14 hours and 15 minutes. His co-pilot was Jim Ashdown (of later Waikiki buzzing fame). In March he was absent from a Senate session when he delivered his own granddaughter.

The five-member Hawaii delegation to Selma, Alabama, included **Robert Brown,** head psychiatrist at St. Francis Hospital, and **Linus Pauling, Jr.,** Honolulu psychiatrist. The **Carl Masons** left in March for San Francisco, Denver, New Orleans (for a medical meeting), Mexico City, and then to La Paz where the marlin were running. The **William Goodhues** of Kukuiula, Kauai, left Bal Harbour, Florida, for the Industrial Surgeons' Conference and other parts.

Local Boys and Girls Make Good

We congratulate the **Tom Fujiwaras** and **Satoru Nishijimas** for their daughters, Cathy and Susan, who made the Dean's list at Connecticut College in New London. The **Robert Baileys** are equally proud of their daughter Beryl, who has been elected president of her class at Vassar. We learned that Lois Patterson, daughter of the **William Pattersons** of Wailuku, sang with the Westminster Choir at Carnegie Hall, New York.

Community Notes

Aggressive **Ed Lau,** Chief of Surgery at St. Francis Hospital, announced that a request has been sent to President Johnson's Commission on Heart Disease, Cancer and Stroke that Hawaii be selected as a vascular disease center site. Ed feels that such a proposed center in Hawaii could offer convenient advanced U.S. medical techniques to the Far East. **Sorrell Waxman, Noboru**

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Notes and News *continued from 512*

Ogami, Richard Lee, and **Angie Connor** were recently selected chairmen of a State Mental Retardation Planning Committee. **Fred Shepard,** Rehab Center Director, has conducted a six-month study to help persons with heart or stroke disabilities lead more useful lives. Results of the study were scheduled for analysis at the end of the trial period, June 30.

Dr. Y. S. Seto has six sons. An incredible four of them are physicians or physicians-in-training. **Millard** is in OB, **Dudley** in internal medicine, **Dexter** in pediatrics, and **Anthony** in Wayne University Medical School. All six, with their families, gathered for a dinner reunion at the Hilton Hawaiian Village.

Outgoing **George Suzuki** is the new president of Nuuanu Elementary School PTA and **Felix Lafferty** is the new president at the Aina Haina PTA. **Shoyei Yamauchi** donated a modern x-ray machine to the people of the Ryukyus through the Okinawa Central Medical Laboratory and Cancer Clinic after returning from his last visit there.

Announcements:

The annual scientific meeting of the American College of Nutrition will be held at the Americana Hotel, New York, Sunday, October 10, at 10:00 a.m. For further information, contact Robert Peterman, M.D., Secretary, 3 Craig Court, Totowa Borough, New Jersey, 07512.

Medical Manuscript Editing Service is provided by the Medical Writers' Association. The charge to nonmembers is $7.50 for the first 1,000 words plus $7.50 for each additional thousand or fraction. Only medical manuscripts of less than 5,000 words will be edited. Manuscript should be sent by first class mail to American Medical Writers' Assn., Medical Manuscript Editing Service, Ravenswood Hospital, Chicago, Illinois 60640.

The following is a list of outstanding postgraduate courses of interest to the G.P. which was compiled by HAGP Program Committee:

August 2-7, 1965, *U.S.C. 8th Annual Postgraduate Refresher Course*—Princess Kaiulani Hotel. Part-time Session: 7:15 a.m. to 10:00 a.m. Full-time Session: 7:15 a.m. to 12:00 noon. Special registration fees for local doctors attending. Part-time ($40.00) or full time ($60.00) sessions.

August 9-10, 1965, *Continuation of U.S.C. Postgraduate Course* at Sheraton Hotel at Lahaina, Maui.

HAWAII CALENDAR*

HMA ANNUAL MEETING, May 11-15, 1966, Princess Kaiulani Hotel. **AMA CLINICAL CONVENTION,** November 28-December 1, 1965, Philadelphia. **AMA ANNUAL CONVENTION,** June 26-30, 1966, Chicago. **PAN PACIFIC SURGICAL** Association 10th Congress, Part I, September 20-28, Princess Kaiulani. Parts II and III to follow in Japan, Hong Kong, The Philippines, Thailand, India, Singapore, Australia, and New Zealand.

AUGUST

August 1-31—**Visiting Professor** C. Henry Kempe from the Dept. of Pediatrics, University of Colorado Medical School. Honolulu.

August 2-10—**U.S.C. Postgraduate Refresher Course,** Princess Kaiulani and Sheraton Maui.

* Errors in listings are not the responsibility of the HAWAII MEDICAL JOURNAL.

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Notes and News *continued from 514*

August 2-27—**Visiting Professor** R. B. Durfee from the Dept. of Obstetrics and Gynecology, University of Oregon Medical School. Honolulu.

August 2-27—**Visiting Professor** James D. Hardy from the Dept. of Surgery, University of Mississippi Medical Center. Honolulu.

August 3—**Visitor** W. F. Barker, Vascular Surgeon.

August 23—**National Heart Institute Visitor** Glen W. Moss. Honolulu.

August 23-26—**American College of Hospital Administrators.** University of Hawaii.

August 25-September 2—**American Psychiatric Assn.,** Area 5, Western Division. Sheraton Hotels.

SEPTEMBER

September 3-12—**American Hospital Assn.** Postconvention tour. Ilikai.

September 16-22—**National Foundation of Health, Welfare, and Pension Plans.** Kahala Hilton.

September 29-October 1—**Governor's Conference on Science & Technology.** Kauai.

OCTOBER

October 10-21—**Visiting Professor** of Medicine, David Karnofsky, Sloan Kettering Institute of New York. Honolulu.

October 11-14—**HCMS—Postgraduate Lecturer** John Bunker, Professor of Anesthesiology, Stanford, School of Medicine, talking on "Acid-Base Balance and Acute Disturbance in Ventilation." Mabel Smyth Auditorium.

October 14-16—**Hawaii Nurses Assn.** Annual Meeting. Mabel Smyth Bldg.

October 25-31—**Western Orthopedic Assn.** Princess Kaiulani.

October 28-29—**Assn. of Western Hospitals Institute.** Hawaiian Village.

NOVEMBER

November 1-30—**Visiting Professor** William T. Fitts from the Dept. of Surgery, Hospital of the University of Pennsylvania. Honolulu.

November 1-December 31—**Visiting Professor** Sidney Carter from the Dept. of Neurology, Columbia College of Physicians & Surgeons, New York. Honolulu.

November 8-20—**Visiting Professor** Ralph E. Dolkart from the Dept. of Medicine, Passavant Memorial Hospital, Chicago. Honolulu.

November 14-18—**Pacific Int. Dental Conference.** Hawaiian Village.

DECEMBER

December 15-17—**HAGP-Lilly Seminar** presenting Kay Clawson of the University of Washington School of Medicine talking on "Common Foot Problems."

JANUARY

January 8-February 4—**Visiting Professor** Mark Ravitch

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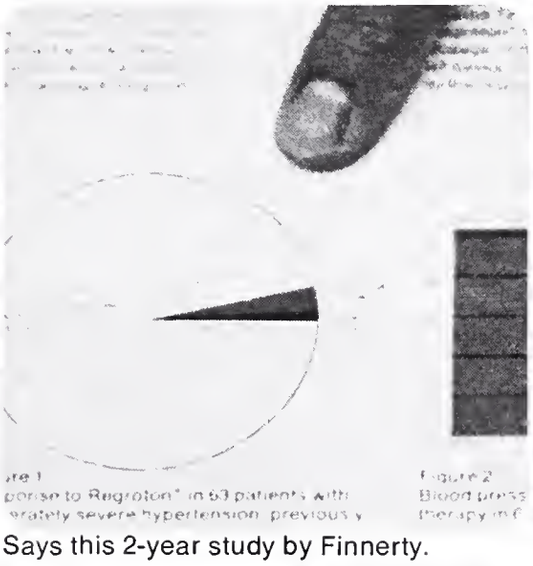
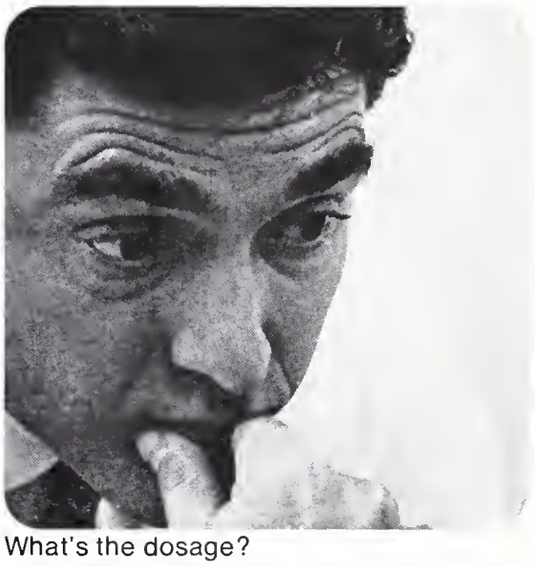


Says this 2-year study by Finnerty.



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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montreal, June 14–19, 1964.

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Notes and News *continued from 518*

from the Dept. of Surgery, Johns Hopkins School of Medicine. Honolulu.

January 15-30—**Visiting Professor** Macdonald Critchley from the Dept. of Medicine, National Hospital, London. Honolulu.

January 24-28—**Postgraduate Course** in Allergy presenting James W. Willoughby. Princess Kaiulani.

January 31-February 11—**Visiting Professor** Fred J. Ansfield from the Dept. of Clinical Oncology, University of Wisconsin Medical School. Honolulu. ■

Book Reviews *continued from 464*

surveys of the current knowledge in this field. The 17 contributors to the text discuss reproductive physiology and pathology, clinical syndromes and diseases, and psychological and even sociological implications of sex behavior. This unique comprehensive approach to a most neglected field is most heartening to those interested in this area of endocrinology and should serve as a good foundation for future research in this field. The chapters on reproductive physiology, infertility, and sex and the law are especially valuable. The 564 pages of text are clearly written and well-illustrated.

As with any text in a rapidly advancing field, future revisions will be necessary and welcomed. This text is highly recommended for all practicing physicians who are concerned with this aspect of clinical medicine, whether it be in diagnosis, treatment, or counseling.

WINFRED Y. LEE, M.D.

Advances in Internal Medicine, Vol. 12

Editors William Dock, M.D., I. Snapper, M.D., 375 pp., $11.00, Year Book Medical Publishers, 1964.

THE EDITORS PROVIDE in this volume, as in previous ones, a balanced set of monographs in the major subdivisions of internal medicine. The section on aerospace medicine concisely reviews problems of manned space flights; pyridoxine-responsive anemia is discussed through analysis of 62 cases; renal acidosis is reviewed and brought up to date. For clinicians interested in intermediate metabolism, a monograph on lipid metabolism, especially as related to diabetes mellitus and obesity, is beautifully written. For the immediately practical, a discussion of the clinical significance of bacteriologic examination of the sputum, and a review of chronic bronchitis and emphysema, are provided.

This series of volumes, covering most of the important fields of internal medicine, is certainly one of the more useful distillations for helping the practicing internist and general physician dig deeper with little pain.

ROBERT A. NORDYKE, M.D.

Clinical Neurology

By Frank A. Elliott, M.D., F.R.C.P., 688 pp., $12.50, W. B. Saunders Company, 1964.

THIS IS ANOTHER in the line of textbooks of clinical neurology written primarily for medical students and residents but certainly very adequate for general consumption. Within its 688 pages, Dr. Elliott has attempted to cover the entire field of neurology, an impossible task, but he has done this quite well. The coverage of the various topics is brief, at times too brief. The format of the text is slightly different from the usual one in that he has omitted the traditional chapters on methods of

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neurological examination, and instead the eight chapters have been devoted to the diagnostic significance of neurological signs and symptoms and their interpretation in terms of the basic neurological sciences. As a whole, it is a very readable text. It cannot be considered a reference book in neurology.

MICHAEL M. OKIHIRO, M.D.

★ The Retinal Vessels

By R. Seitz, M.D., translated by Frederick C. Blodi, M.D., 186 pp., $14.50, The C. V. Mosby Company, 1964.

THIS IS THE FIRST monograph I have seen on this subject. It is a little less than amazing because it has always been my assumption in ophthalmology that the ophthalmoscopic picture that we see using either white or red free light is a "reflection" of the basic or underlying pathological picture; here I learn that there are on record only two cases in which the ophthalmoscopic picture and diagnoses were confirmed by a follow-up histologic study.

This monograph is extremely interesting and should be read by every ophthalmologist, neurologist, and internist.

Probably of hidden value, in this work, is the importance that should be attached to the microanatomy of the retina and choroid, wherein every layer is of importance in the understanding of morphologic changes as they are visualized. This is confirmed by the electron microscope, which is used whenever a shadow of doubt exists in the histologic picture.

Reviewing this monograph has been enlightening, although at times tedious. It should be of great importance to anyone interested in neuroophthalmology.

PHILIP M. CORBOY, M.D.

★ Injuries

Edited by George J. Curry, M.D., 256 pp., $6.50, G. P. Putnam's Sons, New York, 1964.

IN THE PREFACE the author says the book is intended as a guide for the management of injuries, and as a quick reference handbook. He attempts to carry out this aim by presenting and emphasizing simple diagnostic criteria and concepts of when, why, and how an injury should be managed.

The author covers the broad field of injuries with generalized treatment in the first few chapters followed by specific types such as burns, fractures, amputation, cranial and spinal injuries and so forth. The remaining chapters cover specific body areas in relation to injury.

The book gives one the impression of inconsistency. There are some paragraphs and even entire chapters which deal only in broad generalizations of no real benefit in the treatment of injury. Then, there are chapters, such as those on abdominal injuries and thoracic injuries, which cover the field very well and are of great benefit.

This book adds little to information already present in many other such books.

PATRICK J. WALSH, M.D.

★ Progress in Hematology, Vol. 4

Edited by Carl V. Moore, M.D., and Elmer B. Brown, M.D., with 21 contributors, 309 pp., $13.75, Grune & Stratton, 1964.

THE NEW EDITORS succeeded Leandro Tocantins, following his untimely death in 1963. In a remarkably short time they have been able to solicit from their contributors a series of articles outstanding in both depth and scope. Each contribution is an exhaustive review, and refreshingly current. Because each review is meant to

be exhaustive, much of the new volume reads like a textbook of biochemistry, and the nonhematologist may find it hard to assimilate. However, the clinical sections are just as comprehensive as the investigative, and the clinician will find them complete and meticulously organized. The subjects discussed are timely and coincide with recent outstanding developments in hematology. Of particular current interest are the sections on porphyrin metabolism, the methemoglobin syndromes, erythropoietin, myeloma proteins and macroglobulins, and therapeutic advances in acute leukemia. This volume is a must in any major reference library.

REGINALD HO, M.D.

Emergency Treatment and Management, 3rd Ed.

By Thomas Flint, Jr., M.D., 686 pp., $8.75, W. B. Saunders Company, 1964.

THIS REVISED third edition includes a chapter on administrative, clerical and medical-legal principles and procedures. It is very well written, and for practical purposes provides at a glance valuable information for management of most acute illnesses and injuries. The information in this book is comprehensive, concise, and clear. I would recommend this book for all doctors who may be faced with these situations in their daily practice.

EDWARD K. LAU, M.D.

Agoraphobia in the Light of Ego Psychology

By Edoardo Weiss, M.D., 132 pp., $5.50, Grune & Stratton, 1964.

RECOMMENDED for those interested in the psychodynamics and treatment of this specific phobia—i.e. the phobia associated with abandoning a fixed point of support such as one's home.

YAN TIM WONG, M.D.

★Emergency Service Manual

Edited by John H. Schneewind, M.D., 246 pp., $4.50, Year Book Medical Publishers, Inc., 1963.

THIS IS A VALUABLE book for quick ready reference when one is confronted with an acute emergency in medical practice. The general rules listed regarding principles of emergency care are excellent. The number of subjects covered is broad. The chapters on each subject are brief and to the point. Excessive details are minimized. The language is excellent and clear. This little volume should be on the shelf of every hospital emergency room, on the reference shelf of all medical libraries, and in the office of every general practitioner.

CHARLES S. JUDD, JR., M.D.

★Handbook of Pharmacology, 2d Ed.

By Windsor Cutting, M.D., 647 pp., $5.95, Appleton-Century-Crofts, 1964.

THIS SOLID PAPERBACK contains more meat and less fat than any treatise on the subject I have ever seen.

It is astonishingly current; most books are a bit obsolete when published, but not this one. The sections on alkylating agents and insecticides and herbicides are particularly complete and up to date. Every few pages you come across a description of a drug so new that the detail men have been presenting it within the past month or so.

The bibliography is adequate. Price is not given, but the book is worth it!

H. L. ARNOLD, SR., M.D.

Pediatric Ophthalmology

Edited by L. Byerly Holt, M.D., F.I.C.S., 403 pp., $12.00, Lea & Febiger, 1964.

THIS BOOK has been interesting to review, because it is the first compendium I have read on diseases of the eyes

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as they pertain to the lowest age group. It contains many salient and valuable hints regarding etiological, diagnostic, and systemic aspects of eye disorders in children. Unfortunately, the matter of treatment was completely omitted in this volume.

The book constitutes the work of 31 authors who contributed 37 papers written exclusively on this subject. I feel that this volume will be helpful to medical students and residents in ophthalmology but not to "seasoned opthalmologists."

To quote Dr. Oliver Wendell Holmes, "This book has one of the finest of bindings."

PHILIP M. CORBOY, M.D.

★Textbook of Pediatrics, 8th Ed.

Edited by Waldo E. Nelson, M.D., D.Sc., 1,636 pp., $18.00, W. B. Saunders Company, 1964.

ANOTHER EDITION of this standard pediatrics text is now off the press, with 174 additional pages.

For those familiar with the seventh edition, little need be said except that five years have brought many additions in many areas. Of particular interest are the tremendous changes in the field of antenatal origin of disease, inborn errors of metabolism, and viral disease and therapy. All material is clearly presented and well illustrated. The index is especially complete.

Eighty-five authorities have contributed in their special fields of interest. This work has been well edited, maintaining continuity and avoiding needless repetition.

This text is strongly recommended for the library of those working with infants and children. ■

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