

# Pneumococcal Meningitis, Secondary to Acute Mastoiditis\*

H. W. SCHWARTZ

L. D. W., male, aged 27, consulted me on the evening of November 23rd for "sizzing" and impaired hearing in the right ear. He had had a "cold in the head and chest" and a mild degree of earache had developed on the 15th. On the 17th the pain had become sufficiently severe to prevent sleep and glycerine and carbolic "oil" and syringing were resorted to. On the 20th the ear began to discharge and the pain was greatly modified. At this stage the family physician was called and advised seeing an otologist and prescribed some "sleeping capsules" in the meanwhile. The day he came to me he felt so good that he had been up all day. Examination of the ear revealed a very free flow of pus. There was tenderness over the area of the antrum and to a lesser degree over the tip of the mastoid process. Temperature 99.5°. The fauces were inflamed and the mucous membrane of the nose more or less congested. Ephedrine 1% in normal saline solution was prescribed to be used after suitable posturing along with plain, unadulterated, steam inhalations, the source of the steam to be kept boiling during the period of treatment, heat to the ear (short of blistering) and above all bed.

The following day (24th) tenderness could hardly be elicited, the discharge was free and the temperature 99°. A week later (2.12.41) progress was so satisfactory, the temperature being normal for some days, the appetite was good and he was sleeping so well, that permission was given to get up and treatment modified almost to the point of omission sufficient being retained for psychological rather than curative reasons. The local use of hydrogen peroxide and alcohol (70%) demonstrated and prescribed to be used daily. My intention being to call in the course of five or six days and to discuss in a non-committal manner the matter of his returning to work.

The following day (3.12.41) he developed a headache with some pain "behind the eyes" but little was thought of it as he was subject to quite severe bouts of headache and he had been reading a great deal to pass the time, and anyhow it was better towards evening. Early in the morning of the 4.12.41 his mother telephoned that the patient had had a bad night and could hardly stand the pain in and about the left eye. I was fortunate in securing a bed in hospital with only a few hours delay. Examination on arrival in the hospital showed the temperature to be 100.6°, a suggestion of sagging of the superior and posterior wall of the external auditory meatus. There was no involvement of the 5th or 6th nerves.

An X-ray was taken in order to find out which of the three anatomical types of bone one had to deal with: sclerotic, diploic, or pneumatic, i.e., cellular or acellular. This particular case was of the mixed cell type and cells extended well into the root of the zygoma. The cortex was thick, and the lateral sinus was well posterior to the bony canal. A simple mastoid was performed that afternoon. The bone was highly vascular, decidedly of the diploic variety with some small air cells and small points of pus were scattered throughout. Thanks to the X-ray the zygoma was dealt with more thoroughly—and well

\* Read at the Staff Conference, Victoria General Hospital, February 6, 1942.

it was—than in all likelihood it would otherwise have been. The tegmen antri was quite soft and the dura was uncovered round about.

Next morning, 5.12.41, neck rigidity was noticed and the Kernig was present. Soludagenan was started immediately (intravenously). Dr. Carney saw him in consultation and suggested that the soludagenan be continued intravenously, one gram every four hours. The contents of the 3cc ampoule containing the one gram of the drug were diluted with 17cc of sterile water before being administered. Morphia grains  $\frac{1}{4}$  to be given every four hours and a lumbar puncture to be done. That same evening on receipt of the laboratory finding that the pneumococcus type one had been found in the C.S.F., the corresponding serum in doses of 20,000 units was ordered to be also given intravenously and repeated every eight hours. 700 cc of glucose in 5% saline was given on the 5th and again on the 6th. The patient became increasingly ill and by the 8th the bowels moved and the urine was passed involuntarily and slight convulsive movements limited to the limbs were observed. On the 9th convulsions of a very severe character developed lasting from 30 to 50 minutes recurred at frequent intervals. Conjugate deviation of the eyes to the left. During this period of the 7th, 8th, and 9th the temperature fell and hovered about 99°(axilla) and the pulse rate steadily increased reaching 140 at noon of the 10th. All in all it was felt that the possibility of recovery was becoming more remote and the family was given less and less encouragement. Apparently the morphia was exerting little restraining influence on the convulsions and it was decided to use a general anesthetic, but fortunately at this time they became less severe, the pulse rate began to fall and by midnight the nurse was under the impression that there was some evidence of improvement. The following morning it would appear as if a crisis had been passed. Although restless he had not had a convulsive movement that morning, and the pulse and temperature showed continued improvement, but above all his mind was clear, and he told us the last thing he could remember was Dr. Muir preparing to give him the anesthetic on the afternoon of the 4th, the day of his admission to hospital.

Apart from the discomfort of the serum reaction he made steady and uninterrupted progress towards recovery. His appetite became positively alarming to the hospital authorities.

To sum up: (a) elimination of the primary focus—the first and foremost of all measures—the operation of common denominator to all the intracranial complications of purulent ear disease.

(b) soludagenan intravenously, two grams at first and repeated in two hours and then every four hours from the 5th to the 11th, and then the same dose by mouth until the 18th, when the cerebro-spinal fluid was proved to be sterile. On the 22nd the C.S.F. was again negative and resumption of the daganan was not considered necessary.

(c) twenty thousand units of pneumococcal serum, type i for thirteen doses.

(d) morphine grains  $\frac{1}{4}$  every four hours from the morning of the 5th to the evening of the 10th.

(e) the taking of fluids was encouraged and the urine examined frequently for haemturia or other evidence of kidney irritation.

(f) blood examination was made daily but only a few reports are being quoted because of the danger of missing the woods because of the trees. On admission on the 4th, the white count was 24,800 and the red 4,600,000, by

the 12th the white count was 10,600 and the red 3,600,000, Hbg 70%. During the serum reaction there was a temporary increase in the white count. By the 17th the white count was 7,200 the red 2,650,000 and the Hbg 45%. Liver extract had been prescribed on the 12th to be given daily intramuscularly and he received thirteen injections. Ferrous sulphate and brewer's yeast were commenced on the 19th. When discharged thirteen days later on January 1st, the white count was 7,800 the red 4,200,000 and the Hbg 73%. The mastoid wound was almost healed.

You will note that the primary focus was dealt with promptly and thoroughly, the serum was administered in small doses at frequent intervals rather than massive doses of 100,000 units on one or several occasions, that lumbar puncture was used for diagnostic not for therapeutic reasons, and a small dose of morphia given regularly until the restless stage was passed. At no stage did the blood suffer to the point when a transfusion was deemed necessary; neither were we compelled at any time to consider modifying the dosage or stopping the essential element of the treatment because of changes in blood or urine. Had such changes occurred it would probably have proved disastrous. It must ever be remembered that the sulphonamides do nothing to increase the immunity of the blood, once stopped there is no ban on any organism that may have survived.

The patient and I have been congratulating one another on having had the advice and guidance of a consultant so experienced as Dr. Carney, and an intern such as Cameron Anear, so faithful and skillful in executing his recommendations.

Certain questions naturally arise. What are the relative merits of the different channels of administration? How much of the drug reaches the C.S.F.? Are these drugs free in the blood stream or do they enter into the formation of new chemical products? When two remedies are given at the same time, as a rule a very unscientific procedure but nevertheless justified at times, what evidence is there to help us decide to which to give the more credit?

From a communication<sup>1</sup> by Brown, Thornton, and Wilson, based on a study of 90 cases of pneumonia treated by sulphapyridine at the Toronto Western Hospital, I will quote one paragraph. "In only one of 16 cases in which the concentration of the cerebro-spinal fluid was estimated at the same time as the blood was the level in the cerebro-spinal fluid as high as that in the blood. In the majority it was about 65% of the blood concentration. In all instances a disproportionately high percentage of the free form of the drug was present in the cerebro-spinal fluid as compared with the blood values simultaneously obtained. In 8 of the 16 there was practically no conjugated drug in the spinal fluid".

In the discussion of their work towards the end of their presentation they write: "It is clearly evident that there must be wide variations in the ability of the human subject to absorb the drug from the intestinal tract. From two to three, four and even five times as much sulphapyridine must often be given by mouth to attain the concentrations in the blood observed after injection of the soluble sodium salt. By inference, and it is proven by analysis, much of the drug given by mouth must pass unabsorbed through the gastrointestinal tract. This is an unsatisfactory aspect of this form of chemotherapy. It makes necessary frequent chemical estimations to ensure effective dosage and it greatly obscures any attempt at estimating the true toxicity of the drug.

From the findings in this series it seems safe to state that when a single

dose of sulphapyridine is given by mouth the maximum concentration in the blood is reached in four to five hours. When given intramuscularly as sodium sulphapyridine or soludagenan the maximum is attained in three to three and a half hours. When this salt is injected intravenously there is for a short period a very high concentration in the blood but this falls after thirty minutes to a level which may be taken as the effective concentration'.

Steele and Gottlieb<sup>2</sup> state that: "The mortality rate from pneumococcal meningitis was practically 100 per cent previous to 1937. Goldstein and Goldstein in a review of the literature up to 1927 collected only 150 authentic reports of recovery from this disease. Of a series of 468 patients with bacterial meningitis admitted to the State Charity Hospital of Louisiana in the ten year period prior to 1936, Tripoli reported that illness in 111 was due to pneumococci and that 110 died, a mortality rate of 99 per cent. Toomey and Roach reported that 157 patients with pneumococcal meningitis were admitted to the Cleveland City Hospital between 1922 and 1939 and that they all died irrespective of treatment.

When effective concentrated type-specific antipneumococcal horse serum became available about 1930, the antibodies were used in an attempt to treat pneumococcal meningitis. That the results were disappointing was shown by the fact that the "Quarterly Cumulative Index Medicus" listed reports of only 30 additional recoveries during the period from 1927 to 1939. The majority of these few cures were attributed to spinal drainage, to the administration of antipneumococcal serum or the administration of ethylhydrocortisone hydrochloride, or to a combination of these therapeutic measures.

Perhaps one of the most important reasons for the discouraging results with antipneumococcal horse serum was to be found in the fact that the molecule of the horse serum was large and evidently did not pass into the cerebrospinal fluid from the blood stream. As a consequence, it was necessary to inject the horse serum antibody intrathecally, where it produced a violent foreign protein reaction in the form of fibrin and leukocytes with resultant block of fluid drainage and antibody diffusion and formation of localized abscess pockets."

Steele and Gottlieb<sup>2</sup> in their review of the literature are of the opinion (p.231) that it has been erroneously assumed that sulphapyridine is the more effective drug against all pneumococcal infections because of its demonstrated superiority in pneumococcal pneumonia. With the information available they feel that sulphanilamide is the safer and more readily and uniformly absorbed than sulphapyridine or sodium sulphapyridine and its use should be continued until the last named drugs have been proven definitely superior. It has been shown<sup>3</sup> that sulphathiazole does not reach the C.S.F. in anything like the concentration of the other members, having about  $\frac{1}{3}$  of the blood concentration as against  $\frac{2}{3}$  or more for sulphanilamide, sulphapyridine or sulphadiazine.

The value of the sera seems to be more or less in doubt although on the whole there is a tendency to use them. McKay and Hurteau<sup>4</sup> observed that a more rapid and complete response was obtained when specific serum was used in addition to sulphapyridine and that low levels of sulphapyridine in the blood of patients receiving serum were not accompanied by exacerbations of the disease as they were in the absence of the serum.

H. P. Brewer<sup>5</sup>, taking part in a discussion felt that "the value of antipneumococcal serum as an accessory to chemotherapy in pneumococcal meningitis is doubtful. (Coleman, 1940) but with a mortality of 35% with sulpha-

pyridine treatment, cases should at least be given the chance of any benefit from the specific serum. It is possible that future results with the more diffusible rabbit's serum given both intravenously and intrathecally in combination with adequate sulphapyridine dosage may improve this somewhat dismal outlook". Dismal it may be but quite cheerful as compared to a 100% mortality. The intrathecal route is the very last resort because of severe reactions. It is suggested by Finland, Brown, and Rauh<sup>6</sup> that large doses of the specific type of serum be given intravenously and blood be withdrawn two hours later, 5 to 10 cc of the serum promptly separated and the antibody thus secured be the one used intrathecally.

Quoting Col. L. E. H. Whitby<sup>5</sup>: "One of the most satisfying results of chemotherapy is the way in which the sulphonamide drugs have altered the prognosis in meningitis of all types, whether they be primary or secondary to ear infection. When meningitis occurs there can be no question that drainage of the primary focus must be carried out. I have seen more than one case of pneumococcal meningitis where the meningeal infection has been treated as primary and temporarily controlled by one, two, and sometimes, three courses of sulpha-pyridine, but relapsed on cessation of the course. Only after the third relapse and too late to save life has the ear been examined to reveal a silent but obvious primary focus responsible for the constant reinfection of the meninges".

One sometimes feels that patients recover in spite of treatment but such does not apply to pneumococcal meningitis and chemotherapy. You may ask why did I not resort to the use of one of these drugs when I was first consulted<sup>7</sup>. This time I will let E. P. Fowler, Jr.,<sup>8</sup> give the answer: ". . . any physician who in shot-gun fashion prescribes a drug to all cases without discrimination is reflecting ignorance, laziness, or poor judgement as to the expectancies of serious trouble from otitis media. He may sensitize his patient, damage his liver or kidneys, or render him drug-fast while using chemotherapy for a minor ailment, which at a later date might then be unavailable for a serious infection".

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# Editor's Column

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## ON ADMITTING PATIENTS

Generally speaking it is in the best interest of the patient and unquestionably will tend to facilitate the work of the hospital personnel, that whenever possible patients should be admitted during the afternoon, rather than the evening hours. This is particularly true of persons to be operated upon the following morning.

By so doing an opportunity is afforded to have the admission routine attended to, including care of clothing and valuables; the patient's history taken; physical examination and laboratory tests made, without rush, hustle, bustle, and general inconvenience but rather in a manner apostolic permitting "all things to be done decently and in order."

It is said that frequently patients come to hospital at seven, or eight, or nine o'clock and later, accompanied by "friends" who often insist on remaining with the patient as long as possible, to "sooth his nerves," after whose departure the examinations above referred to have to be made, and the necessary pre-operative preparations attended to, thus leaving to a very late hour the time when the patient can finally settle down for what doctors call "a restful night's sleep" before operation.

On inquiry I am told that from the financial standpoint it does not cost the patient any more to enter at 3 p.m. than at 9 or 10 p.m. Why not encourage your patients to report early, yea insist and refuse to take "no" for an answer, in short, be firm. As a special favour please send to the BULLETIN the name of any management that prefers 10 p.m. to 4 p.m.

H. W. S.

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## ADMIRAL GORDON-TAYLOR ADDRESSES MEDICAL STUDENTS

The Halifax Medical Society was particularly fortunate in having at its January meeting a visitor in the person of Surgeon Rear-Admiral Gordon Gordon-Taylor, O.B.E., M.A., M.S., B.Sc., F.R.C.S., F.A.C.S., LL.D., Vice-President of the Royal College of Surgeons of England who was in Halifax enroute home after completing a series of lectures in the United States of America.

Comrade in arms of Dr. W. Alan Curry during the First World War he came to the meeting at the latter's invitation and contributed much to the discussion of the interesting cases.

Later in the week he gave an address to the Dalhousie Medical Students Society which was largely attended by students and Faculty and thoroughly enjoyed. It dealt with wartime medical problems in England and gave us all clearer understanding of the difficulties besetting both civil and military doctors in these times.

He spoke first of the implications of total war; of the German effort to destroy entire populations, male, female, infant and unborn, by means of aerial bombardment. Of the unprecedented savagery of such tactics

unexampled even by animals, the lowest of which are never guilty of attacking the female. The inevitable results of mass bombing he went on to explain were the disruption of normal communications, the slowing of transportation and the ready destruction of any facilities massed in small areas. This, of course, led to the application of the system of dispersion to all possible industries and utilities, including in so far as manageable the people themselves. Hospitals were directly and in some cases devastatingly affected by these bombings, situated as so many were in the poorer and more crowded districts of the cities. Dispersion was of necessity applied to these and in most cases was arranged radially. Thus a hospital of a thousand beds would reduce its city capacity to two hundred of the most sheltered beds possible, these to be used for emergency cases, either of injury or sickness. An acute abdomen, for instance, would be taken in, operated on and kept only two or three days before it was moved out to the next radial unit, twenty-five or thirty miles outside the city. Here the case would remain, or be later sent to a unit forty or fifty miles from the centre. To the surgeon this meant, of course, the loss of direct after care of the patient since it was impossible to follow the cases into the country.

The effect on medical schools and students was marked, but every effort was made to uphold the high standards prevailing and no attempt has been made to shorten courses or lower the requirements for qualification. Students had to be rotated between the units of a teaching hospital working from the centre to the periphery.

Admiral Gordon-Taylor then went on to a consideration of what war had taught the surgeon—from the earliest times to the present day. Particular reference was made to the lessons learned in the last war and to a comparison of the prevalence of certain conditions then and now. Shock was severe in the last war and poorly treated. Secondary haemorrhage and gas gangrene were common as was tetanus, dreaded complication of soil infected wounds.

Abdominal wounds were common and lessons learned from the treatment of the many thoracic wounds led to the development of modern thoracic surgical methods. Plastic surgery owed its development to the demands of the last war.

Blood transfusion was practically unknown in England at the start of the first world war, the late Lord Moynihan being the only person using it there at that time. During those four years it became, under the impetus of a Canadian, Dr. Bruce Robertson, a common procedure.

A study of the casualties so far in this war and comparison with those of 1914-18 disclosed very striking and significant differences. The greatest of these, in fact, what could be called the surgical problem of this war is shock. Never before had he witnessed the extreme degrees of shock seen during the past two years. On the other hand, secondary haemorrhage and gas gangrene were uncommon so far in this war. This he attributed to the use of sulphanilamide. Thoracic and abdominal wounds admitted to hospital are rare in this war: no more than a thousand cases in all since the beginning. This is due to the fact that such wounds are rapidly fatal in the field. Most of the cases reaching hospital are wounds of the extremities, and head, neck and eyes. The latter in a very high percentage—up to fifteen per cent—some ten per cent of which are minor nature.

Burns have been quite common and the usual method of treatment is coagulant, but he warned against the use of tannic acid or any coagulant when the face or hands are involved, apparently because of scar contracture.

Some of the most interesting problems of the current war were, first of all shock, which had been found to require for the average case at least three pints of fluid, one of which must be blood, the others serum, plasma or what was at hand. He warned against the use of gum acacia or other synthetic preparations.

Air blast injuries from bombings have been very common. These affect mostly the thorax and sometimes the abdomen. In the lungs numerous small haemorrhages are produced leading to spotty consolidation and haemorrhagic frothy sputum. Pain, sometimes felt in the abdomen, together with the ever present shock, may lead to an erroneous diagnosis of acute abdomen with resultant highly fatal laparotomy. (Diagnosis is aided by the development in a few hours of the typical X-ray picture of spotty consolidation.) Air blast may affect the abdomen when it is apt to produce retro-peritoneal haemorrhage or haemorrhage into the mesentery which will probably not require surgery.

Water blast or immersion blast is met with in those subjected to depth charge explosions while in the water. Here again the most damage is to the thorax but the abdomen may be seriously affected. Paralytic ileus seems to be the commonest abdominal derangement, but varying degrees of haemorrhage and even rupture of the bowel may occur.

The most perplexing of the new conditions is what is called the Crush Syndrome. This is met with in some instances where individuals have been pinned by the legs or arms under fallen masonry for variable times up to forty-eight hours. When released they are usually bright, full of pluck and seem remarkably little disturbed by their experience. There is little or no shock and the pulse and blood pressure are practically normal. The mental state is one of marked euphoria. After a few days a little temperature appears, the blood pressure changes—may be up or down—the urine becomes bloody and scant and progresses to anuria. Restlessness and muscle twitching lead on to the picture of uraemia in which death occurs. The pathological picture in the kidneys is one of blocking of the tubules with haematin crystals, resembling the kidney of incompatible blood transfusion. The cause of this peculiar condition has not been determined. Various methods of treatment have been tried including sodium citrate and sodium sulphate intravenously.

Admiral Gordon-Taylor then went on to explain the shortage of medical men in England. The necessity of placing doctors in air raid shelters and in factories as well as the services has placed a great drain on medical personnel. He concluded with the hope that a few at least of the many students in his audience might be able to go to the assistance of English medicine.

J. W. R.



# Society Meetings

## HALIFAX MEDICAL SOCIETY

**S**PECIAL meeting of the Halifax Medical Society held at the Dalhousie Public Health Clinic, Friday, December 19, 1941.

The meeting was called to order at 8.40 p.m., with the President, Dr. Graham, in the chair.

The following thirty-four members were in attendance:

Dr. N. H. Gosse, Dr. S. H. Keshen, Dr. F. V. Woodbury, Dr. Margaret Gosse, Dr. A. R. Morton, Dr. C. B. Weld, Dr. G. H. Murphy, Dr. T. B. Acker, Dr. G. E. B. Rice, Dr. G. A. MacIntosh, Dr. A. E. Murray, Dr. H. W. Schwartz, Dr. H. K. MacDonald, Dr. W. G. Colwell, Dr. J. G. MacDougall, Dr. S. R. Johnston, Dr. A. Ernest Doull, Dr. K. A. MacKenzie, Dr. D. M. MacRae, Dr. S. T. Laufer, Dr. J. C. Worrell, Dr. H. E. Taylor, Dr. D. J. Mackenzie, Dr. C. W. Holland, Dr. A. L. Murphy, Dr. W. K. House, Dr. G. B. Wiswell, Dr. H. A. Payzant, Dr. J. W. Reid, Dr. A. McD. Morton, Dr. H. MacKinnon, Dr. N. B. Coward, Dr. R. H. Stoddard and Dr. K. M. Grant.

The President stated the meeting was called to hear the report of the Red Cross Emergency Committee appointed by the Society, with Dr. N. H. Gosse as its chairman. Dr. Gosse was called upon to make his report. Dr. Gosse then read a very thorough explanation of what the committee has been doing and the arrangements so far made in case an emergency should arise. The report follows:

### Report of the Emergency Preparedness Committee of the Halifax Medical Society, December 1, 1941

The Red Cross Medical Committee addressed itself to you some months ago on the subject of Emergency Preparedness, and in assuming your obligations as the medical organization of this City you elected to have the personnel of that Committee constitute your Committee.

Your Committee feels that the time has come when this Society should, as a Society, come into more intimate contact with our activities. Indeed it is anxious that it should review your Committee activities, should be informed as to its ideas and plans, and that it should lend its approval or counsel in the very heavy task which it has undertaken.

The Red Cross Medical Committee was called into being to survey the situation in Halifax and to make plans for the taking care of a large number of casualties in the event of a disaster. A survey promptly showed how utterly inadequate were our existing hospitals to meet any such demand. Further investigation showed that other buildings by virtue of their being to some extent going concerns, lent themselves to being converted into Emergency hospitals with some speed so as to give us from 800 to 1,000 extra beds. Those buildings are:

(1) School for the Deaf.....	188	beds—present capacity	113
(2) Shirreff Hall.....	180	“ “ “	90
(3) School for the Blind.....	300-500	“ “ “	200
(4) Pine Hill.....	166	“ “ “	126

and they have been accepted and recognized as the Red Cross Emergency Hospitals which will be expected to serve as such in time of disaster.

It is one thing to select buildings but it is a very different matter to have them serve satisfactorily as hospitals. The expense that would be required to produce the conditions of a modern hospital would be so great as to be prohibitive. The question of how far to go in the preparation of these buildings for use as Emergency Hospitals was one of considerable concern and discussion. The view of the Red Cross is that they are custodians of the money which you and I contributed to them, and that they must be careful when it comes to spending for something which might never occur. Our Committee on the other hand feels very strongly that at least adequate supplies should be on hand to meet a moderate sized disaster. The final position, the result of considerable work and discussion is as follows:

Four buildings have been elected as emergency hospitals. In two of these, Shirreff Hall, and The School for the Deaf, equipment for one complete operating room, and known as a Mobile Operating Unit is stored. In two others, Pine Hill and The School for the Blind, there is no such unit, and no operating room facilities as such.

How then take care of severe casualties? It seemed better in the circumstances to take advantage of the facilities available to us in the five operating rooms of the Victoria General Hospital, and the three operating rooms of the Halifax Infirmary, and to concentrate on them. Both institutions were glad to co-operate, but neither was adequately equipped for the carrying of all their rooms continuously for twenty-four hours a day, for say, three days. The Red Cross has helped to meet the need, giving us roughly half of what we asked for, and engaging to have the other half in readiness to be shipped in by plane or other conveyance as soon as possible after the occurrence of the disaster. This surgical material has been divided into four lots under the direction of Dr. Graham, Chairman of the Sub-Committee on Surgical Supplies, and we were very kindly given storage space in the Victoria General Hospital, The Halifax Infirmary, Richmond Paper Company Plant, and in St. Patrick's Boys' School on Mumford Road for this material. Surgical dressings are at the moment stored at four of our places, and many more are being made.

The plan is first to evacuate as many patients as possible from the wards of the Victoria General Hospital to a prepared section of the City Home; fill their places with the worst casualties such as bad compound fractures, and when the beds of the Victoria General are filled and casualties taken care of, the operating rooms will receive patients from such other hospitals as have not the facilities for definitive treatment. After immediate operative care, they will then be conveyed back to their respective hospitals for post-operative care. The Infirmary operating rooms will be used similarly—to take care first of its own admissions and then of those sent from other institutions.

It will be apparent that a carefully worked out system of ambulances, of telephones, or other means of communication, linking all these hospitals, and a good central control station are essential to the success of such a scheme. Your Committee has been fortunate in securing the services of Dr. Scammell to head the Committee which will perfect that system, and at the time of disaster will administer it. In view of the need for doctors in other positions, we could not very well give him much if any medical aid. None the less, he

will make the system work with lay help of his own selection. I think we may all feel sure that it *will* work. The control room will be in the Maritime Business College—The Emergency Red Cross Headquarters. Dr. Scammell is also Vice-Chairman of your Committee, and since your Chairman will probably be in hiding in an operating room in time of emergency, the receiving and the placing of incoming doctors during the disaster period will therefore be among his multifarious duties.

**The matter of nurses** for these hospitals is, of course, one of the first importance. The nursing profession of this city early assumed a great deal of responsibility both in organizing themselves and in the training of home-nursing groups, which it was hoped would give us our Nurses' Aides. When our buildings were selected, they inspected them and laid out their staffs, filling at least the key positions, which is as far as their numbers would let them go. Now, as women are being enlisted, and trained, by either Red Cross or St. John Ambulance, Nurses' Aides—I am sorry that I cannot call them V.A.D.'S.—are being allotted to the different emergency hospitals. In addition to all this, some eighteen graduates who have had operating room training, have been assigned to the Victoria General operating rooms. Miss Lenta Hall is head of their emergency work committee and is the nursing representative on our Red Cross Committee.

Beds, mattresses, etc., and general hospital supplies are the work of the Sub-Committee under Dr. John MacIntosh. Dr. MacIntosh has succeeded in associating with himself some capable and industrious laymen who will take on and arrange the distribution of beds, etc., when he himself is tied up to his more strictly medical job.

Dr. Davis was a member of our Committee before Government Departments had taken up the matter as seriously as the Red Cross was doing. Since then everything has come under the Department of Pensions and National Health, and as Minister of Health he is head of the whole Civil Emergency effort of the Province, we may now almost say that he is a member of your Committee *ex officio*. In any event, we are glad to have the benefit of his criticism.

The City organisation is under the Mayor, and the Red Cross is one division, like Police, Fire, Transportation, etc., are divisions of the City Committee.

Dr. Allan Morton is Chairman of our Sub-Committee on the housing of visiting nurses and visiting doctors. He is also responsible to the City Committee for all first aid work, but that is a separate division and quite distinct from the Red Cross. On our Committee, I understand that his work has recently been facilitated by the nurses, who at a recent meeting, secured among themselves a great many offers of hospitality for visiting nurses. It is to be hoped that his own efforts will be equally successful for the housing of visiting doctors.

The Blood Donor Sub-Committee under Dr. Grant has turned in a job of which Halifax may well be proud. About 100 blood donations a week are regularly being made, and the serum from these is as regularly being shipped. (Halifax was the first city in Canada to ship serum to Toronto. Two others were shipping whole blood.) The laboratory technique has become perfected so that individual tests for sterility are no longer made, the sterility tests on the pooled serum being uniformly sterile. (Our laboratory people, Doctors Mackenzie, Smith and Taylor will appreciate that. It would look as if Toronto

does also, for recently, Mount Allison at Sackville, N. B., offered the Red Cross National Office something over 200 blood donors, and they forwarded the offer to Halifax for our people to deal with.)

But Mr. President, that is for *serum* to be dried in Toronto and to be made available to our fighting forces. Only when their full estimated requirements are met, is there to be any for civilian needs. When that will be, no one knows. In view of recent world developments, and of the greater enlistment of our man power which this country must see, it appears to us that it may be a very long time.

We are perfectly sure Mr. President, that not only our Committee but also this whole Society feels, that we could not have engaged in finer work for our country, but at the same time we cannot throw off the sense of responsibility that we have for our own citizens. Personally, I am not so sure that our average citizen cares a hoot, but even that does not affect our responsibility to him. Should a disaster strike Halifax, we all know that many lives would be saved by our having at our beck and call, transfusion squads, with plentiful supplies of blood. As between blood and serum our position is, that in burns, and in shock without haemorrhage, serum or plasma is best, while if haemorrhage is the condition to be treated, then there is no real substitute for whole blood.

It seems to our Committee that the need would be met by the establishing of a blood bank—not to begin at once, but to have everything ready so that the present work could be merged into the blood bank at a moment's notice. Practically all that is required from the material side is the supply of Citrate Vacoliters, and the question of their supply has been sent up for consideration to the higher authorities. But from another side, much more is required. If it is to be reasonably successful, then a large proportion of the population should be grouped—not necessarily as donors, though a large number in an emergency would be expected to serve as such, but so that the tag given them at the time of their typing would facilitate their being transfused should the need arise.

In this regard this Society could do a great deal of good both as a society in publicly urging our populace to get typed, if and when a blood bank is assured, and by individual doctors urging it upon all persons possible as a duty to themselves.

Apropos of this; in the very splendid co-operation offered us by the Medical Service of the Navy, there was contained the suggestion of Transfusion Teams. You may believe that their offer was accepted with alacrity.

During the disaster of the Halifax Explosion, there was I believe a great deal of emergency obstetrics. We are making some effort to obtain special space for this department, and Dr. Kenneth Grant as another member of our Committee is taking care of it.

There remains the matter of Medical Personnel: A night or two ago in discussing this matter, one of the men in authority said "If everything else is in order, you will have no need to worry about our doctors, they will be glad to work wherever they can best serve." It was a compliment which I am happy to say, was thoroughly justified. Yet, Sir, the phrase "where they can best serve" is very definitely susceptible of more than one interpretation. The Committee responsible for interpreting it, while taking full responsibility

for its actions, did not reach its conclusions before having many and varied consultations, not only with its own members, but also with other members of this Society, and with officials of some of the different institutions involved. Insofar as they have accepted therefore, or may accept the appointment, the following appointments have been made:

## SHIRREFF HALL

Chairman of Staff.....	Dr. G. H. Murphy
Vice-Chairman.....	Dr. P. A. Macdonald
Other members.....	{ Dr. G. B. Wiswell Dr. W. G. Colwell Dr. E. T. Granville
Eye, Ear, Nose and Throat.....	Dr. H. W. Kirkpatrick

## SCHOOL FOR THE DEAF

Chairman.....	Dr. J. V. Graham
Vice-Chairman.....	Dr. F. S. Finlay
Other members.....	{ Dr. A. E. Murray Dr. Grace Rice Dr. A. E. Waddell Dr. R. C. G. Hawkins
Eye, Ear, Nose and Throat.....	Dr. H. W. Schwartz

## SCHOOL FOR THE BLIND

Chairman.....	Dr. J. G. MacDougall
Vice-Chairman.....	Dr. F. R. Little
Other members.....	{ Dr. Hugh MacKinnon Dr. K. P. Hayes Dr. S. T. Laufer
Eye, Ear, Nose and Throat.....	Dr. A. Ernest Doull

## PINE HILL COLLEGE

Chairman.....	Dr. J. W. MacIntosh
Vice-Chairman.....	Dr. W. K. House
Other member.....	Dr. W. J. Keating
Eye, Ear, Nose and Throat.....	Dr. H. S. Keshen

## HALIFAX INFIRMARY

(after consultation with Superior)

Chairman.....	Dr. C. S. Morton
Vice-Chairman.....	Dr. A. L. Murphy
Other members.....	{ Dr. T. B. Acker Dr. J. C. Acker Dr. W. J. Barton Dr. Ray MacLean Dr. G. G. Lehv
Eye, Ear, Nose and Throat.....	Dr. D. M. MacRae

With respect to the Victoria General Hospital: While not a Red Cross Hospital, the closest co-operation is being experienced as between it and the Red Cross. The latter on its part has been glad to provide a great deal of

equipment held ready for use there, and to augment by many persons its nursing and auxiliary staffs. On their part, they have concurred in our depletion of their visiting staff to the extent indicated by this list. However, there has been left there a staff proportionately as large as that of any other institutions name, and I understand that they will arrange themselves at a meeting to be held there in a day or two.

Mr. President:

It seems necessary that some fixed scheme should be adopted to govern us in time of adversity, yet in some respects it seems foolish to do so, for who can envisage what will happen if something does happen? It follows therefore that no matter how perfect our organization at the moment, no matter how firmly we become attached to the place to which we may be assigned, we shall have to be ready to respond to a call from the Controlling Centre, if from its reports and in its judgment, we may be thought to serve better somewhere else.

This report should not conclude without an expression of appreciation for the co-operation which we have everywhere met in this undertaking, and particularly for the readiness of our members to say "I shall be glad to serve in any capacity." It is possible that there were choices that differed from the positions allotted, but I feel sure that our lists of staffs make it apparent that the interests of the institution and of the work, rather than the interest of any individual has been considered.

Respectfully submitted

(Sgd.) NORMAN H. GOSSE  
Chairman, Medical Preparedness Committee

Following the reading of the report, Dr. Gosse moved the report be received, seconded by Dr. H. K. MacDonald, and was carried unanimously. Dr. Gosse received many congratulations on his splendid report.

The President then called upon Dr. MacDougall for his impression of the Halifax Explosion of 1917. He emphasized the necessity of avoiding the great confusion which obtained in the first stages of the disaster at that time, and of having plenty of space available to take care of the most needy cases at once, many of such having been badly neglected during the first few days, and as a result many such cases were lost, who, he felt could have been saved with earlier care. One thing lacking last time was that of organization of the doctors, many of whom did not want to take the responsibility themselves of taking care of the badly wounded ones. He emphasized the danger of the temptation to use needles and sutures—a much greater need is the first aid work, with the cleansing of wounds in particular, and needles and sutures used only to control hemorrhage or to hold tissues together for a short time.

Dr. H. K. MacDonald asked Dr. Gosse what he meant by a blood bank. He also emphasized the necessity of avoiding the confusion that existed in the last disaster, and also the great necessity of having first aid stations in suitable places, where many cases can be disposed of readily and prevent the cluttering of beds with cases which must be saved for more urgent cases. After Dr. Gosse had further elucidated his ideas as to what preparation should be made, and what his plans were, and had asked for the Society's backing in his efforts, Dr. MacDonald expressed the view that arrangements for a blood bank should

be put into effect and that the society should go on record as being in favour of such a scheme, and moved that the Society go on record as being in favour of a blood bank being established in Halifax for use of our own citizens and that some means be adopted of canvassing the citizens and grouping them. Seconded by Dr. F. V. Woodbury: carried unanimously.

Dr. Woodbury congratulated Dr. Gosse for his excellent work and preparation made by his committee members to take care of an emergency situation. He also congratulated Drs. MacDougall and H. K. MacDonald for the splendid resume of their experiences in the disaster in 1917. He strongly emphasized the necessity of having plenty of anti-tetanic serum available.

Dr. H. K. MacDonald, "What supply of anti-tetanic serum is available?"

Dr. Gosse, "This question has often been considered, but the difficulty is that it does not last. We expected to have large supplies flown into us when needed. The committee would like to have some counsel re such matters."

Dr. H. K. MacDonald, "What supplies of surgical dressings, equipment, etc. are available?"

Dr. Graham stated he had asked the Red Cross for supplies to keep eight operating rooms running for four days, twenty-four hours per day, but had received approximately one-quarter this amount, but felt more would be quickly available within twenty-four hours or less.

Dr. G. H. Murphy congratulated Dr. Gosse on his excellent report. He felt there were two points to consider: (1) Preparedness; (2) Efficiency of practising preparedness. He felt many had died at the time of the explosion because of lack of proper attention at the beginning—many compound fractures were in terrible state with foreign bodies of all descriptions within such. He advised having the hospital units and all available space so prepared that they can be converted into hospitals within a few hours of the accident—feeling it would be wise to have all units function as operating units and not only two as outlined. He mentioned that Dr. Fraser-Harris had written a report called "Surgical aspects of the Halifax Explosion," a very fine record, but he had been unable to locate it through the many channels tried.

Dr. A. R. Morton stated that in case of an emergency all ambulances, doctors, fire and police cars are the only ones allowed on the street. All doctors would be issued with suitable cards and arm bands for identification.

**Re First Aid**—there are altogether eighteen First Aid Stations situated in various parts of the city, and three casualty clearing stations, so-called—one at the Dalhousie Public Health Clinic, one at Oxford Street School, and one at Alexander MacKay School. Each station will be staffed with three doctors, and nurses, women trained in first aid and stretcher bearers. There are supplies already placed in these stations.

The First Aid Stations are manned by enrolled members of the St. John Ambulance Corps and each has some supplies now. They will direct minor casualties to the C.C.S. for attention there and from there to hospitals as necessary. So far written instructions to these stations have not been issued but will be in a few days.

He stated re anti-tetanic serum, there are in stock at present—80 packages of 1,500 units, 90 packages of 5,000 units, 100 packages of 10,000 units, which will be distributed to the C.C.S.

**Re tagging patients**—each casualty will be tagged with a cardboard tag for identification and other necessary information will be on this card.

Dr. Morton suggested each hospital set up a First Aid Station of its own, as many cases will rush to the hospitals the very first thing, and unless some such provision is made, many cases will be admitted to hospital who should not be there.

He outlined plans that were being worked out for the billeting of about 200 nurses and doctors, who will be called into the city in case of an emergency. He also stated there were 460 women who have First Aid certificates, and about 150 more will be in the Home Nursing Services acting as nursing aids in the emergency hospitals.

Dr. Schwartz, "What about having an historian appointed for the purpose of recording events in case such an emergency arises?"

Dr. Graham, "We can safely leave such in the hands of Dr. Scammell, official historian for the Society."

Dr. Colwell, "What about the evacuation of inmates from the various hospital units advised?"

Dr. Gosse, "We have the word of the Red Cross that such buildings will be evacuated in short order, and care will be taken of those so evacuated."

Dr. Woodbury, "How many stretchers in the city now?"

Dr. A. R. Morton, "About seventy or eighty."

Dr. G. A. MacIntosh, "What preparations are being made for the care of patients in their homes, who might be neglected if some provision is not made for their care?"

Dr. Gosse, "No one doubts the importance of looking after patients in their homes, but much valuable time is lost in such procedures, which could be used in more urgent ways. The allotting of men to do such work must go through the proper control centres." He said he would be glad to have suggestions re meeting this situation. He felt that the medical students would serve admirably in this situation, providing they had some training to meet emergency work and he strongly advised such a procedure being started following the students' return from Christmas holidays.

**Re home care**—Dr. A. R. Morton, "There are now 420 A.R.P. workers who are supposed to acquaint themselves with and check upon all the people in their district when the need arose."

Dr. Holland, "No mention has been made of the possibility of a gas attack. Are any provisions made for such, e.g. gas masks, and are any personnel trained to care for same?"

Dr. A. R. Morton, "This question arose a few weeks ago, in the Civil Emergency Committee meeting, but all felt a gas attack is a very remote possibility, owing to the difficulty of transporting any large quantities of gas in heavy tanks, etc."

Dr. H. K. MacDonald, "How well prepared for burns are we?"

Dr. Gosse, "I think ample provision for such will be available."

**Re Army and Navy casualties**—Dr. Gosse, "Such casualties are, of course, to be taken care of as well as the aviation ones, and he mentioned the Navy M. O. had stated that all Navy medical officers would aid wherever necessary.

Dr. K. A. MacKenzie, "What about Camp Hill Hospital?"



Dr. Gosse, "The full staff of Camp Hill Hospital will be needed at the hospital for service there."

Dr. S. R. Johnston, "Is any provision being made for those rendered homeless?"

Dr. A. R. Morton, "This comes under the Shelter Committee of the Red Cross and will be carried out by them."

Dr. Graham wound up the long discussion by stating he felt the danger of an explosion, as happened previously, was much greater than an air raid emergency, and with such in mind we should be on the alert at all times, as such danger was indeed very real, more so than many of us realized.

There being no further discussion, the meeting adjourned at 10.45 p.m.

(Sgd.) K. M. GRANT, Secretary

### HALIFAX MEDICAL SOCIETY

THE regular meeting of the Halifax Medical Society was held at the Halifax Infirmary, Wednesday, January 7, 1942.

The meeting opened at 8.35 p.m., with the Vice-President, Dr. Payzant, in the chair, Dr. Graham, the President, having been called away.

There was an attendance of thirty-four regular members, listed as follows:

Dr. W. M. Roy, Dr. H. E. Taylor, Dr. A. E. Murray, Dr. W. L. Muir, Dr. C. C. Stoddard, Dr. E. T. Granville, Dr. W. A. Curry, Dr. G. H. Murphy, Dr. C. S. Morton, Dr. J. W. Merritt, Dr. A. McD. Morton, Dr. W. J. Dyer, Dr. C. S. Marshall, Dr. W. J. Barton, Dr. Margaret Gosse, Dr. N. B. Coward, Dr. A. L. Murphy, Dr. N. H. Gosse, Dr. R. H. Stoddard, Dr. J. C. Worrell, Dr. W. G. Colwell, Dr. H. A. Payzant, Dr. A. R. Morton, Dr. D. M. MacRae, Dr. H. G. Grant, Dr. O. G. Donovan, Dr. T. B. Acker, Dr. K. A. MacKenzie, Dr. F. G. Mack, Dr. L. A. Pennington-Collier, Dr. S. T. Laufer, Dr. E. P. Brison, Dr. J. V. Graham and Dr. K. M. Grant.

The meeting was signally honoured in having Admiral Gordon-Taylor present, who was introduced by his host, Dr. W. A. Curry.

Other visitors were—Surgeon-Lieutenant-Commander H. S. Morton, Surgeon-Lieutenant Woolhouse, Major Lindsay, Surgeon-Lieutenant MacLeod, Captain McFarlane, Surgeon-Lieutenant Learmont, Captain Ingham, Surgeon-Lieutenant Carl Harris. Also students Bob Begg, Jack Woodbury and Bird.

The above visitors were welcomed by Dr. Payzant.

The minutes of the last regular meeting were read and approved. Re the special meeting on December 19, 1941, it was moved by Dr. Colwell and seconded by Dr. G. H. Murphy that they be approved as read: carried unanimously.

There was only one matter of business arising from the minutes, *viz.* a letter to Hon. J. C. Tory thanking him for his donation making the Medical-Dental Library possible. A copy of same is given below.

Halifax, N. S., January 6, 1942

Honourable J. C. Tory

Halifax, N. S.

Dear Mr. Tory:

The members of the Halifax Medical Society, in conference here tonight, have been searching their minds and hearts, to find some adequate form in which to give

fitting recognition to your generous act, which gave the Medical Library to the University, and which placed doctors, undergraduates, educationalists and the public alike under deep and lasting gratitude to your benevolence and fine sense of public service. Without your most generous gift, in 1938, the Medical and Dental Library would be but a deferred hope, and the good services it has already rendered but figments of what might have been.

For the present, we can only offer our thanks. We feel, however, you will permit us to set down here a few thoughts which may, in some small measure, suggest what the Library means to our profession, and through it, to all your fellow citizens. There is no immodesty in saying that no one can appraise its utility and resource more accurately, or with more sympathetic intuition, than the practitioner. His duty and success are in closest touch with every advance and betterment of the Healing Art. He is a busy man, and needs the ready and refreshing checking-up found in the shelves of a well ordered medical library. For him a wrong diagnosis or faulty technique may be quickly corrected and the whole outlook of his patient greatly improved. It is no exaggeration, therefore, to say that on occasion, the library may hold the scales of life and death. Surely a function which reaches to the heart of things.

The whole science and art of Medicine rests on the garnered wisdom of the ages, and upon the enormous scientific advances of the last century and our own times. Our Library may be regarded as a great pooling and distributing centre, wherein the written word of Medicine holds for all seekers the accumulated observations and experiences in the field of practice, as well as the priceless products of research, of many men in many climes, who in all times have led the way with new truths and new weapons for battling our enemies of disease and death.

To our Library the undergraduate may go to read and implement what he hears and observes in his clinics and lectures, and the teachers of medicine and surgery to broaden and vitalize the scope of their instruction by mingling their thoughts and methods with those of others who labor in the same vineyard. The general reader can turn to the Library for the inspiration which comes from the tireless, plodding efforts of the pioneers in Medicine; what they did under disheartening odds and the ultimate triumph of their endeavours.

These are but a few of the thoughts in our minds as we tell one another tonight what a significant place the Library holds in our lives.

May we wish you now in your retirement that sense of rectitude and satisfaction which comes from the consciousness of so good a deed, and express the hope that your health may improve and your days be lengthened and happy.

Signed on behalf of the Halifax Branch of the Medical Society of Nova Scotia

J. V. GRAHAM, President

K. M. GRANT, Secretary

#### *Communications:*

A communication was read from Mrs. Marion O'Brien thanking the Secretary for the wreath to her father-in-law.

There being no further business, the clinical part of the programme was proceeded with.

1. Dr. Curry presented several very interesting cases. First, Fracture of head of femur—that of a middle-aged man who slipped while at sea and fractured head of the left femur. He was laid up in his bunk in this condition for four days before admission to hospital. X-ray showed fracture through neck close to the head. Treatment instituted was Buck's extension for a few days following which a Smith-Peterson nail was inserted with very good result, patient now being up and around with very good movements of the thigh. He will wear crutches for six months and the nail will probably be removed in about a year.

Dr. Curry then gave a brief summary of the various methods employed years ago and more recently, for the treatment of this very serious type of fracture, leading to the treatment by the Smith-Peterson nail, which has proven very successful in most cases.

The next two cases presented were of severe frost-bite. The first of these was that of a young man, who, on admission had a temperature of 104° and cellulitis in the right leg to the knee. In a few days the cellulitis subsided, and eventually all his toes of this foot became gangrenous and line of demarcation formed and at present all five toes and phalanges are hanging by a shred of tissue. When the heel flap is sound, he intends doing a Syme's amputation of the foot, expecting thereby to give the best results. Because of extensive gangrene of his left foot, this was amputated at middle third of leg, which is now healed and healthy.

The second of these cases of gangrene was also treated by Syme's amputation which is now quite well healed.

Dr. Curry stressed the importance of doing the Syme's amputation properly, stating that the flap over the ends of the bones must be snug and not flabby, and the dog ears which form on either side should be cut away. Also, in after-treatment, it is important to support the flap with adhesive tape.

The next case shown by Dr. Curry was that of a Shopar amputation done twenty-five years ago, apparently with an excellent result. Dr. Curry pointed out this type of amputation through the mid-portion of the foot is more or less obsolete.

The next case shown by Dr. Curry was that of a man who had had both legs amputated below the knee, and for the past three weeks had been wearing two artificial limbs. The man himself demonstrated how completely and easily he was able to get around, using only a single cane.

Dr. Curry then gave a very interesting discourse on amputation, pointing out the advantages and disadvantages of the ones most commonly done. He then asked Admiral Gordon-Taylor to continue the discussion.

Admiral Gordon-Taylor, surgeon in charge of a large London hospital, congratulated Dr. Curry on his excellent judgment in all these cases presented, and proceeded to give a very interesting and very instructive lecture on amputations in general, citing a number of cases of double amputation which he had himself. He pointed out that the Syme's amputation did not enjoy the reputation it had in Canada, but was still employed to some extent there. He stated the Shopar operation was not in favour at all in England. The guillotine amputation, he cited, still has its usefulness in indicated cases, mentioning two he had done recently. With respect to the treatment of nerves in amputations—he stated the feeling in England was to leave the nerves alone altogether and do no crushing, ligaturing or injecting with alcohol.

The next case was presented by Dr. Graham—that of adenocarcinoma of testicle. The patient was admitted with evidence of a hydrocele—when scrotum was tapped, the testicle felt hard and nodular and malignancy was suspected. The patient did not wish testicle removed—fever therapy was given for one week—no apparent improvement and removal was again advised. An X-ray of lump, bony frame, etc. revealed no evidence of metastasis. Pathological report—adenocarcinoma of testicle. Following removal, deep X-ray therapy was instituted.

In the discussion, opened by Admiral Gordon-Taylor, he stated though the prognosis in teratoma of the testicle is much worse than seminoma, yet the outlook is very much brighter than it formerly was, due chiefly to the very great value of X-ray in these cases, stating he knew of one case in his own experience, being alive and well at the end of sixteen years.

The next case presented by Mr. Bob Begg was that of a comminuted fracture of the right os calcis. It was that of a young man who had fallen some thirty feet and landed on his feet. X-ray revealed a comminuted fracture of the right os calcis with compression. Mr. Begg, senior interne at the Infirmary, then proceeded to give a very thorough and masterly history of the various forms of treatment which had been instituted before a satisfactory result was finally obtained. He also outlined the difficulties of treatment of these cases, citing the best known authorities on this particular type of fracture.

Admiral Gordon-Taylor discussed the case just presented and congratulated Dr. Curry for the result apparently obtained, pointing out such fractures were always very serious and results are not always satisfactory.

There being no other cases, the meeting was opened for discussion.

Dr. Donovan, in opening the discussion, expressed appreciation of Dr. Curry's presentation of so many interesting cases. In his work with the Compensation Board, he said, he seldom finds one amputation case who is perfectly comfortable with his artificial limb, there being pressure in one place or another.

There was other discussions by Dr. N. H. Gosse, Dr. A. L. Murphy, Dr. T. B. Acker and replies to questions etc., where necessary were given by Dr. Alan Curry.

There being no further business, the members were told by the President that the Sisters of the Infirmary were inviting all to enjoy a repast. Following the very excellent repast, it was moved by Dr. N. H. Gosse, seconded by Dr. A. McD. Morton, that a hearty vote of thanks be extended to Sister Superior and her staff for this very enjoyable and filling repast. Dr. Payzant, the Vice-President and Chairman of the meeting for the evening, then extended the thanks of the members present to Sister Superior.

The meeting adjourned at 10.55 p.m.

(Sgd.) K. M. GRANT  
Secretary-Treasurer

# Abstracts From Current Literature

## 1.

GASTROENTEROLOGY—A REVIEW OF LITERATURE FROM JULY 1940 TO JULY 1941. Jones, Chester M.: *Arch. Int. Med.*, 1941, 68; 763.

Studies on the effect of smoking tobacco on gastric acidity showed that a definite increase in gastric acidity could be observed after smoking, as compared with controlled figures obtained on three-fourths of a group of patients without gastro-intestinal disturbances. Four out of five patients with ulcer showed a similar increase after smoking two cigarettes. In a small group of subjects, definite increases in acid values were observed after smoking popular brand cigarettes, whereas little or no change was noted when partially denicotinized cigarettes were used.

The influence of various fruit juices on gastric function was studied. At the height of digestion there was no appreciable difference in the pH of the gastric juice whether water or fruit juice were given with the meal. Nor did the fruit juice exhibit any proteolytic activity. The emptying of the stomach was slightly increased after the ingestion of fruit juices. Pineapple juice apparently caused a marked reduction in the emptying time of the stomach after meals containing protein or aminoacetic acid.

In view of the current attention to the rise of gelatin in treating diseases of the stomach, the observations of some experimenters are of some interest in confirming previous impressions that this substance tends to reduce the hydrogen ion concentration, free acid and pepsin in the gastric secretion. The tendency is due, undoubtedly, to the acid-combining power of the protein.

On the basis of a rather ingenious series of experiments, Grindlay studied the secretion of the gastric acid following operation on the distal end of the stomach. The Fundic secretion appeared to be greatly increased when the pars pylorica was completely isolated from the remainder of the stomach. The author presents suggestive evidence that the pyloric portion of the stomach has an important relation to the chemical mechanism of gastric secretion. Complete isolation of the pars pylorica resulted in a striking and prolonged increase in the secretion of gastric acid, and the introduction of gastric contents into a completely isolated gastric (pyloric) pouch caused the fundic portion during the second twelve hours after the feeding to be greater both in volume and in acidity than that occurring when gastric contents were not introduced. If such results obtained in animal experiments can be applied to human beings, it is obvious that simple surgical procedures directed toward the exclusion only of the pyloric end of the stomach may be totally inadequate as far as control of gastric secretion is concerned and that the more radical procedures at present employed are more desirable and more efficacious.

The importance of suspecting cancer of the stomach in the young is emphasized by several authors. McNeer reports fifty well authenticated cases of this condition in subjects under 31 years of age. While this condition is rare in childhood, after the age of fifteen the incidence rapidly increases for each five year period. The author points out that not infrequently what should have been diagnostic roentgenologic evidence was disregarded because

of the age of the patient. Examination of the protocols of various cases seems to indicate that the disease in young persons is entirely comparable to its counterpart in older ones in regard to duration, pathologic entities, analysis of gastric contents, resectability and prognosis, contrary to nearly all other statements on the subject. Obviously, the only proper attitude is that expressed by Eusterman, namely, that any doubtful gastric lesion must be considered malignant until proved otherwise, and that those lesions which are considered benign in spite of normal acidity, size or general appearance must still be kept under suspicion and followed closely. Only by maintaining such an attitude can the inadequacy of present methods for early diagnosis and the insidious onset of the disease, as illustrated by the usual short history, be overcome. If surgical intervention for a gastric lesion is indicated, there can be no doubt that with increasing operative skill and improved preoperative and post-operative care somewhat more helpful results are being obtained. Priestley's report of a recent study of 10,890 cases in which gastric cancer was diagnosed illustrates this fact. Exploration was performed in approximately 60% of the cases, in about one-half of which the section of the stomach was possible. Operative mortality was approximately 5 per cent. In short, with the best of surgical skill, about 25 per cent of patients in whom a diagnosis of gastric cancer is made may hope for possible favourable results, although in only about one-third of this series of cases did the patient live for five years or more. In other words, it was found that of the 1,951 patients who survived gastric resection and were traced, 29 per cent lived for five years or longer. Thus in 6 to 8 per cent of those cases in which the correct diagnosis is made the patient has a real chance of surviving in a cured condition for five years. Such figures are worthy of attention, inasmuch as many physicians still hesitate to resort to radical surgical measures, although it is apparent that only such measures will ever be effective in reducing the mortality from this common and terribly serious condition.

Cases of gastric syphilis are not common but occur with sufficient regularity to warrant their inclusion in any discussion of carcinoma of the stomach. Reports by various authors indicate clearly the close similarity between syphilis of the stomach and gastric cancer. In practically every instance the lesion occurs near the pylorus, and nearly always a diagnosis of probable cancer is made on the basis of roentgenologic evidence. The possibility of syphilis should always be remembered, especially if positive serologic reactions are associated with inadequate antisyphilitic treatment. Most intensive and specific treatment should be initiated, and at times this will successfully control the situation. In most instances, however, enough scarring and deformity have taken place that subtotal gastrectomy is indicated, and favorable results should be expected. Gastroenterostomy was attempted in one of the cases reported, and was entirely unsuccessful.

A further cause of confusion in the roentgenologic diagnosis of gastric carcinoma is a similar granulomatous process, tuberculosis of the stomach. The condition is rare, but, like syphilis, the disease usually produces its lesions in the region of the pyloric antrum, although it may extend into the duodenum. In cases of the ulcerative type the usual roentgenologic picture is that of a narrowed antrum, with circular marginal defects and mucosal changes characteristic of superficial ulcer. One case of successful treatment by resection is reported.

The relation between the stomach and hematopoiesis is thoroughly estab-

lished. This subject is of particular interest in this review in its relation to the problem of gastrectomy. Individual instances of pernicious anemia secondary to gastrectomy are occasionally reported but are relatively rare. It has been shown experimentally in swine that resection of the stomach and duodenum caused a progressive depletion of the anti-pernicious anemia principle in the liver, and the potency of the liver was completely exhausted within six months. In spite of the acknowledged importance of the stomach in controlling normal hematopoiesis, it is surprising that subtotal, or even total, resection of the stomach in human beings only occasionally results in serious anemia, either of the Addisonian or of the hypochromic, iron deficiency type. It is obvious that reasonable measures taken post-operatively, with careful attention to nutritional factors, are all that is needed to prevent anemia in gastrectomized persons.

**Peptic Ulcer.** Although it is fairly generally accepted that a close relation exists between intracranial lesions and the occurrence of peptic ulcer, the histologic studies of Boles and Riggs are of some importance in focusing attention on the neurogenic factors in the production of ulcer. These authors studied 15 cases of acute gastric ulcer associated with primary intracerebral disease and found no pathologic difference between this type of ulcer and acute ulcer in the absence of such disease. They view the ulcers as focal expressions of circulatory changes secondary to abnormal stimulation of the central vegetative nervous system. Removal of the prevertebral ganglions in dogs was followed by ulcerations of the stomach and intestine. Another group of authors have shown the presence of mucosal lesions in shock, so that one must assign an important role to neurogenic and resulting circulatory disturbances in the initiation of ulcer.

It has been shown that so far as gastric acid secretion is concerned, values are distinctly higher in the case of duodenal ulcer than they are in the case of gastric ulcer. That large quantities of gastric acid enter the duodenum and that the neutralizing mechanism of this portion of the small intestine is necessarily disturbed in the presence of duodenal ulcer were confirmed by Kearney.

The effect of war conditions on the activation of peptic ulcer is of current interest and is emphasized in two articles, and in an editorial comment in the Canadian Medical Association Journal. Allison, on the basis of studies of men in the Royal Navy, states that peptic ulcer appears to be the only serious condition of dyspepsia in the present war, although its occurrence in the Navy is perhaps not so frequent as in the Army. He properly stresses the psychologic factors that play a part in war time. The importance of disability in the armed forces, particularly under fighting conditions is further stressed by the Canadian Medical editorial, in which it is stated that in nearly one-eighth of the men evacuated to base hospitals from the expeditionary force to France the debilitating condition was given the primary diagnosis of gastric or duodenal disease. The urgent necessity for the elimination of patients with ulcer from certain phases of war activity and for rejection by boards of selection of persons with suspected ulcer is emphasized by Tillisch in a report of a case of serious hemorrhage from a duodenal ulcer in a pilot in flight.

The treatment of choice for massive hemorrhage from peptic ulcer still lies between medical and surgical measures in selected cases. Stone reflects the view of many that radical surgical procedure is indicated for older patients but admits frankly that the value of early surgical intervention will not become

apparent until comparative figures are available for the age group in question. He believes that at present the chances of surviving radical surgical procedure will be less than the probable two in three chances of survival following medical treatment.

Medical measures include particularly the use of colloidal aluminum hydroxide or a selected diet, such as that outlined by Meulengracht. Woldman claims to have reduced the mortality in emergency cases of massive hemorrhage from 28 to 2 per cent by the continuous administration of colloidal aluminum hydroxide. Various authors report successful use of the Meulengracht regimen, although no additional figures of value are presented. It is obvious that strict medical measures are efficacious, except for the small group of older patients in whom surgical treatment may have to be considered.

Further studies on the effect of various antacids in the control of gastric acidity and the treatment of peptic ulcer continue to appear. Most authors agree that much more effective results are produced by preparations of aluminum hydroxide than by Sippy powders or other antacids in the treatment of peptic ulcer. In studies on the effect of various antacids in the control of gastric acidity, it has been shown that the greatest rise in pH is caused by Sippy A powder, but that this rise is of lesser duration than that produced by a suspension of aluminum hydroxide. Magnesium trisilicate and sodium bicarbonate produced rises of relatively short duration.

The effects of the prolonged administration (seven to eight months) of aluminum hydroxide on the acid-base balance and on renal function were studied by Kirsner, who found no change in the blood electrolytes in any instance and no abnormality in blood urea N or in urea clearance. The use of aluminum in three cases in which there was a marked reduction in renal function subsequent to alkalosis was followed by the maintenance of a normal acid-base balance and by gradual improvement in the urea clearance. Such observations would seem to be of maximum importance in relation to antacid therapy.

**Surgical Treatment.** The failure of excision of the pylorus and antrum in man to produce approximate or complete achlorhydria was demonstrated experimentally in animals by Wangenstein and his collaborators. They doubt the validity of Eakins hypothesis of a pyloric and antral hormone which controls the gastric phase of gastric secretion and believe that their results constitute adequate evidence that subtotal gastric resection is the most successful surgical procedure in the treatment of peptic ulcer.

The not infrequent recurrence of ulcer after various forms of gastric surgery still constitutes a diagnostic and therapeutic problem of importance. The situation and general characteristics and symptoms of recurrent peptic ulcer are described by Rivers, who presents an excellent review of this particular phase of the ulcer problem. He points out what is not always clearly understood, that most recurrent ulcers occur in or near the vicinity of the stomach.

E. DAVID SHERMAN, M. D.

Sydney, Nova Scotia



# The Medical Library

It is not generally realized that the Medical and Dental Library of Dalhousie University is open to and at the service of all qualified physicians and dentists of the Maritimes. This use is conditional only on the payment of postal charges by the borrower, if resident outside the city of Halifax, and on the borrower assuming financial responsibility in case of loss.

A period of absence of three weeks is allowed on books and of two weeks on journals. During the academic session, September 19th to May 1st, certain text books are retained in Halifax for student use.

The Committee in charge of the library invites its wider use by practitioners of the province, and to this end a list of modern additions in all fields during the past year is here added:

## MEDICAL SCIENCES:

Butt & Snell.....	Vitamin K.....	1941
Callander, C. L.....	Surgical anatomy, 2d ed.....	1939
Drinker & Yoffey.....	Lymphatics, lymph, and lymphoid tissue.....	1941
Ellinger, F.....	Biological fundamentals of radiation therapy.....	1941
Goodman & Gilman.....	Pharmacological basis of therapeutics.....	1941
McNaughton-Jones, H.....	Hearing and equilibrium.....	1939
Peter, L. C.....	Extra-ocular muscles, 3d ed.....	1941
Proetz, A. W.....	Applied physiology of the nose.....	1941
Windle, W. F.....	Physiology of the foetus.....	1940

## MEDICINE and THERAPEUTICS:

Abrahams & Widdowson.....	Modern dietary treatment.....	1940
Brinton, D.....	Cerebrospinal fever.....	1941
Bourne, G.....	Nutrition and the war.....	1940
Bortz, E. L.....	Diabetes, 2d ed.....	1940
Browning, Ethel.....	Modern drugs in general practice.....	1940
Harris, Seale.....	Clinical pellagra.....	1941
Heaton, T. G.....	Artificial pneumothorax in tuberculosis.....	1941
Graybiel & White.....	Electrocardiography in practice.....	1941
Grollman, A.....	Essentials of endocrinology.....	1941
Hurst, Sir Arthur.....	Medical diseases of war.....	1940
Katz, L. N.....	Electrocardiography.....	1941
Joslin, E. P. and others.....	Treatment of diabetes mellitus, 7th ed.....	1940
Kohler, Alban.....	Roentgenology, 2d ed.....	1935
Krusen, F. H.....	Physical medicine.....	1941
Kolmer & Tuft.....	Clinical immunology . . . and chemotherapy.....	1941
Master, A. M.....	Electrocardiogram and X-ray configuration of the heart.....	1939
Moulton, F. R., ed.....	Human malaria, a symposium.....	1941
Pancoast, H. K. and others.....	Head and neck in roentgen diagnosis.....	1940
Portiš, S. A., ed.....	Diseases of the digestive system.....	1941
Willius & Keys.....	Cardiac classics.....	1941
Wilson, Kinnier.....	Neurology, 2 vols.....	1940
Wirtschafter & Korenberg.....	Diabetes mellitus.....	1942
Youmans, J. B.....	Nutritional deficiencies.....	1941
Pollack, Herbert.....	Modern diabetic care.....	1940

## REFERENCE WORKS: (for use only in the reading-room)

Blumer, George, ed.....	Therapeutics of internal diseases, V.4, 5.....	1941
Kracke, R. R.....	Diseases of the blood (and atlas) 2d ed.....	1941

## SURGERY:

Bailey, Hamilton, ed.....	Surgery of modern warfare (Reference).....	1941
Spivaek, J. L.....	Surgical technic of abdominal operations, 3d ed.....	1941
Blalock, Alfred.....	Principles of surgical care; shock.....	1940

Dickson & Diveley	Functional disorders of the foot	1939
Graham, Harvey, pseud.	Story of surgery	1939
Guedel, A. E.	Inhalation anesthesia	1937
Ilingworth, C. F. W.	Short text book of surgery, 3d ed.	1942
Iselin, Marc	Surgery of the hand	1940
Minnitt, R. J.	Handbook of anaesthetics, 5th ed.	1940
Trueta, J.	Treatment of war wounds	1940

## GYNAECOLOGY and OBSTETRICS:

Hamblen, E. C.	Endocrine gynecology	1939
Martius, Heinrich	Gynecological operations	1939
Titus, Paul	Management of obstetric difficulties, 2d ed.	1940
Novak, Emil	Gynecological and obstetrical pathology	1941

## SPECIALTIES:

Brown & Tisdall	Common procedures in . . . paediatrics, 3d ed.	1939
Griffith & Mitchell	Text book of pediatrics, 3d ed.	1941
Holt & McIntosh	Diseases of infancy and childhood, 11th ed.	1940
Gesell, Arnold	First five years of life	1940
Gesell & Thompson	Psychology of early growth	1938
Sutton & Sutton	Diseases of the skin, 10th ed.	1939
Bamford, Frank	Poisons	1940
Billings, E. G.	Handbook of elementary psychobiology	1939
Hill, Horace	Histamine and insulin treatment of schizophrenia	1940
Muncie, Wendell	Psychobiology and psychiatry	1939
Richards, E. L.	Introduction to psychobiology and psychiatry	1941
Ross, T. A.	Lectures on war neuroses	1941
Walshe, F. M. R.	Diseases of the nervous system, 2d ed.	1940
Herms & Gray	Mosquito control	1940
Chenoweth & Machle	Industrial hygiene	1938
Ficklen, J. B.	Manual of industrial health hazards	1940
Cameron, G. M.	Bacteriology of public health	1940

## GENERAL:

Castiglioni, A.	History of medicine	1941
Cummings, R. O.	The American and his food, 2d ed.	1941
Heiser, V. G.	Toughen up, America	1941
Newman, H. H.	Multiple human births	1940
Mitchiner & Cowell	Medical organization and surgical practice in air raids	1939
Nicholls, T. B.	Organization, strategy and tactics of the army medical services in war, 2d ed.	1941
Oliver, W. W.	Biography of William Hallock Park	1941
Flexner & Flexner	William Henry Welch, a biography	1941
Rose, M. S.	Feeding the family, 4th ed.	1940
Sherrington, Sir Charles	Man on his nature	1940
Silverman, Milton	Magic in a bottle	1941
Panum, P. L.	Observations made during the epidemic of measles	1940
Bateman, Donald	Berkeley Moynihan, surgeon	1940
Zinsser, Hans	As I remember him	1940

# Have You Made Out Your Income Tax?

## RETURNS BY MEMBERS OF THE MEDICAL PROFESSION

As a matter of guidance to the medical profession and to bring about a greater uniformity in the data to be furnished to the Income Tax Division of the Department of National Revenue in the Annual Income Tax Returns to be filed, the following matters are set out:

### INCOME

1. There should be maintained by the Doctor an accurate record of income received, both as fees from his profession and by way of investment income. The record should be clear and capable of being readily checked against the return filed. It may be maintained on cards or in books kept for the purpose.

### EXPENSES

2. Under the heading of expenses the following accounts should be maintained and records kept available for checking purposes in support of charges made:

- (a) Medical, surgical and like supplies;
- (b) Office help, nurse, maid and bookkeeper; laundry and malpractice insurance premiums. (It is to be noted that the Income War Tax Act does not allow as a deduction a salary paid by a husband to a wife or vice versa. Such amount, if paid, is to be added back to the income.)
- (c) Telephone expenses;
- (d) Assistant's fees: The names and addresses of the assistants to whom fees are paid should be furnished. This information is to be given this year on or before the 31st March, but on or before the last day of February in each subsequent year on Income Tax Form known as Form T-4, obtainable from the Inspector of Income Tax. (Do not confuse with the individual return of income, Form T. 1, to be filed on or before 30th April in each year);
- (e) Rentals paid: The name and address of the owner (preferably) or agent of the rented premises should be furnished. (See j);
- (f) Postage and stationery;
- (g) Depreciation on medical equipment: The following rates will be allowed provided the total depreciation already charged off has not already extinguished the asset value:

Instruments—Instruments costing \$50.00 or under may be taken as an expense and charged off in the year of purchase;

Instruments costing over \$50.00 are not to be charged off as an expense in the year of purchase, but are to be capitalized and charged off rateably over the estimated life of the instrument at depreciation rates of 15% to 25%, as may be determined between the practitioner and the Division according to the character of the instrument, but whatever rate is determined upon will be consistently adhered to; The residual value of instruments not heretofore fully depreciated will be depreciated along with instruments costing over \$50.00 purchased subsequently;

Office furniture and fixtures—10% per annum;

Library—The residual value of library not heretofore fully depreciated will continue to be depreciated at 10% per annum for the years 1932, 1933 and 1934 as well as charging off the actual cost of books purchased in those years. After 1934, only the cost of new books will be allowed as a charge.

(h) Depreciation on motor cars cost:

20%, 1st year; 20%, 2nd year; 20%, 3rd year; 20%, 4th year; 20%, 5th year. The allowance is restricted to the car used in professional practice and does not apply to cars used for personal use.

(i) Automobile expense; (one car): This account will include cost of license, oil, gasoline, grease, insurance, washing, garage charges and repairs;

(Alternative to (h) and (i)—In lieu of all the foregoing expenses, including depreciation, there may be allowed a charge of 4½¢ a mile for mileage covered in the performance of professional duties).

If Chauffeur is employed for business reasons, so that in the result he is substantially used for business purposes (although incidentally used for personal or family use), the expense will be allowed.

(j) Proportional expenses of doctors practising from their residence—

(a) owned by the doctor;

(b) rented by the doctor;

(a) Where a doctor practises from a house which he owns and as well resides in, a proportionate allowance of house expenses will be given for the study, laboratory, office and waiting room space, on the basis that this space bears to the total space of the residence. The charges cover taxes, light, heat, insurance repairs, depreciation and interest on mortgage (Name and address of mortgagee to be stated);

(b) Rented premises—The rent only will be apportioned inasmuch as the owner of the premises takes care of all other expenses.

The above allowances will not exceed one-third of the total house expenses or rental unless it can be shown that a greater allowance should be made for professional purposes.

(k) Sundry expenses (not otherwise classified)—

The expenses charged to this account should be capable of analysis and supported by records.

Claims for donations paid to charitable organizations will be allowed up to 10% of the net income upon submission of receipts to the Inspector of Income Tax. (This is provided for in the Act.)

You can increase this deduction by the amount, not exceeding 40% of your income, of the donations to the fund registered under "The War Charities Act 1939" under the name donations of the Canadian War Services Fund, if such donations were subscribed on or before 7th April, 1940 and paid on or before 31st December, 1941.

If your income was \$10,000.00 in 1941, you can deduct \$1,000.00 ordinary donations paid, and \$4,000.00 special donations as above.

The annual dues paid to governing bodies under which authority to practise is issued and membership association fees not exceeding \$100.00, to be recorded on the return, will be admitted as a charge.

The cost of attending post-graduate courses or medical conventions will not be allowed.

(l) Carrying charges;

The charges for interest paid on money borrowed against securities pledged as collateral security may only be charged against the income from investments and not against professional income.

(m) Business tax will be allowed as an expense, but Dominion provincial or municipal income tax will not be allowed.

### Professional Men Under Salary Contract

(3) For 1939 and subsequent years the salary of professional men will be taxed in full without any deductions other than those specified in the Income Tax Act such as charitable and patriotic donations and payments to superannuation or pension funds. In particular, the cost of operating an automobile, including depreciation thereon, and the annual fees paid to governing bodies will not be allowed.

The annual dues paid to governing bodies under which authority to practise is issued, and membership association fees, not exceeding \$100.00 to be recorded on the return, will be admitted.

## Correspondence

Halifax, N. S.  
February 2, 1942

Dr. J. G. B. Lynch, President  
Nova Scotia Medical Association  
Sydney, Nova Scotia

Dear Dr. Lynch:

For over one year it has been my privilege as Registrar to work in close contact with the Members of your Association. In that time they have examined fifteen thousand young men.

May I thank you, and through you, the Members of your profession for the careful and the Public-spirited manner in which they have carried out this duty.

We quite appreciate the difficulties with which the doctors are frequently faced. In Nova Scotia there are a very small number of men who wish to evade military service but those who do will naturally begin with their medical examination and a careful check on their physical condition requires time and concentration. The number of reports we have had to refer back for further information are very few. The most of these are for the very essential signature of the examiner, an oversight only because of the pressure of private practice.

A number of the doctors find it difficult to obtain in the vicinity of their office a space of twenty feet with a good light for the purpose of examining eyes. This eye test is important for many reasons. Perhaps you have among your Members a number of specialists who have suggestions to offer to the general practitioner that will assist in a solution of this problem.

Should any of your Members be short of forms for men or women or have lost their copy of *Physical Standards*, I will be glad if they will let me know. Suggestions from the examining physician on any matter are always welcome.

Dr. M. G. Burris is attached to this office on a part-time basis with the title of Medical Advisor. It is his duty to read your reports and advise, on the basis of the statements appearing therein, if a man should or should not be sent to a training centre. There may, of course, be factors other than your medical report which have to be considered but it is the principal document upon which we rely. In some cases more detailed information may be required before giving an opinion. This information has been, and I feel will continue to be, gladly given. Doctors have often gone to considerable trouble to make a second examination.

I have shown the draft of this letter to Dr. Burris. He wishes to associate himself with what I have written and to join with me in wishing the Members of the Nova Scotia Medical Association everything that is good during the coming year.

Yours very truly

EDGAR W. MINGO, Registrar

Administrative Division "G"  
Department of National War Services

January 27, 1942

Dr. H. G. Grant

Editor

Nova Scotia Medical Bulletin

Dalhousie Public Health Centre

Halifax, N. S.

Dear Doctor Grant:

As you are undoubtedly aware, the Dominion Medical Convention is being held at Jasper, June 15 to 19, 1942.

Due to the Special features at Jasper, this Meeting will be unique in many ways. Hotel and railroad rates are being published by the *Canadian Medical Association Journal*, also other special features.

If you would kindly draw attention to these in your publication, it is likely many Doctors would be contacted who are not necessarily Members of the Canadian Medical Association, but who would nevertheless be interested.

If you desire any additional information, we would be pleased to be of service to you.

I am

Very truly yours

R. FREDERICK NICHOLLS, M.D.

405-6 McLeod Bldg.

Edmonton, Alta.

Secretary, Publicity Committee

## Personal Interest Notes

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**D**R. F. J. BARTON, son of Dr. W. J. Barton of Halifax, who graduated from Dalhousie in 1941, went to Toronto July first last, and is now on the rotating interne staff of the Toronto General Hospital, at present on the service of Dr. Roscoe Graham.

Dr. Florence J. Murray, daughter of Rev. and Mrs. Robert Murray of Sackville, Halifax County, who has been serving as a medical missionary of the United Church of Canada in Japan for the last twenty years is "safe and well" in Korea. A cable received by her parents said she was allowed to carry on her duties in charge of mission hospital at the City of Hamheung, where two other Canadians, Rev. Mr. Fraser, a Nova Scotian, and Rev. Mr. Scott, are also stationed. The three had remained behind to look after the mission work and property when other missionaries were returned home. Dr. Murray is a native of Pictou and graduated from Dalhousie in 1919.

A quiet wedding took place on January 23rd at the home of Dr. and Mrs. W. R. Dickie of Digby, when their second son, Dr. Edward Dudley, was united in marriage to Miss Annie Elaine, daughter of Mr. and Mrs. George Woodman of New Harbour, Newfoundland. After the ceremony the couple left for Halifax and various points in the Annapolis Valley. On their return they will reside in Digby where Dr. Dickie has been practising since his graduation in May, 1941.

Dr. Dan and The 94th. (By M.F.H.) Baddeck, N.S., January 26:—It will be of more than passing interest to many friends here and throughout Cape Breton generally, and particularly to the remaining officers of the good old 94th Regiment, Argyll Highlanders, in Victoria and Inverness Counties to know of the part being played in the present war by the sons of Major (Dr.) Daniel MacDonald, M.O., of the old 94th Battalion.

The military tradition has been strong in many of the families of Inverness and Victoria Counties. This is not to be wondered at, as many of these families were descended from people who had served in the empire's campaigns of the long ago. Many early settlers were descended from men who had served in Waterloo in 1815, and some who had seen earlier service with the Imperial troops in Canada.

Dr. Daniel MacDonald needs no introduction to the people of Victoria County. His name is a household word in this part of Cape Breton. He came to Baddeck very soon after graduating from Johns Hopkins in Baltimore. This was sometime around 1892. He immediately began practise here, and remained here until the outbreak of World War No. 1, when he was called to North Sydney in his capacity of M.O. of the old 94th. Even after locating in North Sydney, the people of Victoria were loath to let him go, and it was often the case that he would be called to various parts of Victoria when the



services of a physician would be required. I think that we can safely say that the military tradition is strong in his family.

His eldest son, Donald J., who volunteered for active service in the last Great War while a student at St. Francis Xavier University, is well known here, as his early education was gathered at Baddeck Academy. He was known as an exceptionally brilliant student, and was an out-standing athlete. Donald J. was only seventeen years old when he volunteered his services. Like his father, he had some military training while enlisted in the 94th Battalion. Accepted for service overseas, he joined a heavy field battery from Toronto, with which he served two years in France.

His athletic prowess was recognized while he was serving in France, and in 1918 he was sent by his O.C. to London to represent the Ontario batteries in a long distance run, which he won with great acclaim. Returning to Canada in April, 1919, he soon afterward took part in the Antigonish Highland games, winning 8 firsts and 3 seconds out of 12 events. In 1920 he went to Detroit, Michigan, where he graduated as electrical engineer. To-day he is captain in the Michigan Rangers, in which unit his son Donnie is top sergeant.

Major Dan's youngest son, Dr. "Sandy" MacDonald, who had developed a lucrative medical practice in Sydney, relinquished it to volunteer his services with the C. A. M. C. He now holds the rank of major, and is first clinical surgeon in a 200-bed military hospital at Aldershot.

The people of Victoria County, among whom Dr Dan and his family spent so many years, and particularly the old pupils of Baddeck Academy, are proud of the record set by this family in serving King and Country and the Allied cause. Major Daniel MacDonald and Mrs. MacDonald are spending the winter in Berwick, N.S., and friends will be glad to learn that they are both enjoying excellent health.

Rev. Roderick MacNeil, P.P., St. Joseph's, Antigonish County, is an uncle of the young men mentioned above. (Antigonish Casket, January 29th, 1942)

Dr. James A. Proudfoot, ex-M.L.A., and prominent physician of Inverness, received burns in a narrow escape from flames which destroyed his office quarters early Saturday morning, January 24, causing damage to property and equipment valued at over \$2,000.00. Dr. Proudfoot had returned to his office following a late call, lighted an oil stove and prepared to write a letter when he fell asleep. It is believed that the fire started from the oil stove. Dr. Proudfoot was awakened from sleep by the roaring flames and made his way outdoors to safety, but not without sustaining a few burns which were not serious.

Dr. Prescott St. C. Irwin, and Dr. S. Ritty Brown (Dal. 1908) both formerly of Shelburne, but for some time resident doctors in Hawaii, escaped injury in recent attacks, and are busy caring for the wounded there. Dr. Irwin is a son of the late Hon. Robert Irwin, formerly Lieutenant Governor of Nova Scotia. (Yarmouth Herald, January 20th, 1942)

Medical students at Dalhousie, their professors and local doctors, were addressed by Surgeon Rear-Admiral Gordon Gordon-Taylor, Vice-President of the Royal College of Surgeons and Surgeon-consultant to the Admiralty, in the Medical Science Building, on Thursday afternoon, January 15th. He spoke on the various changes in training of doctors since the outbreak of war,

and advances in medicine prompted by the war. Admiral Gordon-Taylor pointed the phenomenal success of sulphanilamide in treating wounds, and how it had been instrumental in cutting down fatalities because of blood poisoning. He also explained the method by which London hospitals and medical colleges have been decentralized as a precaution against bombing raids. Patients, as soon as possible, are moved to outlying hospitals, and medical students themselves carry on their studies in rural surroundings.

Dr. Arthur S. Burns of Kentville, who for several years has been carrying on intensive study of Modern Psychology, went to New York City last September and is taking post-graduate work at the Psychiatric Institute connected with the Presbyterian Hospital. He is also attending clinics as well as assemblies of psychiatrists, in several of the other New York Hospitals. It is hoped Dr. Burns will return to his native province to practise along these lines.

## Obituary

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ONE of the victims of the torpedoing of the Lady Hawkins was Dr. Lewis Nelson Morrison, who formerly practised at Mahone Bay. Dr. Morrison was a brother of Mrs. MacKenzie, wife of Dr. Kenneth A. MacKenzie of Halifax. His father who died while practising in Sydney some years ago was Dr. D. N. Morrison. His mother is also deceased. Dr. Morrison was born in Oxford in 1893, and gained his early education in Oxford, Wolfville and Sydney, where his father practised, and later attended Horton Academy at Wolfville. At the outbreak of the First Great War he enlisted and went overseas with the No. 7 Station Hospital, the Dalhousie contingent, later transferring to another unit. He was overseas four years. Upon his return to Canada he commenced his studies at the Dalhousie Medical School, graduating in 1925. He then took a year's post-graduated internship in Boston and returned to Nova Scotia establishing a practice in Mahone Bay where he remained for about ten years. About five years ago Dr. Morrison received the appointment with the Canadian National Steamships and went on the Lady Nelson as his first assignment, and later with other ships of the line. Dr. Morrison is survived by his wife, the former Miss Grace G. Smith of Oxford, who resides in Mahone Bay.

Dr. John Knox McLeod, Sydney medical officer, died at his home in Sydney on February 18th after a brief illness, at the age of 79. Death was due to a brain haemorrhage suffered about ten days previously. A native of Sydney he was a son of the late Rev. Dr. Hugh McLeod, first moderator of the Presbyterian Church in Canada, and in his passing Sydney lost one of its best known citizens and a member of one of its oldest and best known families. He received his early education at Sydney, his Arts and Science at Dalhousie from 1878 to 1881, and then went to the Bellevue Hospital Medical College, from which he graduated in 1883 at the age of twenty. He had to wait a year until he could secure his license to practise and then went to Bay Roberts, Newfoundland, remaining there for fifteen years. Returning to Sydney he established practise there and in 1907 was appointed medical officer, continuing in that position until the first World War, when he enlisted in the Canadian Army Medical Corps, holding the rank of a captain and serving overseas with a number of units including the McGill Hospital Unit at Boulogne. At the close of hostilities he returned to Canada and for two years had charge of the Moxham military hospital after which he was re-appointed to his post as city medical officer which he retained until his death. Dr. McLeod was actively interested in the control of tuberculosis and he helped in no small way to make the hospital annex at Sydney a realization. He took an active interest in the civic affairs of Sydney and for a time served as alderman. He was also identified with the Sydney Red Cross Society, the Victorian Order of Nurses, the Sydney Tuberculosis Council, the Board of Trade, the medical staff of the City of Sydney Hospital, and St. Rita's Hospital and the Canadian Club. He was a staunch Mason, one of the pioneers of St. Andrew's Lodge, as well

as Past Master and Grand Lodge officer for a number of years. The last surviving member of his family, Dr. McLeod is survived by his wife and two sons, Hugh of Sydney and Ross of New York.

Dr. David MacPherson Rowlings of Musquodoboit Harbour died at the Victoria General Hospital, Halifax, on February 18th, following a brief period of illness. Dr. Rowlings was taken ill on Saturday, the 14th, and Dr. Duncan MacMillan of Sheet Harbour was called on Sunday and immediately conveyed his fellow practitioner to hospital. Dr. Rowlings was born in Musquodoboit Harbour in 1900, a son of Mrs. Laura Rowlings and the late George Rowlings. Following a distinguished scholastic career at Dalhousie he graduated in medicine in 1923, and served a period of internship at the Victoria General Hospital. In 1925 he opened a practise at his home in Musquodoboit Harbour. Five years later he entered Harvard University for post-graduate work in surgery. On completion of this course he proceeded to London, England, where he completed a further study before returning to his home and reopening practise twelve years ago. He is survived besides his mother, by a sister, Mrs. G. J. Jones, Musquodoboit Harbour, and four brothers, and two half-sisters and four half-brothers.

The death occurred at his home in St. John's, Newfoundland, on February 7th of Dr. Robert Almon Brehm, M.R.C.S., a native of Halifax, in his seventy-first year. The son of the late Robert A. and Euccua Brehm, Robert Brehm was born in Halifax. The family having moved to St. John's in the early seventies, he attended the Methodist College, later taking a medical course at Dalhousie graduating in 1898, and continued his work at St. Thomas Hospital, London. Returning to Newfoundland, Dr. Brehm engaged in practise in St. John's and in 1903 was appointed Medical Health Officer, St. John's. For many years he was Government Public Health Officer and up to the time of his death carried out the duties of Health Officer for St. John's. He was married in 1918 to Miss Alice B. Carey, who survives him. They had one son, Robert. Also surviving is a brother, Frank. The deceased was a member of the Masonic Lodge and of the University Graduates' Association.

The BULLETIN extends sympathy to Dr. T. B. Acker and Dr. J. C. Acker of Halifax on the death of their mother, Mrs. Margaret Burns Acker, wife of W. C. Acker, Halifax, which occurred on February 15th.