Treatment Of The Jaundiced Patient*

Dr. Martin Hoffman and Dr. R. M. MacDonald

Dr. R. M. MacDonald: This 50-year-old R.C.M.P. inspector was admitted one month ago with the complaint of "an uncomfortable feeling in his stomach for 10 days which he thought was due to the flu." Some 6-7 days prior to admission he noticed urine was dark. He thought this was due to fever. Several days later he had marked malaise, nausea, vomiting, headache, pyrexia and he noticed his stools were light colored.

Three days before admission his friends thought he looked a little yellow, but he was not convinced and carried on with his work. However, on day of admission he reported to Dr. House who observed definite jaundice and on the strength of the clinical picture referred him to hospital.

His past history revealed few illnesses. Years before he had an hernia operation and haemorrhoidectomy. On functional enquiry there was little of note prior to onset of present illness. His appetite had always been good; he enjoyed his food and was free of dyspepsia. He has been temperate in habits. Family history was non-contributory. He has had no known contact with jaundiced patients nor did he receive any injections in recent months.

Physical Examination: Well nourished patient with moderate jaundice. Liver was palpable one finger breadth below costal margin and slightly tender. Spleen not felt. No adenopathy. Remaining physical examination not remarkable.

Investigation on admission: Blood count normal, serology; Kahn negative; Serum Bilirubin direct 5.6, total 8.4 mgm %. Urine; strongly positive for bile, and Urobilinogen 1 in 60 positive; 1 in 70 negative.

Clinically this was considered a classical case of Infectious Hepatitis and within 1-2 days of admission he felt improved and was eating better. However three days after admission he had abdominal pain, nausea and fever and required intravenous feedings. Further liver function tests revealed normal protein, negative flocculation tests, alkaline phosphatase 15.4 units (slightly elevated). Within 3-4 days he settled down and has steadily improved and although we have considered him as a case of infectious hepatitis he presented clinical features resembling gall bladder disease and laboratory findings unusual for infectious hepatitis. Yesterday, a cholecystogram was carried out and showed a non-filling gall bladder and opacities resembling biliary calculi.

This patient in his convalescent stage has kindly consented to come to this meeting and I would like Dr. Hoffman to carry on. There may be further questions he would like to ask of our patient.

Dr. Hoffman: This is the first time I have heard of this patient and Dr. MacDonald has thoroughly gone over the history. Just a few points that occurred to me as I heard the history, not so much, perhaps, in consideration

^{*}Dr. Hoffman was Guest Teacher during a "Week in Medicine" sponsored by the Post-Graduate Committee of Dalhousie University. This presentation was given at a Victoria General Hospital Staff Conference on March 5th, 1954.

of this case, but in cases of this sort in general. Inspector, would you tell us a little more about how this all started? As I understood from Dr. MacDonald's description, about eight to ten days before you were admitted to hospital, your illness began with gastro-intestinal disturbances—is that correct?

Patient: That is correct. I was at a party on a Saturday evening—I had been feeling out of sorts on the Thursday afternoon. It didn't affect me in any way to make me feel I wouldn't want to go out anywhere. I was working steadily, in fact we had a lot of work on in the office. On the Saturday evening, I went out, we were playing two hands of bridge and then I came home. I turned in about a quarter of ten and sometime between midnight and one o'clock I woke up with my mouth filled with saliva and having been seasick on several occasions, I knew what was going to happen and I ran for the bathroom where I emptied my stomach and I washed my mouth out and took a small amount of bicarbonate of soda and some warm water.

Dr. Hoffman: You had a loss of appetite then up to the time of hospital admission?

Patient: Yes, up to the time of hospital admission.

Dr. Hoffman: When did your appetite return?

Patient: Approximately eight days after admission.

Dr. Hoffman: Did you vomit at any time other than on that first night?

Patient: Yes, on Saturday night and on Tuesday afternoon when I came home from work.

Dr. Hoffman: What would happen when you thought of food?

Patient: Usually a violent reaction of the stomach that would close me off at the throat.

Dr. Hoffman: Well, that is a very good description of the characteristic anorexia and nausea which is associated with these conditions. Did you have any pain at any time?

Patient: Just an uncomfortable feeling in the stomach.

Dr. Hoffman: But there was no sharp pain.

Patient: Not until after I got in the hospital.

Dr. Hoffman: Will you describe that pain to me. Where did it occur? Patient: Three areas of pain. There was one right in the centre, I

would say right underneath the breast bone—it seemed it was in a localized area. The other two were down on the right side there under the ribs.

Dr. Hoffman: Did this pain move to your back at any time?

Patient: Yes, I had it under the shoulder blades.

Dr. Hoffman: Equal on both sides?

Patient: Equal on both sides.

Dr. Hoffman: Was the pain continuous, sharp or burning?

Patient: No, it was more nagging.

Dr. Hoffman: It was continuous?

Patient: More or less continuous. You would have spells when it would go away for two or sometimes as long as four hours and then you would wake up. I found the pain in the side to be of sufficient intensity that if I went to roll over in the night I would waken up with a yelp.

Dr. Hoffman: If you slept on your left side?

Patient: If I rolled over on either side.

Dr. Hoffman: Now, Inspector, on that Saturday evening you were off duty so it is permissible for me to ask this question. Did you have a drink that evening?

Patient: I did not have anything. I had ginger-ale to be perfectly frank.

Dr. Hoffman: The reason I asked that is that very often alcohol causes an up-set and I am just curious. Do you smoke?

Patient: Yes.

Dr. Hoffman: Has your desire to smoke altered in the past few weeks?

Patient: Definitely, until about three days ago I haven't had a smoke since that Saturday night that it first hit me.

Dr. Hoffman: On other occasions that you have been sick with an upset stomach or other illnesses, have you lost your desire to smoke?

Patient: No.

Dr. Hoffman: That is a very important point, because infectious hepatitis is perhaps the only disease that I know of where the desire to smoke is completely suppressed in people who ordinarily would smoke when they had other illnesses. It needn't always be suppressed, but it is one of the very interesting clinical points in hepatitis, but you lost your desire to smoke entirely?

Patient: Definitely.

Dr. Hoffman: How much do you smoke usually?

Patient: Well, about a pound of pipe tobacco and thirty cigars in one month.

Dr. Hoffman: And you lost the desire entirely.

Patient: Yes.

Dr. Hoffman: Have you ever tried to stop smoking on your own?

Patient: Yes.

Dr. Hoffman: Did you succeed?
Patient: Yes, for about six months.

Dr. Hoffman: There are a few other points in the history that I would like to ask you about. Have you been taking any medicines of any sort in the past half year?

Patient: Probably twelve Anacin or Aspirin in the past twelve months.

Dr. Hoffman: You have taken no other medicines? You have had no injections?

Patient: No, Sir.

Dr. Hoffman: You haven't been tattooed in the past six months. The reason I asked that is that people who have been tattooed very frequently develop hepatitis, it all depends on who the tattooing needle has been used on before. Have you been exposed to anyone with jaundice?

Patient: I don't think so.

Dr. Hoffman: And you have never had jaundice before so far as you know.

Patient: I was born with it.

Dr. Hoffman: How do you feel now?

Patient: Good.

Dr. Hoffman: When you walk about you have no distress?

Patient: Well, today I dressed myself and walked from my room to the stairs, over the objection of the nurse, and I walked down the stairs and out to the car to come to this clinic.

Dr. Hoffman: I have just one more question to ask you. Has your skin ever been itchy?

Patient: Only after the yellow or yellow-green or whatever shade it was disappeared. I had a few isolated spots in the crease of the arm, one or two spots down on the leg and a couple on my chest.

Dr. Hoffman: Was it severe enough to wake you at night?

Patient: No.

Dr. Hoffman: Did you scratch?

Patient: Oh, just rubbed a bit.

Dr. Hoffman: It only lasted for a short time.

Patient: Yes.

Dr. Hoffman: Thank you very much. The diagnosis of jaundice in this man is pretty easy since he's better. However the problem of differential diagnosis in jaundice is a very real one and I think I am the last person to discuss it, because just ten days ago, I recommended a patient be operated upon for stone in the common duct—he didn't have a stone. I would like to tell you about this patient because it clearly demonstrates how one can be confused on clinical and laboratory grounds.

This is a fifty-year-old woman who is fair and fat and for five years prior to her admission to hospital had suffered fatty intolerance. She was admitted to hospital because of acute epigastric pain which radiated to the right costal margin and to the area beneath the right scapula. She had fever on admission and tenderness on examination in the epigastrium and in the right upper quadrant. That was followed twenty-four hours later by dark urine and a day later by icterus of the sclera and she had fever. The pain was of suf-

ficient severity to require Demerol on several occasions during the first twenty-She settled down and then two or three days later she had rigor, fever, severe epigastric pain localizing later in the right upper quadrant with radiation to the back and shoulder. Now, the clinical findings, I think, are perfect for stone. She had jaundice with this, but the laboratory findings suggested infectious hepatitis. However, the laboratory findings were ignored as they should have been because this history was so classical. ation, however, revealed that she had infectious hepatitis. Now it is interesting that in that week there were three other patients who were operated upon by the surgical staff of the hospital, all with a pre-operative diagnosis of cholelithiasis, and these three additional patients, making four in all, had hepatitis. That shows that at this particular hospital at least we were wrong four times in one week. I think one of the reasons that we were getting into difficulty in the differential diagnosis of jaundice was because the junior staff members know all about the laboratory tests and the senior members do not, and since the senior staff members don't want to admit that they don't know as much as the junior staff members, they had been permitting the junior staff members to diagnose jaundice differentially on the basis of the laboratory procedures and ignored their clinical judgment. That, it seems to me has been the major cause at the Royal Victoria Hospital. The operations were performed because the laboratory findings, as here, were more in keeping with obstructive jaundice and these laboratory findings are by no means a replacement for clinical judgment. I think that we shouldn't be embarrassed if we do on occasion make the error of operating on a patient whom clinically appears to have obstructive jaundice and turns out not to have it.

Now, the differential diagnosis of jaundice is a problem. I think, even in centres like Boston where they are particularly interested in this problem, they now admit that in fifteen out of every hundred patients with jaundice they admit to hospital they don't know what the correct diagnosis is. I think one of the reasons for that is that it is only the problem cases that are now being admitted to the large hospitals because of the high cost of hospitalization. Patients with classical infectious hepatitis never get in, so the cases that do get in are cases of surgical jaundice or those with obscure hepatitis. Now, in the differential diagnosis in this man, it seems to me we might systematically go over the various points that became apparent as Dr. MacDonald told us the history.

First of all, his age. Now, it is true that infectious hepatitis is a disease which occurs in young people, but that is a misconception because it is only young people who gather together in camps during wartime and go to boarding school and since this is a disease which has epidemic proportions the conception has arisen that it is primarily a disease of young people. However, in a hundred consecutive cases that we observed with infectious hepatitis there were eight people over the age of sixty-five. So age, although helpful, by no means helps us in the individual patient because hepatitis may occur at any age. Now it is interesting that if you take the general population and inject intracutaneously the virus of this disease, about thirty to thirty-five percent react positively suggesting, but not proving, that they had the condition at

some time in their life. The cutaneous test is by no means diagnostic, nevertheless, it does suggest that a third of the population have had the disease at some time and therefore as we might expect the older you are the less likely you are to have the condition. Most of these people, of course, have not had clinical infectious hepatitis, but presumably a sub-clinical variety. So the age is a little against infectious hepatitis but certainly doesn't exclude it. His sex doesn't help us very much although it is true the cholelithiasis is more common in women.

What about his past history? Well, I presume his jaundice at birth has nothing to do with his present illness. If he had had jaundice as a young child or as a young adult and he recovered from that as he presumably would have, then I think we would not think of infectious hepatitis, because as far as I know, one attack of hepatitis usually provides immunity against subsequent attacks of infectious hepatitis. It is true that one can have infectious hepatitis, recover, and then a few months later have jaundice again, but that is more of an exacerbation of a pre-existing hepatitis rather than a second bout of hepatitis.

His past history doesn't reveal any intolerance to fat, therefore it is not by any means exclusive of cholelithiasis, but certainly it doesn't offer any evidence for it. He had no previous gastro-intestinal disturbances. He has had no operations in his upper abdomen so we can't consider any surgical conditions, such as adhesions or strictures being responsible for his jaundice. family history is of no help to us. His personal history and his occupation doesn't help us at all. If he worked in a laboratory, in a bacteriology laboratory for example, or if he manufactured thrombin or fibrinogen from blood. we might consider the possibility of homologous serum hepatitis. We use the term homologous serum hepatitis to describe any form of hepatitis which is due to the administration of blood products or its derivatives. We know that people working in laboratories and working with blood, if they puncture their finger they can contract the disease if the particular specimen they were working with contains the virus. There is a surgeon in Sydney, who has hepatitis at the moment, and it would seem that he might have homologous serum hepatitis, because he cut his glove while operating about three months before the onset of his illness in a patient who had had hepatitis in the recent past. So it is just possible that occupation sometimes helps; also occupation regarding toxic elements. In these days of new chemicals toxic hepatitis is a great deal more common than we appreciate. There is a new drug, that I presume some of you are using, Largectil, which is being used for all sorts of purposes. Some surgeons use it to lower the temperature of the patient so that they can do cardiac surgery. Some allergists use it for its anti-histiminic activities and psychiatrists use it to quieten patients. Six patients that I know of in the last hundred that have received Largectil in the Allan Memorial Institute have developed hepatitis because of Largectil. So then, occupation, exposure to carbon-tetrachloride and other agents are of course important, but that doesn't help us in this particular patient. He has taken no drugs. other drug which notoriously causes hepatitis, which we are seeing more and more, as people use hormones more and more, is methyl-testosterone. It gives rise to a type of jaundice which has the same laboratory features as this one, and this is an important variety of hepatitis to recognize because it reacts extremely well to cortisone and the disease clears up very rapidly. It now is very common because male hormones are being used indiscriminately in men of fifty years and over who have reduced libido, so we must be very careful to inquire as to what medication the patient is receiving. Then we can exclude occupation; we can exclude injections; he hasn't had any tattooing; he hasn't worked in a laboratory and he hasn't taken any drugs which might be responsible so we can exclude toxic hepatitis.

Regarding the history of the present illness, the very fact that it started as it did, namely, with gastro-intestinal disturbance is in keeping with either hepatitis or cholelithiasis. Most patients with infectious hepatitis seem to start their illness in the way that he started his, namely the sudden onset of nausea, anorexia and vomiting, but what I think is most characteristic of hepatitis as contrasted with stone, is that he had a complete disinclineation to Now, it is true that people with stone in the common duct don't like to eat, but they don't have, in my experience at least, the revulsion that he experienced towards food, the thought of food would make him ill. He said he got a spasm of the glottis when he thought of food. Here is a man who smokes a great deal too. He suddenly lost the desire to smoke. These two findings, I think would be in keeping with the diagnosis of hepatitis. Now we are not at the moment discussing what type of hepatitis it is, but we are using the term hepatitis to imply primary disease in the liver as contrasted to an extrahepatic disease, but the practical problem when this man was first seen was it medical jaundice or surgical jaundice? If it is surgical jaundice, you cure the man by operation, if it is medical jaundice you do, as in most medical conditions, nothing, and therefore this distinction is very important. Not only is it important from the viewpoint of what you do, but if you make a mistake and operate on a man with medical jaundice you have a very good chance of killing him, because if his liver is damaged, the further damage imposed by surgery may so damage his liver that it is just enough to precipitate him into hepatic coma and death.

Of the eight patients who died out of one hundred with infectious hepatitis in the series we studied, I think four or five had had a laparotomy so it is very important to decide if it is medical or surgical. It doesn't quite matter what type of medical jaundice it is, the fact is we have to make that simple distinction between the two varieties if we are to arrive at proper therapy.

Well then, his onset is more in keeping with hepatitis than it is with stone although by no means does it exclude stone. One point, it seems to me is against stone, that is, the absence of pruritus. I don't think anybody understands what pruritus is due to, but clinical experience shows that extra hepatic obstructive jaundice, which is the surgical type which we are interested in excluding in this man, is very frequently associated with pruritus and usually the patients tells you that he has pruritus. Now Dr. MacDonald didn't mention it because the patient probably never talked about it and that is a characteristic of people with infectious hepatitis and that is if they do have pruritus, usually it is mild. I think of these hundred cases that we questioned, 15% had

pruritus and only two or three had severe pruritus and it is that type of patient we will discuss in a moment. Well, he had no pruritus. Now that I think is against obstructive jaundice.

Physical examination. Well, that doesn't help us too much. I assume he had epigastric tenderness not localized particularly. His liver was palpable, but it would be palpable in either infectious hepatitis or stone. It certainly was only palpable one finger breadth and that doesn't help us. If his spleen was palpable it would have helped us a great deal. In approximately 15%-20% of people with infectious hepatitis the spleen is palpable whereas in primary extra hepatic disease due to stone the spleen is not likely to be palpable unless the obstruction has existed so long that sufficient liver damage has occurred to permit portal hypertension to result and therefore splenomegaly on a congested basis or as sometimes happens these people have a chronic hepatitis and the spleen is enlarged because of that and not because of the immediate cause of the jaundice. So the absence of splenomegaly doesn't help us too much but if it were present it would certainly be in keeping with hepatitis.

The other aspects of the examination. Now, I am not sure about the stool. Was it completely colorless?

Dr. MacDonald: He claims it was colorless.

Dr. Hoffman: No one in the hospital saw it but that is his description. Well, that perhaps is not too helpful. If we were sure, had seen it ourselves that it was completely colorless, then I think we would have had to think more of stone because the jaundice wasn't very severe and if his stool was completely colorless because of intra hepatic disease one might have anticipated the total bilirubin would have been much higher. However, in my own experience only about 1% to 15% of the people with stone have completely colorless stool, whereas about 80% to 90% of the people with carcinoma of the head of the pancreas do—and as the bile fills up above the stone the duct begins to dilate and since the stone is uneven trickles of bile can get through and for that reason in about nine out of ten people with stone you can demonstrate The fact is, however, that his urine did contain urobilinigen. If he were totally obstructed there would have been no uribilinigen in his urine. because you will remember that urobilinigen is formed in the intestine because bile reaches the duodenum and the bilirubin is converted to urobilinigen by bacterial action in the lower small intestine and his urobilinigen, which, when reabsorbed appears in the urine. Obviously then if he were totally obstructed he would have no urobilingen in his urine because no bile would have reached the intestine and therefore none would have been formed. Despite the fact that he says the stools were light colored, his urobilingen test on the urine. if done properly, would contradict this statement. Therefore, I'll accept this rather than his statement and conclude that he was not totally obstructed.

The urine contained bile and it is rather interesting that the sequence of events as he described them are rather characteristic of hepatitis. As I remember it the disease started with anorexia, nausea and vomiting. Then two or three days later he noticed that his urine was dark colored and a few days after that he noticed that the stools were pale and that is the usual sequence of

The latent period before the onset of jaundice can vary anywhere from two or three days to three or four weeks. Usually icterus of sclera is first noticed by the family two or three days after the urine becomes bile stained. So then the history is in favor of hepatitis more than it is of stone, but there are a few things against it. First of all, the fever, and most people with hepatitis do have fever in the early stages, but when the jaundice appears, not invariably but most frequently, they do not have fever and he spiked a temperature of 101° in association with pain. One might think that he had cholangitis and if he had cholangitis one would obviously have to think of stone. I don't think his pain sounds severe enough for stone even though the radiation does suggest that he might have a stone. The patient that I quoted at the beginning, who had perfect anatomical radiation for stone in the common duct, namely, below the right scapula and to the shoulder, turned out to have hepatitis, and we know that hepatitis can mimic any variety of stone. Now the laboratory findings are not too helpful. They confirm that he has jaundice and excludes hemolytic jaundice which we have no reason to consider in differential diagnosis because for hemolytic jaundice the direct Bilirubin is less than 20% of the total and in this case it was 60 or 70%. The alkaline phosphatase is slightly increased. Now, if this were obstructive jaundice the chances are that the alkaline phosphatase would be markedly increased and the serum flocculation test would be negative. Well, the serum flocculation tests are negative—the alkaline phosphatase is only slightly increased. If he had infectious hepatitis of the usual variety, the alkaline phosphatase would be normal or slightly increased and the serum cephalin-cholesterol would be strongly positive. So laboratory findings don't support infectious hepatitis, nor do they support an extra hepatic obstruction although they are more characteristic of the latter. And it is this, I presume, along with the pain, fever and the radiation of the pain that made Dr. MacDonald worry.

Now, I don't know how one can be sure exactly what this man had, but I think if one had to bet, I would bet on hepatitis. Now, the X-ray findings I don't think helped us too much because this was done at a time when his serum bilirubin was 1.2 mgm %. Generally when the serum bilirubin is 1.2 enough radio-opaque dye can get through the damaged liver to visualize the gall bladder. However, one can't be sure of that and the only way to be absolutely certain as to whether the failure to visualize the gall-bladder is liver disease or gall-bladder disease is to give the man bromsulfalein. The reason for that is this: Even with "Priodax" or better dyes, you remember that you give the material orally, it enters the blood stream, the portal vein carries it to the liver and here the material is removed from the blood stream, and the radio-opaque material then enters the bile capillaries; then it comes out into the common duct into the cystic duct and then in the gall bladder it has to be concentrated about ten fold before it contains sufficient concentration to be visable radiologically. The basis for using a cholecystogram is that if the mucous membrane of the gall bladder has been damaged, it can't concentrate the dye, but the dye has to get there before you visualize the gallbladder. If the liver is damaged not enough of the dye or radio-opaque material can get to the gall bladder. Therefore, primary hepatic disease may result in failure to visualize the gall bladder. Experience has shown that even

the best possible technique that if the liver is damaged and the way to detect the damage is to administer another dye which is handled the same way and another dye which is handled exactly the same way is bromsulfalein. One administers intravenously 5 mgm of this dye for every kilogram of body weight into one arm and then thirty minutes later one removes a sample of blood from the other arm and determines what percentage of the administered dye is still present. In a normal person 95% or more of the dye will have been removed. Therefore a normal retention is 5% or less. Experience has shown that if the bromsulfalein retention is greater than 25% not enough dye gets to the gall-bladder to visualize it. Therefore, if the cholecystogram is to help us in this man we should give him bromsulfalein and if retention is less than 25% we have to assume there is something wrong with his gall bladder because then enough dye should have reached the gall bladder to be concentrated. If, on the other hand the retention exceeds 25% then we will have to wait until there is less than 25% before we can determine the significance of the failure to visualize the gall-bladder. I agree a lot of evidence is in favor of stone, but I'll pick infectious hepatitis for the reasons I have given. Does anyone know the answer.

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Henry Kirkwood MacDonald

Professor Emeritus Of Surgery, Dalhousie University

VICTOR O. MADER, M.D.

Halifax, N. S.

DOCTOR Henry Kirkwood MacDonald was born on August 7th, 1873 at Lyon's Brook, Pictou County, Nova Scotia, the son of Robert and Mary MacDonald. He received his preliminary education at Pictou Academy and graduated from McGill University in Medicine in 1896. He practised in Sydney and Lunenburg until 1907, when he went to England to do post-graduate work. He returned to Lunenburg in 1908 and came to Halifax in 1911. Doctor MacDonald was immediately appointed Assistant Surgeon at the Victoria General Hospital, and two years later joined the teaching staff in Surgery of Dalhousie Medical School. From then on his life was almost completely devoted to an extremely busy surgical practice and to teaching. As a consultant he went over the entire province. No surgeon was more attentive and devoted to his patients.

In 1932 on the retirement of Doctor E. V. Hogan, Doctor MacDonald became Senior Surgeon at the Victoria General Hospital and Head of the Department of Surgery at Dalhousie University. He retired from active work in these institutions in 1946 and was thereupon appointed to the Consulting Staff of the Hospital and made Professor Emeritus of Surgery by the University. The same year in token of his fifty years as a physician the Halifax Medical Society presented him with an engraved gold watch.

All of his confreres, friends, students and patients deeply mourn the passing of this great personality, excellent surgeon and industrious student. He will be remembered long by those he served so well. He will be remembered by his friends for his many kindnesses, constant courtesy and good-fellowship. He will be remembered by those who went fishing or played golf with him for his constant good sportmanship, and most of all he will be remembered by those who served under him either as medical students, internes or juniors on his surgical service.

Doctor MacDonald (usually known as H. K.) had a personality which radiated self-confidence and instilled the same confidence and affection in his patients and all who knew him. At the bedside he was a master, taking the deepest interest in every detail affecting the well-being of his patients.

He was an early riser, frequently appearing in the wards of the Victoria General Hospital to make rounds early in the morning to the great dismay of the nurses who were not yet prepared for such visits. He loved to operate

early and occasionally became slightly impatient when everything was not ready including anaesthetist and assistants. During operations, however, no matter how difficult the problem, he was always considerate and cool, never overbearing or difficult. This quality endeared him to his assistants, internes and nurses.

As a teacher he was unique. He appeared to be more interested in the patient than in the student. This attitude produced that intangible result of demonstrating to the student the real essence of clinical teaching, the importance of studying the *patient* to make a clinical diagnosis.

He was always ready to admit his mistakes. I can recall many occasions when he would say "We should have done 'so and so' when we had done 'this or that.' "

His generosity was unbounded, almost to a fault. To his family he gave everything within his power. His children and his grandchildren will ever remember the gifts of this generous ancestor.

In adversity he showed no sign. Buoyant and confident as ever he carried on with his task. "In every storm of life he was oak and rock, but in the sunshine he was vine and flower."

At the end of a very fruitful life he suffered a long and painful illness. He complained little and to the very last was glad and happy to see his old friends.

He died peacefully on May 23rd, 1954, in his 81st year.

The Breast

W. O. COATES, M.D., Amherst, N. S.

Development:

During the second month of embryonic life a surface thickening of the ectoderm forms a mammary ridge. This thickening extends from the root of the fore-leg, or in man from the root of the arm to the mid-line of the groin. In man the ridge atrophies to a small nodular part, which overlies the pectoral muscles and which will later form the glandular portion of the mamma. In animals, such as the dog, pig, or cat, similar nodules form along this mammary ridge, with the result that there are several mammary glands on each side. In man, and they are more common in the male, there may be more than one mammary gland on each side. In other words, there may be accessory glands. In this case they are along the line of the mammary ridge. In some cases, the accessory gland will function, but usually it atrophies.

A short time before birth, the solid buds of ectoderm become canalized, thus the breast is made up from fifteen to twenty lobules and each lobule possesses a duct which opens onto the nipple by means of a lactiferous duct. The appearance of the ducts in the gland may in many cases, and especially in the male, give rise to the formation of milk immediately after birth. usually disappears without any untoward consequences. The interlobular septa and fibrous framework of the mammary gland are derived from the mesodermal tissue into which the ectodermal buds infiltrate. The superficial fascia which covers the gland sends down fibrous processes called "the ligaments of Cooper"; these join the connective tissue septa which ramify throughout the gland. When "the ligaments of Cooper" are invaded by malignant tissue they become shorter and cause dimpling of the skin, which on this account is no longer freely movable over the breast. The breast rests on the fascia covering the pectoralis muscles and extends from the second rib above, to the sixth costal cartilege below.

Laterally it extends almost to the axillary line and medially it extends to the lateral border of the sternum. There is a portion of the breast known as "Spence's axillary tail" which passes upwards and slightly medially, deep to the lateral border of the pectoralis major, and extends as far upwards as the third rib.

Arterial Supply:

The arterial supply of the mammary gland is derived from the lateral thoracic and the anterior perforating branches, especially the second and third which arise from the internal mammary artery.

Lymphatics:

The lymphatic vessels of the breast converge towards the centre of the gland and then pass vertically downwards through the breast to join the very extensive plexus, which is situated on the fascia covering the pectoralis maor. This extensive plexus of lymphatics is termed "the sub-mammary lake." When these normal lymphatic channels are blocked by tumour emboli there is a retrograde flow established along the vessels and this retrofrade flow will radiate centrifugally throughout the breast. In the deep mammary or sub-

mammary lymphatic lake, the lymph vessels pass outward in all directions to terminate in various glandular groups. Following are the connections of the sub-mammary plexus.

(1) With the lymph glands along the anterior surface and lateral border of the sub-scapularis muscle.

(2) With the pectoral lymph glands. These glands lie mainly along the

lateral border and deep surfaces of the pectoralis muscle.

(3) With the intra-clavicular lymph glands. As the term implies, these lie

immediately below the middle third of the clavicle.

(4) With the lymph glands that lie along the internal mammary vessels. These glands are situated in the upper intercostal spaces and through them there is a connection with the anterior mediastinal lymph glands.

With the sub-mammary and cutaneous plexus of the opposite side across

the fromt of the sternum.

(6) With the sub-peritoneal plexus on the under surface of the diaphragm.

They reach this position by crossing the costal margin.

(7) With the central lymph glands of the axilla.

As previously mentioned the breast is made up of twelve to twenty lobes of pyramidal shape, each of which may be regarded as a gland in itself. Each is provided with a milk duct which opens at the nipple. Smaller ducts branch laterally from the main duct and end in bulbous expansions or alveoli. The cells of the large ducts are columnar, of the small ducts, cuboidal. The ducts are surrounded by a loose cellular connective tissue called the periductal or intra-lobular tissue. The ducts are also surrounded by a thin layer or elastic tissue which Cheatle terms "the elastica". This layer is not prolonged over the acinar wall. However, when the breast involutes, during and following the menopause, this elastic tissue completely surrounds the acini also.

The epithelium lining the commencement of the duct is stratified as far as the ampulla, where it gives place to tall columnar epithelium. When the small ducts are reached the epithelium becomes cuboidal and the terminal acini are lined with the same variety of epithelium. At first sight it appears that the ducts were lined with just one layer of epithelial cells, however, there is a second flattened layer outside, which may be described as a reserve layer producing the lining cells.

Functional Changes:

At Puberty:

There are no acini before puberty. At puberty the ducts branch and acini form. Many are so crowded with cells that the acini appear solid and at times may look like a foetal thyroid.

During Pregnancy:

There is an extreme epithelial hyperplasia. The appearance resembles the thyroid gland in exophthalmic goitre.

During Menstruation:

The stimulus is the corpus luteum. There may even be a production of milk at the time of menstruation.

Involution:

Involution follows hyperplasia, not only in the breast, but also in the case of the thyroid gland. Involution is most marked after lactation and at the menopause and also occurs after an abortion or a pregnancy without lactation. The columnar cells become cuboidal and flattened. The acini return to their former size and after the menopause they disappear altogether. There is an increase in the peri-ductal fibrous tissue and the "elastica", as Cheatle has pointed out, is continued around the acini as well as the ducts. The whole or part of the breast may be involved when hyperplasia occurs. Similarly involution changes may not involve the whole breast. Consequently, the varied gross and complicated microscopic picture.

Summary:

The important thing to remember is that the structure of the breast varies considerably, as to whether or not it belongs to the male or female, whether or not the breast is examined before birth, at birth, at puberty, during menstruation, between the menstrual periods, during pregnancy, during lactation, approaching the menopause or following the menopause.

Therefore, is it any wonder that cancer is so common in an organ which

presents such a varied gross and microscopic picture?

Diseases of the Breast:

Inflammatory Infections:

The organism is usually the staphyhoccus aureus, less commonly the streptococcus. The effects and treatment are similar to those of inflammation elsewhere, except that extensive formation of pus can be very disastrous to the breast as a whole. Application of heat to an acutely inflamed breast will most certainly tend to produce abscess formation. Early evacuation of pus is essential. The acutely inflamed, rapidly enlarging, fiery red breast, may resemble an acute carcinoma of the breast. Of course, the prognosis is entirely different.

Chronic Mastitis; or Lobular Hyperplasia; or Cystic Mastitis:

Theories as to Causes.

(1) Inflammatory:

The only evidence supporting this theory is the presence of a lymphocytic infiltration. However, this is always present in involution following lactation and sometimes in senile involution.

(2) Neoplastic:

Against this theory is the fact that there is no tumour.

(3) A Perversion of Involution:

Keynes in a Hunterian Lecture on chronic mastitis came to the conclusion that it is not bacterial, toxaemic or traumatic in origin, but is caused by the chemical irritation of stagnating secretions and epithelial debris. The retention in the ducts and acini of stagnating secretions and epithelial debris is encouraged by the epithelial plug in the duct, previous to its opening on the summit of the nipple.

Clinical Features of Chronic Mastitis:

The patient first complains of a painful, tender breast and later the formation of one or more lumps in the breast. The above condition is more marked at the menstrual period. Both breasts may be involved. The axillary glands are often enlarged and tender. It is almost impossible, by palpation, to differentiate between an apparently well localized malignant tumour, a cyst, and fibro-adenoma of the breast.

Cut Surface:

The variegated picture of cysts of varying size together with the presence of a rubbery-like tissue, which is flecked with grey and pink dots is characteristic of chronic mastitis.

Microscopic Appearance:

(1) Cysts of varying size.

- (2) Epithelial buds and papillary projections into the cysts.
- (3) Pale epithelial cells lying free within the ducts and acini.

(4) Lymphocytic infiltration.

(5) Increase of peri-ductal and peri-acinar tissue.

Relationship of Chronic Mastitis to Carcinoma:

Hyperplasia of the breast is the result of hormonal stimulation and carcinoma of the breast can be induced by means of oestrogenic hormones. The consensus of opinion is that a woman who has had chronic mastitis is in far greater danger of developing cancer than the woman who has had no symptoms or clinical evidence of having had chronic mastitis. However, once she is past the period of the menopause or the period of hormonal stimulation of the breast the danger is no greater. Administration of oestrin tends to produce cancer in ovarectomized mice.

Experimental Research in Carcinoma of the Breast:

Heredity:

Heredity plays a very important part in the experimental cancer work in the laboratory. It has been shown by Maud Slye and many subsequent workers that it is possible to breed a strain of mice which is practically 100 per cent liable to develop cancer of the breast, and another strain which is practically immune. It has been truly said that pure strains of animals of known hereditary tendencies are as important for cancer research as pure chemicals are for the chemist or pure seed for the agricultural worker. It is much more difficult in man to prove the importance of the heredity factor than in animals, because, in the first place the causes of death are not so ascertainable in past generations and "random mating" as it would be called in the experimental animal, interfers with the possibility of breeding pure cancerous or non-cancerous stocks. However, it has been repeatedly shown that cancer of the breast is about three times as frequent in the relatives of the sufferers of breast cancer as in a control group, while cancer of the breast itself was no less than eighteen times as frequent in the mothers of the original cases as in a control group. It has been definitely shown that there is a hereditary predisposition to cancer of the breast as well as to cancer in general. In the experimental animal the hereditary weakness affects one organ or tissue rather than the whole body. The feeling is growing that the genetic factor is of real importance, especially in cancer of the breast in the human species. The occurence of "cancer families" has long been described in literature. If both parents are cancerous one might expect to find a marked cancer incidence in the children, although many of these may die of other diseases before they reach the cancer age. Wassink has found that among 660 patients with breast cancer, there were 301 relatives with cancer, 92 of whom were female. Moreover, breast cancer develops about $10\frac{1}{2}$ years earlier in the daughter than in the mother.

It has been shown that the litter produced by breeding a male rat with a definite cancer of the breast strain with a female rat of a nonbreast cancerous strain, that 10% of the offspring will die with cancer of the breast. Conversely, it has also been shown that the litter produced from the non-cancerous male and a cancerous female, that 90% of the offspring will die of cancer of the breast.

Influence of Oestrogenic Hormones: (A)

The action of oestrogenic hormones in producing mammary carcinoma in mice is a discovery of major importance, although its origin goes back 25 years. It was first shown by Lathrop that castration of female mice of a strain in which mammary cancer was frequent, reduced the incidence of this growth and delayed its appearance; the operation was only effective if performed before the age of six months. This investigator twenty-five years ago, recognized that two factors were involved; a hormone and heredity. In other words the effect of oestrin treatment is to increase the frequency of breast carcinoma. It is possible with the injections of oestrogen to increase the gross incidence of cancer in a strain from 2% to 100%. In other words, if there is a hereditary predisposition toward carcinoma of the breast, the incidence of carcinoma may be increased by oestrogenic hormones to 100%.

The Milk Factor: (B)

It is not surprising that the mechanism of inheritance of susceptibility to mammary cancer in mice occasioned much perplexity in the past, since another factor operates which was then unknown. This factor is something which is transmitted only by the female and was first recognised in 1936. The operation of this non-genetic mechanism can best be illustrated by crossing high and low cancer strains; the frequency of cancer in the female offspring depended on that in the mother. This additional factor is something transmitted from mother to offspring after birth and is known as the Milk Factor. It has been shown repeatedly that newly born mice who are removed immediately at birth from their mother and not allowed to suckle, have much less chance of developing cancer of the breast than those who are allowed to nurse for only a very few moments. This factor is well recognised at this time. In other words the earlier, and this refers to minutes not hours, that the young are removed from cancer-tendency mothers, the later and less certainly will they develop breast cancer. The milk from these cancer-tendency mothers

may be given by mouth, intra-peritonealy or by subcutaneous injection. The result is the same.

Characteristics of the Milk Factor:

It is contained in extracts of lactating mammary glands and in extracts of mammary cancers. It is also present in the spleen, thymus and whole blood. It is removed by prolonged centrifuging. It is destroyed by dessication. When rabbits are immunised with the agent, they form an antibody which neutralizes its action. The factor is transmitted in the milk even if the animal does not develop breast cancer.

In summarizing, I would say it has been shown that three factors are responsible for development of breast carcinoma in mice;

- (1) Heredity
- (2) Oestrogenic hormones
- (3) The Milk Factor.

Tumours of the Breast:

Benign: Fibro-adenoma and duct papilloma. The former accounts for about fifty-eight per cent of the tumours of the breast as a whole. Fibro-adenomata are known to occur in peri-canalicular and the intra-canalicular types. They are limited by a capsule and are not considered malignant. In the treatment, a local removal is all that is necessary. However, in any tumour of the breast it is advisable to have the patient under observation for a long period of time following the operation. The latter, or duct papilloma is a tumour of the breast which is benign, but may be considered to be potentially malignant. On the cut section the tumour appears as a papillomatous growth which projects into a dilated duct close to the nipple.

Microscopis Appearance of a duct papilloma:

The blood vessels are large and thin walled so that haemorrhage is common. A discharge from the nipple, either serous or blood-stained is one of the most characteristic symptoms. There appears to be a definite relation between duct-papilloma and duct-carcinoma.

Carcinoma of the Breast:

The more common types of breast carcinoma are;

- (1) Scirrhous
- (2) Medullary or encephaloid.
- (3) Adenocarcinoma. This type is of low malignancy and is the most uncommon form of breast cancer.
- (4) Duct carcinoma. This is a papillary tumour which distends one of the large ducts near the nipple.
- (5) Intraductal carcinoma. This is a condition in which the smaller ducts are filled with closely packed epithelial cells, which eventually break through the limiting membrane and invade the surrounding tissue. Bloodgood calls this the comedo form of adenocarcinoma.
- (6) Paget's disease of the nipple. This was first described by Sir James Paget in 1874. A variety of views have been held as to its nature.

It commences as an eczematous condition of the nipple and sooner or later, usually within 1 to 4 years, a carcinoma appears in the breast. The eczematous area is bright red and finely granular.

Microscopic picture:

The epidermal hypertrophy together with the clear Paget's cells and the infiltration of plasma cells is characteristic of Paget's disease. It is thought that the large, clear, vacuolated cells, which are known as Paget's cells, spread along the ducts in an intra-epithelial manner. Consequently, the Paget's cells penetrate the wall of the duct and give rise to the infiltrating carcinoma of the ordinary type.

Lymphatic Spread:

It is possible for cancer cells to spread along lymphatic channels in two ways; (a) by permeation, (b) by embolism, (c) by transcoelomic implantation. The usual route appears to be along the lymphatics of the falciform ligament to the portal glands, whence the disease permeates the lymphatics of the portal tracts and sets up secondary growths throughout the abdominal cavity. The cancer may also spread by infiltration, that is the cancer cells may extend outward from the primary growth and infiltrate the tissue spaces between the fat cells and the bundles of fibrous tissue.

Blood Spread:

Invasion of the blood stream occurs either by cells gaining access directly into the vessels at the site of the primary tumour or from lymphatic invasion through the thoracic duct. In the former case the cells may pass into the venous side of the circulation, through the right side of the heart and so reach the lungs where metastases may be produced.

Pain in Carcinoma of the Breast:

I would like to point out that pain in the breast may be localized to the swelling or widely distributed in one or both breasts. The significant pains are those localized in a swelling and they are most commonly noted after the lump is discovered. Pain may be momentary or continuous. The most characteristic momentary pain is a stabbing one, which may be a single stab or several quick stabs or a pain described as "knife like". To be significant, the stabbing pain must be in a tumour and not felt vaguely in the breast. Another type of momentary pain, found only in breast carcinoma, is the snatching pain; it is described as if the breast had been suddenly pulled out and then let go. A continuous pain or ache is seen in both malignant and simple breast diseases. A pain which radiates to the other breast is probably due to a simple breast condition. The aching pain in the breast may be made worse by approaching menstruation and relieved by its onset. This is especially true of chronic mastitis.

Of 204 patients with carcinoma of the breast, 53% had pain.

Treatment of Carcinoma of the Breast:

Surgery remains the most certain method of eradication of cancer of the breast. The value of irradiation in association with surgery, as the only method, and in the treatment of recurrences and metastases, makes it not only the greatest, but also the sole advance in treatment of cancer of the breast in the past twenty-five years. Before anyone can discuss treatment of cancer of the breast it is necessary to use the following classifications as a guide to the surgeon in the choice of those cases which are suitable for surgical treatment and those suitable for radiation.

- Stage 1. Tumour of the breast only. In this stage, simple mastectomy alone gives a survival rate of ten years in 75% of cases.
- Stage 2. Tumour of the breast with palpably enlarged axillary glands or having skin changes. It is clear that surgery alone is no longer to be considered an adequate method of treatment in this stage. In association with surgery, x-ray therapy can be used as a pre or post operative measure, or both. Pre-operative radiation in stage 2 tends to eliminate dissemination of cancer cells which may occur at the operation.
- Stage 3. Tumour of the breast with enlarged supraclavicular or contralateral glands or with fixation to the pectoral fascia. The cases that fall into this stage are beyond surgery and should be treated with radiation.
- Stage 4. Skeletal or visceral metastasis. In this stage also, surgery is unthought of and radiation should be adopted.

The value and indications of radiation therapy in cancer of the breast can be summarized as follows;

(1) As a pre-operative measure in Stage 2.

(2) As a sole method in Stage 3 and stage 4 cases.

(3) As a post-operative treatment in cases where disease is suspected beyond

the operation area and recurrences.

The discussion of the treatment of carcinoma of the breast would not be complete without reference to the use of testosterone and stilbestrol.

Adair, in 1949, of New York, discusses the use of irradiation, surgery, and hormone in mammary cancer in a series of 13,000 cases in the Memorial Hospital in New York. In 125 operable cases, radiated with high-voltage x-rays, after microscopic confirmation of the diagnosis, the five year survival rate was approximately one-half that of cases treated by pre-operative radiation and radical surgery.

The suggestion on using testosterone in breast cancer was made by Loeser in 1939. He was unable to arrive at any satisfactory conclusion on the relative merits of the use of stilbestrol as that against testosterone. However, he was quite decided that the indications for the use of testosterone were more clear for those that had skeletal metastasis. In some cases the use of stilbestrol or testosterone resulted in alleviation of pain, increase of appetite and a gain of weight.

Mention had also been made as to the advantage of carrying out an ovariectomy in breast cancer cases. Ovariectomy may be performed by irradiation or surgery. Beatson, as long ago as 1896, advocated bilateral ovariectomy in the treatment of breast carcinoma and other workers have reported improvement following this procedure. Writers at different times have verified his results.

Summary:

I would say, in summary, that the whole picture of carcinoma of the breast as far as the likelihood of producing 5 year survivals are concerned, is very poor. Even in Stage 1 and Stage 2 cases, 51% died of cancer before the end of five years and that 30% are too advanced for operation when they are first seen.

I regret that after a very thorough perusal of the literature on the results of treatment of carcinoma of the breast, I am forced to leave such a dark picture in your mind, however, I am afraid I have no other alternative.

REFERENCE

- ADAIR, F. E., and HERRMANN, J. B.: The use of testosterone propionate in the treatment of advanced carcinoma of the breast. Ann. Surg. 123: 1023-1035, 1946.
- ADAIR, F. E., MELLORS, R. C., FARROW, J. H.; WOODWARD, H. Q.; ESCHER, G. C. and Urban, J. A. The use of estrogens and androgens in advanced mammary cancer; clinical and laboratory study of 105 female patients. J.A.M.A. 140, 1193-1200, 1949.
- CHEATLE, G. L. and CUTLER, M.: Tumours of the breast; Their pathology, Symptoms, Diagnosis and Treatment. Philadelphia. J. B. Lippincott Co. 1931.
- GORDON, D.; HORWITT, B. N.; SEGALOFF, A.; MURISON, P. J.; and SCHLOSSER, J. V. Hormonal therapy in cancer of the breast. III Effect of progesterone on clinical course and hormonal excretion. Cancer 5: 275-277, 1952.
- Segaloff, A.; Horwitt, B. N.; Gordon, D.; Murison, P. J.; and Schlosser, J. V.: Hormone therapy in cancer of the breast. Iv. The effect of androstenediol on clinical course and hormonal excretion. Cancer 5: 1179-1181.; 1952.
- Segaloff, A.; Gordon, D.; Horwitt, B. N.; Schlosser, J. V., and Murison, P. J.: Hormonal therapy in cancer of the breast. I. The effect of testosterone propionate therapy on clinical course and hormonal excretion. Cancer 4: 319-323, 1951.
- Taylor, S. G., III and Morris, R. S., jr.: Hormones in breast metastasis therapy. M. Clin. North America 35: 51-61, 1951.
- NATHANSON, IRA. I 1952 Cancer Vol. 5., 4.
- Willis, R. A. (1948) "Pathology of Tumours" London. (Butterworth & Co.) pp. 21, 129 Textbook of Surgery. Christopher. 4th Edition.
- CADE, S. "Discussion of the value of irradiation in association with surgery in the treat-
- ment of carcinoma of the breast. Proc. Roy. Soc. Med., 1943, 36, 237.

 Adair, F. E.; Treves, N.; Farrow, J. H.; and Scharnagel, I. M.: J. Amer. Med. Ass. 1945, pp. 80 575.
- ADAIR, F. E. and HERRMANN, J. B.: Ann. Surg., 1946, 123, 1023.
- PRUDENTE, A. Surg. Gynec. and Obstet. 1945, 80, 575.
- "Recent Advances in Pathology", 1947. 5th edition. pp. 78-100.
- "Recent Advances in Surgery", 1948, 3rd edition. 382 416-418.
- Ann. of Surg. P. i35, 782-790, June, 1952.
- AIRD, IAN. Comp. Surg. Studies, 1949, pp. 499-520.
- BOYD, WM. Surf. Path., 1947, pp. 513-547.
- This title is being given to a letter received by one of our colleagues who thought others might like to read it, and is published with the writer's consent.—The Editor.

A Pioneer Woman In Canadian Medicine

Muriel G. Currie

Halifax, N. S. ANADIAN women in medicine is a subject on which very little has been written and information regarding them is hard to obtain, as very few records have been kept.

Doctor Charlotte Ross was born in Yorkshire, England, and at the age of five years came to Canada with her parents, Mr. and Mrs. Joseph Whitehead. who settled at Clinton, Ontario.

Her early education was received at a convent in Quebec, and she became so proficient in the study of languages that she later won a prize in French at the Sacred Heart Convent in Montreal.

At the age of eighteen she married a Scotsman, David Ross. It was not until after the birth of her fourth child that she decided to study medicine, Having an invalid sister, and trying to find some way to lessen her suffering had started Doctor Ross thinking, reading up, and studying various remedies. When the family physician told Mr. Ross that his wife "knew as much as half the doctors," she decided if she knew a little, it would be a good thing to know more, so she straightway went to the doctor and discussed the matter, with the result that he loaned her books to read.

Finding her an apt pupil, the doctor strongly advised her to study medicine and went so far as to write to the Women's Medical College, Philadelphia, for a prospectus, as there was no medical college in Canada open to women at that time, and he finally made all the necessary arrangements for her to enter the institution as a student.

Doctor Ross was a devoted wife and mother and solicitous of the welfare of her family, but her husband being a railroad contractor was away from home a great deal, so it was convenient for her to live in one place as in another. When she was ready to begin her medical studies she decided to leave the oldest child, who had now reached school age, with the grandparents in Montreal, and take the other three, and a niece to help care for them, to Philadelphia with her.

You may be sure that Doctor Ross' plan met with a good deal of opposition. Even her father, a member of Parliament, and a successful railroad contractor was not quite advanced enough in 1865, to believe in medicine as a career for a woman, particularly a married woman. However, Doctor Ross was not to be dissuaded and in carrying out her plans displayed great courage and willpower—these attributes she no doubt inherited from her father himself, for as a young lad he had fired the first steam engine invented by Stevenson, "The Rocket", which is now enthroned in state at Darlington, England. later years, Doctor Ross had the satisfaction of having her father tell her that he was very proud of her.

Instead of taking four years as was customary at that time, Doctor Ross spent ten years in completing her course, not because she lacked ability, but because more children were born and Doctor Ross gave them all the attention she considered a true mother should, waiting until they were of an age when

she could go on with her studies without interfering with their proper development.

She graduated in 1875 and opened an office in Montreal where her husband was engaged in business. She was the first woman physician in Montreal and soon had a very good practice, which she gave up in 1878 to join her husband and father who were building section 15 of the Canadian Pacific Railway, with headquarters at Whitemouth, Manitoba.

Hundreds of men were working in the lumber camps around Whitemouth and many serious accidents occurred. As there was not another doctor within sixty miles, Doctor Ross had to treat the injured. Once a tree fell on a young lad, fracturing his spine. The doctor's efforts were of no avail, and she not only had to comfort the dying boy, but it fell to her lot to break the tragic news to his mother. She sewed up wounds with an ordinary needle and thread, using a sterilized thimble in lieu of a needle-holder.

Doctor Ross had a wonderful sense of humor, but it must have been tried beyond endurance one night, when a man called to say that his daughter was dying, and asked the doctor to go back in the sleigh with him as quickly as possible. Just as they were starting the roof of the Ross house caught fire. The doctor and her husband succeeded in putting out the fire while the man stood impatiently waiting, never offering to lend a hand. It was forty below zero and several times during the ten-mile drive Doctor Ross had to get out and run behind the sleigh to keep from freezing. On arriving at the patient's home, imagine her surprise to find the "dying girl" sitting up in bed chewing gum, while her lover sat beside the bed keeping vigil. She had only had a fit of temper and hysterics.

During the early days conditions were very primitive and Doctor Ross carried food, clothing and even boiled water to many of the patients' homes, riding on hand cars, engines, box cars, rough wagons or sleighs. Accidents were an everyday occurrence, and Doctor Ross became so accustomed to them, that she was heard one day discussing a cake recipe with the women at the station house, while scrubbing up after amputating a man's leg, which had been crushed by a train.

Doctor Ross was very fond of music and as a child was taught by Madame Albani's father. Another hobby was the collecting of china.

Doctor Ross died in 1916, having retired from active practice three years previously.

When the British Medical Association met in Winnipeg in August, 1930, one of the most interesting ceremonies was a memorial service to Doctor Charlotte Ross. Doctors from overseas and Canada joined in doing honour to the memory of the pioneer woman doctor of Western Canada. Doctor Mary Crawford, at that time President of Canadian Federation of Medical Women conducted the service of prayer and Doctor Edith Ross, a grand-daughter, placed a wreath on the grave.

Her granddaughter was a worthy successor and specialized in the field of anaesthetics, holding the position of chief anaesthetist in St. Boniface Hospital, Winnipeg, for some years prior to her death which occurred in 1932, after an illness of some months.

Another Half Century Gone

THE "Maritime Medical News" of April, 1907, contained a letter from Doctor Henry G. Farish of Liverpool. N. S., which is reproduced below. It is a good letter from a man over eighty, who had been graduated fifty-eight years. Briefly and dramatically he tells of the evolution of medicine in the second half of the eighteenth century, and he closes with a challenge. In this year 1954, there are quite a number in Nova Scotia who could take up the thread where Doctor Farish left off, and the Bulletin will welcome their contributions.

Liverpool, N. S., March 14, 1907.

To The Editor of The Maritime Medical News:

Sir:—I would like to dot down a few remarks relative to the state of the medical profession when I began practice in 1850. It is interesting to me to recall such events; and the younger generation in perusing it may find food for thought (and perhaps they may be pleasant thoughts) in knowing that their professional lives were not begun under conditions so different from the present.

In looking over the last Medical Register for our province, where 610 names appear, I find that only three graduated before me, viz.: Doctor Daniel McNeil Parker in 1854, Doctor Charles Bent in 1847, Doctor Charles Campbell in 1847, and I coming in 1849.

In 1850 I moved to the small village of Liverpool, and have lived there continuously in active practice to the present time; rarely laying off through sickness, and am in good health and condition now, close upon 83 years of age.

In the matter of travelling, and the scarcity of doctors: for the first two years I travelled entirely on horseback; and my limit was north to Maitland, the extreme north of Queens County, 40 miles; east to LaHave River, and the Islands, 30 miles; west to Lockeport, 38 miles and all the settlements within this radius. Doctor Forbes and I the only practitioners, until we came within the beat of Doctor Snyder at Shelburne, Doctors Steverman and Jacobs at Lunenburg, and Doctor Slocomb at Bridgewater.

In the changes in surgery and obstetrics we can consider them pheno-For instance, during my student years, well do I remember when walking through the wards of Hotel Dieu, the largest and best equipped hospital in Paris, and when the surgeons were men of the highest repute, I followed in the wake of one of these celebrities, and he brought our attention, with great pride and satisfaction to a case of thigh amputation, where "charpie," i.e. picked or shredded lint was packed in between the flaps, (a fist full) to prevent close approximation and to cause granulations to spring up and create "laudable" pus, and the more pus exuded, so much more favourable How crude when compared with our modern treatment! was the result. my earliest professional years laparotomy may have been performed by some surgeon, with more than ordinary courage, and with the most ancient technique, and as might have been anticipated with very rarely a favourable ending. Lopping off limbs without waiting for the conservative efforts of nature was the rule. Lister was no more than a child then if even he was born, and antiseptic treatment was unknown. Anaesthesia was only just being used,

and ether was administered in fear and trembling. Venesection was in vogue for the relief of every trivial pain, whether arising from neuralgia, or from inflammatory conditions.

In obstetrics, the treatment then adopted and inculcated should have been relegated to the Dark Ages.

My famous lecturer, Doctor Ramsbotham, than whom no lecturer stood higher in obstetrics, an oracle in his department, whose book on obstetrics was a text book, and was re-edited very many times, stood up before his large class in London, and we as students on hearing these ominous words on the correct time to use forceps, would exclaim: "Who then may be saved?" his expressions which I copy verbatim from his work still on my shelves. then the pains were subsiding gradually, or have entirely disappeared—if the strength is failing, the spirits sinking, the countenance becoming anxious, if the pulse is 120, 130 or 140, the tongue covered with a white slime, or dry brown or raspy, if there have been two or three rigors, if on pressing the abdomen there be great tenderness of the uterus, if there be green discharge, if there be preternatural soreness of the vulva with heat and tumefaction of the vagina, if the head has been packed, and has made no progress for six or eight hours, if there be hurried breathing, delirium, or coldness of the extremities, then we are at any rate warranted in having recourse to the forcepts." horrible results must have happened in the practice of those students who in after years when in some country place, with no chance of consultation with a senior practitioner, but with these words ringing in their ears-hesitated until too late to use the forceps, and when all was over thought themselves lucky in having the patient escape with only a vaginal fistula, either rectal or cystic, to be a source of the greatest discomfort to the poor suffering woman for all time; for repairing was not thought of then-and so on ad infinitum.

How much a student of that period like myself had to unlearn! Step by step this line or that line of treatment driven into our brains by the sage lecturer, with almost sledge-hammer emphasis, had to be laid aside; and that quickly by reading the wonderful advances in all departments of our noble profession, and by the experiences gained at such hazard. It was a serious task, but necessity was a master which dealt no lenient blows, and we became by experience and severe and persistent study to correct our ways. And this was no easy task, as after these long and wearisome journeys we were more inclined to seek the couch than pour over voluminous tomes. Still when one's heart and ambition is in his work, the duty becomes less arduous, and many an hour has been snatched from needed sleep to keep abreast of the times.

And here I would strongly advise the present generation of medicos not to be too anxious to buy in a hurry a large library, but procure as necessity calls. Old editions soon become worthless. Old ideas are soon exploded, and consequently such volumes are rarely opened. One yearns for newer ideas. One new volume should always be at hand on the desk to take up at every spare moment, when waiting for an engagement, or for meals, etc. Bright and progressive magazines should be also on hand ready to be stuffed in the pocket to scan over while waiting for development at the patient's house. We thus

stop the chances of getting into ruts. We meet our younger medicos (fresh from college) in consultation, armed with knowledge of the latest date and we are thus put in a position of being relegated to the back seat of the "Old School" department.

One's light should be shining brightly to the last, and in his heart of hearts having the strong conviction that it "were better to wear out then rust out."

I have dotted down these desultory remarks only to shew how many advances have taken place in the brief space of a little over half a century.

Perhaps it may be left for some other, when this century begins to wane, to take up the thread and continue it for another half century, shewing even greater advances.

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Yours truly,

HENRY G. FARISH

Notes From Maritime Medical Care

THE Annual meeting of the Commissioners and Administrators of Trans-Canada Medical Plans was held in Vancouver from June 9th through to June 11th, 1954. Maritime Medical Care Incorporated was represented by its President, Dr. J. C. Wickwire and the General Manager. This organization now forms links between the ten prepaid medical plans across Canada.

All do not offer comprehensive coverage yet it is encouraging to note that practically all the plans are working towards this goal. British Columbia is now in the process of organizing Medical Services' Incorporated which, together with their present association known as Medical Services' Association, will be in a position to provide individual hospital care on a basis much like Maritime Medical Care Incorporated and other similar plans across Canada.

In the near future, we are practically assured that Quebec Hospital Association and Maritime Hospital Association will also offer individual hospital care on a service basis that will meet with the requirements of Trans-Canada Medical Plans. When this is realized, it will then be possible for Trans-Canada Medical Plans to offer a limited coverage for the personnel of National employees in Canada.

This move will also expedite inter-plan transfer. To date, Maritime Medical Care Incorporated has been able to transfer subscribers only to other plans who were in a position to offer a more or less similar contract. Trans-Canada Medical Plans, has since its inception, been endeavouring to encourage all plans to develop at least a limited coverage that would be common to all. This, we believe, will soon be a realization. It is quite possible and probable that all schemes will, in the course of time, develop a comprehensive coverage.

We take pleasure in presenting part of the opening address of Dr. E. C. McCoy, President of Trans-Canada Medical Plans.

Gentlemen:

It gives one great pleasure to welcome you to this 4th Annual Meeting of T.C.M.P. It is particularly pleasant to welcome you to this meeting in Vancouver—the climate capital of Canada—and we hope that as well as having a successful meeting—you may enjoy our good weather and beautiful scenery. We have made arrangements for you to see some of our scenery and to enjoy some of our hospitality and we should be pleased to arrange for anything further that any of you may wish for—individually—if you will just speak to us about it.

Having now concluded two years as Chairman of T.C.M.P. Commissioner and prior to vacating this chair, it might be well to—

- (1) summarize briefly what has been accomplished during that time.
- (2) outline what we are in process of doing at the present time—and
- (3) outline briefly to you what the future of T.C.M.P. could be and how it fits into the picture of National Health Insurance in Canada.

During the interval since two years ago to-day we have—

- (1) established a head office in Toronto.
- (2) engaged an excellent full-time Executive Director with his secretarial help.

(3) enrolled member plans in Quebec, New Brunswick and Prince Edward Island where we had no coverage previously.

4) have established—and beginning to operate an Inter-Plan Transfer

Agreement.

5) Have available—coverage for employees of national employers in all

provinces of Canada-except Newfoundland.

(6) There has been established a method whereby the experience and knowledge of the various plans across Canada may be pooled—and a method of communidation whereby this knowledge may be readily available to any plan desiring it.

(7) Channels of communication with Blue Shield have been set up and it is hoped that before long any subscriber could move readily from any

Blue Shield Plan to any T.C.M.P. Plan without loss of seniority rights.

(8) Member Plans have been encouraged to offer coverage to more people and to-day we find several provinces seriously considering broadening their coverage which may or may not be due to T.C.M.P. In our own province here in B. C., we have never covered groups of less than 10 people. Now we are on the verge of covering employed groups of three or more and hope before long to offer other types of enrolment through our new plan called M.S.I.—Also as of June 1st, M.S.A. now covers infants from birth.

(9) T.C.M.P. has been set up under the sponsorship of the Canadian Medical Association and with their representative Dr. Roy Richardson sitting

on our Commission.

It is felt that this is a noteworthy list of accomplishments. It sounds rather easy when you hear them all listed—but with 10 provinces to bring together with ideas that differ as much as our ideas differ across Canada it has been a long slow process and has required much study and collaboration in working out these various points.

In outlining what T.C.M.P. is doing at present I think we all recognize that prepaid medical care—particularly that sponsored or approved by the profession—is growing rapidly. Thus each plan individually is getting more experience and much of it along lines which other plans may not know about. Thus the importance of T.C.M.P. as a fountainhead or pool where the knowledge and experience of all the plans is pooled becomes much more important. Thus Mr. Shillington is gradually acquiring data and information about various types of coverage and this in turn is available to all the member plans. For example, when we were in the process of setting up our new M.S.I. in B.C., we had Mr. Shillington come out and discuss our proposals for coverage. etc., with us—and tell us how this fitted in with what is being done in the rest of Canada. Correction of this lack of liaison has corrected one of our weakest points in prepaid medical care. Each province or community set up its own plan without much regard to previous good or bad experience that may have gone on and from which much good information could have been gleaned.

Also subscribers can now move from any province of Canada—from one member plan of T.C.M.P. to another member plan without loss of seniority

and benefits. He will not necessarily get as complete a coverage in all provinces—but he will at least have the majority of illnesses covered.

At the present time also we have been giving considerable thought to the matter of national coverage. It would certainly be ideal if this could be done on a uniform basis across Canada and at a uniform rate. However, this is a very difficult problem and I'm sure it is impossible to develop a uniform rate that is fair. Nearly everything costs more as you come further west—costs of cars—salaries—etc., are all higher and thus it costs more to practise medicine. Thus if a uniform rate were set up it would not be fair to all practitioners—nor to all patients. It is difficult enough to set up a uniform rate on a provincial basis that is fair with the difference in cost between rural and urban practice.

The matter of national enrolment is a different thing. This could be written in either of two ways—the ideal would be uniform coverage across Canada which could be sold to national employers—Among those businesses with nation-wide branches there is a growing desire of the business executive to include the same benefits for each plant or branch. Many are quite willing to pay different rates according to location, but the desire—and employee pressure—particularly through their unions—for uniform benefits is growing.

Another thing that I believe T.C.M.P. is doing—is making the public realize that there is an alternative to government-run health insurance—and an alternative that will give better medical care at a more reasonable cost. I'm sure that it is a fair statement to make that the medical care provided for the people of Canada and the U.S.A. is the best available anywhere in the world at the present time. It is certainly not the cheapest—but I know of nothing that is good—that is also cheap. What we hope to provide and we now do for more than two million Canadians is a continuation of this good medical care at as reasonable a cost as possible. We do not believe that it can be provided at as reasonable a cost, by any government.

Now by this I do not mean that the government would not play any part in this provision of medical care. I'm sure we all agree that they have a large part to play and I'm sure that is where many of us have fallen down before in attempting to discuss this. We have discussed the provision of medical care under two main headings—either—

- (1) State Medicine—where the government provides the money to pay for the medical care and in turn gets the money from the people through the medium of taxes—the people thus have very little incentive to keep down the costs.
- (2) Health Insurance—where the patient pays a premium on a monthly basis to provide for his illnesses and where the patient tends to be much more interested in the costs and much less likely to request unnecessary care. Under either plan most people will request more medical care than they would if they paid themselves for each medical service. Under prepayment plans they are less likely to demand excessive or unnecessary care—than under a non-contributory plan.

In either case the actual care of course is provided by the doctors but usually under a form of state medicine it is recognized that much unnecessary care will be demanded.

To discuss this intelligently I'm sure we must realize that there are two main aspects to the provision of medical care. The first is the field of public health and preventive medicine on a community basis—the other is the field of curative medicine which also involves preventive medicine on an individual basis and to have a proper health insurance plan, we must consider both of these fields. Curative medicine is the more expensive part while public health and preventive medicine is much less costly. On the other hand, public health and preventive medicine on a community basis must be compulsory. From a public health point of view, there is not much sense in your being immunized against diphtheria if your neighbours aren't also. The only place where such a compulsory scheme properly fits into our way of life is under government sponsorship, therefore, this part of medicine could properly be provided by the government out of the tax dollar—personal contribution here is not necessary.

On the other hand, individuals should be vitally interested in curative medicine. It is high-priced as stated before and the individual must share part of that cost at least. This should be done on a voluntary basis—if we are to retain two of the basic principles which we believe to be essential—those are (1) free choice of doctor by the patient and (2) free choice of doctor to accept any patient. I know of no compulsory scheme that does not interfere with one or both of these principles to a greater or lesser degree.

The individual must as I said make some payment towards the provision of his curative medicine—otherwise some—and I fear this is a fairly large percentage—will request too much unnecessary care. Thus also I feel that the government is making steps in the right direction through the provision of our health grants. However, curative medicine insurance should remain voluntary and should be paid for at least in part by the patient himself and should not be on a taxation basis—for those who are able to pay. The government should contribute for those unfortunate people unable to pay for themselves as I'm sure we all agree that it is our duty to look after our indigents.

Thus T.C.M.P. with its member plans in each province provides a method whereby people can budget or prepay for their curative medicine—which as I have said before is the part of their medical care for which they should pay at least a part. It also provides a method through which the government could contribute toward the care of those unable to pay for themselves.

The one chief drawback to these plans at the present time is that not enough people are covered. Many plans are too limited in their coverage—some will cover only employed people—others will cover people only in certain age groups and not too much individual coverage is available as yet. This condition is gradually being rectified as we gain more experience but we should all be striving to broaden our coverage and to do so as rapidly as possible.

Society Meetings

The Nova Scotia Society of Ophthalmology and Otolaryngology

A joint meeting of the New Brunswick and Nova Scotia Societies of Eye, Ear, Nose and Throat was held at Saint John, New Brunswick, Monday, May 17, 1954.

The morning session, which consisted of presentation of clinical cases with discussion and movies, was held at the Pathological Institute of the Saint John General Hospital. The meeting then adjourned for luncheon at the Admiral Beatty Hotel and this was followed by the presentation of papers, an unusual clinical case of Dr. R. H. Stoddard, Halifax, and a business meeting and discussion.

Dr. Hayes presented a case of Atopic Dermatitis with cataract O.S. and lens change O.D., but good vision in this eye. An extraction was done in the left eye with good results. The man has an improved field on the left side, which is essential at his present work (railway work). He had been in the navy during the last World War and gave a history of having developed the Atopic Dermatitis in the service and having been granted a pension for his present condition. There was considerable discussion of the case by Doctors Wright, Doull, Glenister, Kirkpatrick, McKean and Hayes.

Doctor Hayes' next case was a female—a case of healed chronic Choroiditis O.S.—history of twelve year duration first noticed during a pregnancy and began as a heaped pigmented mass, which gave the appearance of a tumor mass—the other eye is a Keratoconus with poor vision—this condition was watched carefully and gradually flattened out and resulted in the typical healed chronic Choroiditis as seen at present.

His next case was a boy with a unilateral Ptosis—left lid—there was a slight over correction at present—just recently operated on—a white cotton suture—Friedewald Guyton suture was used—and the result is quite satisfactory.

Doctor Hayes then showed several X-ray pictures of oesophageal conditions of rather unusual history—a female patient, who was regurgitating even liquid—examination did not reveal any gross obstruction—but it was decided to pass an oesophagoscope by anaesthetic this was done the next day—but nothing was seen and the obstruction gone—evidently a bolus with some solid food material, which passed down with the relaxation of the anaesthetic—there was a foul odor and a few flakes in the oesophagus. The other case was oesophageal stricture—from drinking some Minard's Liniment as a home remedy—dilation has been carried out and will have to be repeated several times.

Doctor Silver presented a case of a male 60 years—complaining of failing vision for the past few months and loss of part of his visual field in the left eye. This man had been examined for glasses in September, 1953 and his vision was well corrected and no evidence of any visual disturbances or retinal changes. A large pigmented mass is seen over the mascular region—with retinal detachment and a pigmented mass below the disc margin—no tension—no pain—but gradually increasing loss of vision for the past three months and more

marked for the past month. Discussion by the members, that if the question of it being a secondary growth could be ruled out the eye should be removed.

The next case was a young male—21 years—history of old T.B. hip now quiescent and general health good—there was a large scotoma—with muscular degeneration and optic atrophy—a unilateral lesion.

The next case—female—middle aged had been treated for many years for so-called asthma, developed hoarseness and shortness of breath—X-ray showed marked stenosis of trachea—masses in floor of mouth, skin—biopsy showed the condition to be Beck's Sarcoid—with lesions in the larynx, floor of mouth and skin of face. A tracheotomy was done and she is quite comfortable. No known treatment of any value or help to her.

The meeting then saw two films—One of the Stryker Saw for removing large tumors of the orbit. The ease with which this instrument cut through the heavy bones of the lateral margin and this gave easy access to the area and the subsequent satisfactory cosmetic result. Also a very splendid color and sound film of repair to the naso-lacrynal system following various traumatic injuries and destruction. The meeting then adjourned for luncheon at the Admiral Beatty Hotel.

Following luncheon, Doctor Stoddard, Halifax, showed a case of Ideo-Pathic Haematympanum—a young female—seen in January, 1953—with loss of hearing and fullness in the ear—no history of blood disturbance—the ear drum was incised repeatedly and darkened appearance of the drum due to free blood, which was expelled and continued for a time until the opening healed—this was repeated several times, but with the same results. A few cases reported in the literature. No cause or specific treatment known—the question of a modified radical mastoid is being considered as it has been of help in some of the cases reported.

A short business meeting was held. A letter was read from Mr. Flinn of the C.N.I.B., stating that the present arrangement with the oculists, which had been made at the meeting in Moncton in May, 1953, was not working satisfactorily and that the C.N.I.B. would like us to reconsider and perhaps reach a more satisfactory arrangement. There was considerable discussion by the members and the following resolution regularly moved and seconded and passed by the meeting—that our refraction fee remain as is—the bill to be sent at the discretion of the examining specialist—and that the executive arrange a meeting with Mr. Flinn to discuss the matter.

It was regularly moved by Dr. Doull, seconded by Dr. Pullins, that our next meeting be held at the time of the Nova Scotia annual meeting in Halifax, Monday, November 8, 1954. It was agreed by all present that our annual meeting be held at this time instead of in September, owing to the meeting of the International Congress of Ophthalmology in Montreal and New York.

Dr. K. C. Rodgers of Saint John presented the first paper on the afternoon programme—Anti-biotics in Eye, Ear, Nose and Throat. This was a very comprehensive and well prepared paper with several charts, which were distributed to the members present giving in detail their action on Gram negative and positive organisms, certain of the virus infections, the Spirochetes

and the Richethassia and also their dosages and mode of administration, their concentration in the G.I. Tract, the Urine and various body fluids, Pleural cavity, Peritoneal cavity and the Bile. There was considerable discussion and questions by the members.

Dr. J. Likely presented a paper—Complications of Mastoid Disease (Mastoiditis and the Anti-biotics). Dr. Likely stated that his paper was really a practical presentation of the case more than purely scientific and he tried to emphasize this point; that often anti-biotics masked the symptoms and delayed the proper use of surgery in many of these Mastoid conditions.

There was considerable discussion of the facts presented and the feeling was that there was a tendency to too prolonged use of anti-biotics by the family physician and the paediatrician in these Mastoid conditions, resulting in complications.

Dr. R. T. Hayes presented a paper—Gonioscopy—giving a brief review of its use and the various types of lens available. Several were passed about for inspection. The Allen Prism seemed to be the one of choice at present and its modification—a double prism affair, which can be used with the patient in an upright position, with local application of Pontocaine as in taking tension and the use of Methyl cellulose as a media. By rotating these prisms a view of the angle of the anterior chamber can be obtained and the presence of synechiae and details of the iris structure can be observed. This is definitely a forward step in the examination and treatment of conditions about the iris tissue.

There was discussion by the members present and questions asked by several.

Dr. Hayes then announced that Mrs. Hayes and himself would be pleased to have all members at his residence for tea and refreshments.

The members from the Nova Scotia Society expressed their thanks and appreciation to the New Brunswick Society for the very excellent programme and the kind invitation of Doctor and Mrs. Hayes.

On motion the meeting adjourned.

E. G. GLENISTER, M.D. Secty.-Treasurer.

CAPE BRETON MEDICAL SOCIETY

The Annual Meeting of the Cape Breton Medical Society was held April 15, 1954, at St. Rita Hospital, Sydney, N. S., Doctor H. J. Martin presiding. The reports of the Secretary and Treasurer were read and accepted. Doctor G. C. Macdonald and Doctor J. A. McDonald reported on the annual meeting of Maritime Medical Care Incorporated.

The Nominating Committee brought in the following slate of officers for 1954 and 1955:

President—Doctor A. W. Ormiston, Sydney.

Vice-President—Doctor M. J. Chisholm, New Waterford.

Secretary—Doctor H. J. Devereux, Sydney. Treasurer—Doctor G. C. Macdonald, Sydney.

Executive Representatives, The Medical Society of Nova Scotia—Doctor W. M. Nicholson, Reserve Mines and Doctor A. L. Sutherland, Sydney; Cape Breton Medical Society Executive, Doctor L. R. Meech, North Sydney and Doctor J. K. Morrison, St. Peter's.

The guest speaker was Doctor H. B. Atlee who spoke on Carcinoma of the Pelvic Organs. The talk was divided into four main topics, (1) Carcinoma of the ovary; (2) Carcinoma of the vulva; (3) Carcinoma of the uterine body; (4) Carcinoma of the cervix. He stressed the need for early and accurate diagnosis, early and proper treatment both by radiation and surgery. A very interesting discussion followed. Following which the meeting was adjourned and a buffet supper was served by the Sisters of St. Rita Hospital.

H. J. DEVEREUX, Secretary.

VALLEY MEDICAL SOCIETY

The annual meeting of the Valley Medical Society was held at the Paramount Hotel, Wolfville, in June, with Doctor R. A. Moreash of Berwick presiding. The meeting was in the form of an annual dinner and an address was given by Doctor G. D. Denton of Wolfville on isotypes, and one on obstetrical cases by Doctor H. E. Kelley of Middleton. Presentations of life memberships were made to Doctor W. Alan Curry of Halifax and Doctor H. E. Killam of Kinsman's Corner. Doctor P. S. Cochrane of Wolfville and Doctor J. P. McGrath of Kentville moved the resolution in respect to Doctor Curry, and Doctor A. A. Giffin of Kentville and Doctor H. E. Kelley of Middleton, the motion of recognition of Doctor Killam.

The following officers were elected-

President—Doctor D. MacD. Archibald of Kingston.

Vice-Presidents—Doctor D. H. Kirkpatrick of Kentville and Doctor D. G. Black of Digby.

Secretary-Treasurer-Doctor G. D. Denton, Wolfville.

Representative to the Executive of The Medical Society of Nova Scotia—Doctor J. P. McGrath of Kentville.

The College Of General Practice In Canada

The Post-Graduate Committee will shortly be announcing a one day symposium on geriatrics, sponsored by The Lederle Laboratories, to be held in Halifax on December 8th.

Your Executive is planning a supper meeting for the previous night, December 7th, at which Doctor Victor Johnston, Executive Director of the College of General Practice, will be the guest speaker.

It is, perhaps, a little unseasonable to plan now for a meeting in December, but it is hoped that many of our provincial colleagues will mark these dates and use it as an excuse for bringing their wives to town for a day's Christmas shopping and the cocktail party on the evening of the symposium.

Watch this section for further details.

Doctor A. M. MacPherson of Kentville is retiring from general practice to enter the Victoria General Hospital for a course in Radiology.

To-day's Thought for General Practitioners.

Is it not time that the policy of admitting patients to the Victoria General Hospital be changed, so that, in an emergency, a patient who is desirous of, and capable of paying for semi-private or private accommodation, but due to lack of such is, of necessity, forced to accept accommodation in the public ward, he or she may be regarded as a semi-private or private patient, enjoy the privileges of that status, and continue under the care of the family doctor?

The Children's Hospital can do it, why cannot the Victoria General Hospital?

F. MURRAY FRASER, Secretary, General Practitioners' Branch.

CORRECTION

The Editors regret that an error in format in the June issue gave the impression that the notes on the College of General Practice had been reduced to one brief item. Pages 237 and 238 should not have been separated by major titles. One or two pages are reserved in each issue for the news and views of the Secretary of the Association.

Annual Dalhousie Refresher Course October 25th-29th. 1954

The plans are nearly completed for the 28th Annual Refresher Course to be held October 25th-29th, 1954.

This year promises to be one of the very best in the history of the Refresher Course. A varied and interesting program is nearing completion, and it will offer much to the practitioners throughout the Atlantic Provinces. In addition to those given by members of our own Faculty a number of presentations will be made by four distinguished guests.

The John Stewart Memorial Lecturer is to be Dr. Waltman Walters, Chief of Surgery at the Mayo Clinic. It is most fortunate that such an outstanding American surgeon of such varied interests is to visit us this year. He has also consented to stay as our Guest in Surgery and to take part in the regular scientific program, including clinics.

Dermatology is always a popular specialty as so many practitioners have problems confronting them in this field. We are happy to be able to announce that Dr. Norman Wrong, formerly Chief Consultant to the Canadian Army Overseas and at present Chief of the Dermatological Service at Toronto General Hospital, is to spend two days with us.

It is four years since we have had a visitor in pathology. Many will remember the stimulating contribution of a former Dalhousie graduate, Dr. Malcolm Dockerty, now of the Mayo Clinic staff, at that course. This year we are again having a distinguished Canadian who holds an important position in the field of Pathology in the United States, Dr. H. Edward MacMahon, Professor of Pathology at Tufts College Medical School and Pathologist, Pratt Diagnostic Clinic, New England Centre Hospital is a graduate of the University of Western Ontario.

In Medicine we are to have Dr. Franz J. Inglefinger, one of the outstanding Gastroenterologists and an Associate Professor of Medicine at Boston University. As an observant research worker and as an astute clinician he offers a happy combination of a teacher who is both stimulating and informative. We hope to have a clinical-pathological conference with Drs. MacMahon and Inglefinger participating.

POSITION WANTED

Physician registered in Nova Scotia available for relieving duties for weekends and evenings in Halifax area. For further particulars apply to the Assistant Secretary.

Personal Interest Notes

At the Federation of Medical Women of Canada Convention held in Vancouver during June, three Nova Scotia women doctors were awarded life memberships. Honoured were Doctor Jemima MacKenzie of Pictou, Doctor Grace E. B. Rice and Doctor Jane Heartz-Bell, both of Halifax. The life memberships are the first awarded by the Federation since it was organized in 1924 as an affiliate of the British Federation of Medical Women.

Doctor H. I. Goldberg of Halifax attended the Canadian Dermatological Convention in Vancouver in June, and also the Convention of the American Medical Association later in San Francisco.

Doctor M. G. Patterson of Dartmouth was made an Honorary Member of the Halifax Medical Society at their April meeting.

Doctor T. C. Routley of Toronto has retired as General Secretary of the Canadian Medical Association, and has been named President-elect of the Canadian Medical Association, which office he will assume in June, 1955, when the Medical Association holds a joint meeting in Toronto with the world-wide British Medical Association, of which he is already President-elect.

Doctor P. S. Campbell of Halifax was honoured in June with an honorary life membership in the Canadian Tuberculosis Association at their annual meeting held in Saint John.

Doctor R. A. MacLellan of Rawdon Gold Mines was appointed an executive member of the Nova Scotia Association of Urban and Municipal School Boards at their meeting held in Halifax in June.

Doctor R. F. Hand and family of Dartmouth left the middle of June for New Orleans, where Doctor Hand will take a year of post-graduate work in eye surgery at the Tulane University of Louisiana.

The Bulletin extends congratulations to Doctor and Mrs. Frank W. Morse of Lawrencetown on the birth of a son on June 18th.

At the annual meeting of the Valley Medical Society held at the Paramount Hotel in Wolfville in June, Doctor W. Alan Curry of Halifax and Doctor H. E. Killam of Kinsman's Corner were honoured with presentations of life memberships.

Doctor A. M. MacPherson of Kentville is now taking post-graduate work in radiology at the Victoria General Hospital in Halifax. He has been practising in Kentville for the last four years, and was Secretary-Treasurer of the Valley Medical Society.

The following were among those attending the Annual Meeting of The Canadian Medical Association at Vancouver in June from Nova Scotia. Doctor M. G. Tompkins and Doctor J. R. Macneil of Glace Bay, Doctor R. W. Wright of Elmsdale, Doctor S. Marcus of Bridgewater, Doctor J. C. Wickwire of Liverpool, Doctors C. B. Stewart, N. H. Gosse, Margaret E. B. Gosse, H. I. Goldberg, C. C. Stoddard, G. B. Wiswell, T. B. Acker, Roberta B. Nichols,

and L. C. Steeves' all of Halifax. Doctor Steeves mode of transportation excited considerable interest and was the subject of a newspaper article in Vancouver. He travelled in a station wagon fitted out with bunks for his five small sons. Doctor Wright also enjoyed a camping expedition using a trailer, and Doctor Acker motored out with his family. While in Vancouver Doctor Wiswell attended the meeting of the Canadian Paediatrics' Society, Doctor Acker the Canadian Orthopaedic Association, Doctor Steeves the Canadian Heart Association, and Doctor Stoddard the Canadian Anaesthetist's Association. Doctor Stewart was accompanied by his wife and children who visited with Mrs. Stewart's sister in Regina while Doctor Stewart went on to Vancouver and later visited the medical schools at the University of Alberta in Edmonton and the University of Saskatchewan at Saskatoon.

Doctor Harold E. H. Taylor, formerly Assistant Professor of Pathology at Dalhousie University, has recently been appointed Professor of Pathology at the University of British Columbia in Vancouver.

Doctor Walter C. MacKenzie, Dal. 1933, Professor of Surgery at the University of Alberta in Edmonton, has recently returned from England where he was highly honoured by being selected to deliver the Moynihan lecture.

Doctor W. M. Roy of Halifax has returned from a trip to Montreal, Toronto, Ottawa and Boston, combining business with pleasure, as he visited hospitals in Montreal and Toronto.

Obituary

Doctor Felix Connor passed away Thursday night, May 6th, at the home of his brother, Rufus R. W. Connor of Digby, N. S.

He was born in Halifax eighty years ago, the son of Major Timothy Connor, R.A.M.C., and Mrs. Connor of that city. He graduated from the Medical College of Dublin, Ireland, in 1902. Doctor Connor practised his profession in several places in Nova Scotia including Noel, Hantsport and Neil's Harbour. During World War I he served as Captain in the Medical Corps. He later went to sea as ship's surgeon and served in that capacity during World War II in both the Atlantic and Pacific theatres. He was wounded in Liverpool, and later in Glasgow during air raids.

Doctor Connor is survived by two brothers, Rufus R. W. with whom he lived in Digby, and Alexander P., British Consul, Baltimore, Maryland; also two sisters, Mrs. Maud C. Browne of New York and Mrs. Florence Ferraeria. His wife, the former Lila deWitt of Canning, predeceased him several years ago.

The Bulletin extends sympathy to Doctor Hugh MacKinnon of Bridge-water on the death of his father, Rev. Dr. M. A. MacKinnon, who died at Edmonton, Alberta on June 14th, at the age of eighty-two; and to Doctor L. M. Morton of Yarmouth on the death of his wife, Mrs. Hallie J. Morton, and mother of Doctor B. St.C. Morton of Halifax, who died suddenly on June 23rd, at the age of sixty-nine.