



WHEN ATTENDING

The Dalhousie Refresher Course and
The Annual Meeting of The Nova Scotia Medical Society

STAY AT

THE LORD NELSON HOTEL HALIFAX

Special Medical Convention Rates:

\$2.50 per day, per person for rooms with private bath.

Near Dalhousie, The Victoria General Hospital and The Halifax Infirmary.
Opposite the Public Gardens and Adjacent to the Business Section.

HOTEL GUESTS HAVE THE PRIVILEGES OF THE WAEGWOLTIC CLUB.

Acidity Neutralized Without Distention

The Hydroxides of Magnesium and
Bismuth used in the preparation of

HYDROXYL

(Hartz)

neutralize hyperacidity without producing additional gas to distend and distress the patient who may already be suffering from distention. Hydroxyl is thus preferred to mixtures containing the alkaline bicarbonates and carbonates, all of which liberate carbon dioxide during the neutralization reaction and are thus irritating and distressing in many cases.

Hydroxyl should be prescribed half an hour before meals in doses of one to four fluid drachms well diluted with water or milk, except in cases of hyperchlorhydria when the dose should be administered two hours after meals.

Available in eight and sixteen
ounce bottles.



The J. F. HARTZ CO., Limited

Pharmaceutical Manufacturers

TORONTO

MONTREAL

SPECIFY HARTZ FINE PHARMACEUTICALS

REFRESHER COURSE
IN
DISEASES OF CHILDREN
MEDICAL SURGICAL

•
Children's Memorial Hospital
Montreal

Given by the senior members of the Attending Staff

September 14-19 inclusive

LECTURES

DEMONSTRATIONS

WARD ROUNDS

REGISTRATION FEE \$5.00

•
Prospectus and Time Table on application to

DR. H. S. MITCHELL,
Medical Superintendent,

Children's Memorial Hospital, Montreal

ATTENDANCE LIMITED

STICKS QUICKLY—HOLDS FAST!

White DRYBAK

THE WATERPROOF ADHESIVE

Drybak, the waterproof adhesive plaster, is made in white as well as suntan colour.

White Drybak is a tested, guaranteed product. Soft and flexible, sticks instantly, holds fast. Pure, snow white in colour, it does not turn yellow with age.

A sample will be sent on request to practicing physicians.

Made in Canada



Johnson & Johnson Limited
MONTREAL CANADA

CARBONACTYL

Activated Animal Charcoal in two per cent Aqueous Suspension.

The recent advent of this product in therapeutics has created a wide-spread interest in Canada and other parts of the world.

INDICATIONS: Acute Infections.

Pneumonia and acute post-operative bronchial infections; acute post-puerperal infections; phlebitis; gonococccic epididymitis and prostatitis; acute gonococccic arthritis; cholecystitis; styne, furunculosis.

POSOLGY:

For Adults: First, give 3 c.c. of CARBONACTYL *intravenously* in severe cases, 4 c.c. and even 5 c.c.

To Children of 10 years: 2 c.c.

The above doses can be repeated for many consecutive days, preferably with an interval of 24 hours between each injection.

HOW OFFERED:

Ampoules of 5 c.c.—boxes of 6 and 12

Rubber-capped vials of 10 c.c.

BIBLIOGRAPHY:

C.M.A. Journal, February, 1934: "Charcoal intravenously in a case of severe septicaemia," by B. F. Macnaughton and J. W. Gerrie.

C.M.A. Journal, August, 1934: "Intravenous injections of Animal Charcoal in the treatment of varied infections: A clinical and experimental study," by Dr. Eugene St. Jacques.

Medical Record, January, 1935: "Intravenous injections of Animal Charcoal in the treatment of various infections," by Dr. Eugene St. Jacques.

La Presse Medicale, No. 91, November 13, 1935: "La Granulotherapie," by Auguste Lumiere.

Colorado Medicine, May, 1936: "Newer concepts in the treatment of Furunculosis," by Duval Prey and Jno. M. Foster, Jr.

Detailed literature and samples on request.

Laboratory Poulenc Frères

OF CANADA LIMITED - MONTREAL

Distributors: ROUGIER FRÈRES - - MONTREAL

CONTENTS

SCIENTIFIC:

Acute Gonorrhoea in the Male.—Dr. G. A. Winfield	- - - - -	387
Some Pituitary Gland Disorders.—Dr. J. W. Reid	- - - - -	395
Acute Pleurisy with Effusion.—Diagnosis and Treatment.—Dr. C. J. W. Beckwith	- - - - -	399

CASE REPORTS:

Medical Treatment of Pyloric Stenosis.—Dr. F. A. Minshull	- - - - -	403
Subarachnoid Haemorrhage.—Dr. G. Ronald Forbes	- - - - -	405

EDITORIAL: Medical Education and the Dalhousie Refresher Course	- - - - -	411
---	-----------	-----

PROGRAMME OF ANNUAL MEETING	- - - - -	413
-----------------------------	-----------	-----

ECHOES FROM MOOSE RIVER	- - - - -	416
-------------------------	-----------	-----

NOTES AND COMMENTS	- - - - -	421
--------------------	-----------	-----

DEPARTMENT OF THE PUBLIC HEALTH	- - - - -	422
---------------------------------	-----------	-----

OBITUARIES	- - - - -	426
------------	-----------	-----

PERSONAL INTEREST NOTES	- - - - -	428
-------------------------	-----------	-----

URASAL

AN EFFICIENT

URINARY ANTISEPTIC

COMPOSITION:

Hexamethylenamine 7½ grs.
combined with Piperazine
and Lithia Benxo-Citrate.

INDICATIONS:

● CYSTITIS - PYELITIS
RHEUMATISM, Etc.

Manufactured by

FRANK W. HORNER LIMITED
MONTREAL » » CANADA

THE Officers and the Executive of the Medical Society of Nova Scotia extend a cordial invitation to all physicians in the Province to join the Association. The annual meeting of the Medical Society of Nova Scotia which will be held at Halifax from August 31st to September 4th will be one of the most important in the history of our Society. The question of federation with the Canadian Medical Association will be fully discussed and the vote on this question should represent the physicians of the Province. If you are already a member of your local Society all that is necessary to do is to forward your cheque for the annual fee, \$10.00. If you do not happen to belong to your local Society you can make application directly to the Secretary, Dr. H. G. Grant, Halifax, and become a member at the annual meeting.

INVITATION

*To Members of the Medical Society
of Nova Scotia.*

You are cordially invited to visit Nova Scotia's leading mens wear store and see the new **Fall Suits, Coats, Hats, Furnishings, Shoes, Baggage, Motor Rugs, Waterproof Coats and Novelties.**

COLWELL BROTHERS LIMITED

The English Shop

HALIFAX, N. S.

Established 1891

Acute Gonorrhoea in the Male

G. A. WINFIELD, M.D.

EVEN in these modern and enlightened days, one hesitates to introduce discussion on such a forbidden subject as gonorrhoea. Yet it is probably one of the oldest of man's afflictions; it is increasing rapidly in spite of added facilities for its treatment, and it is a condition in which, until the last decade or so, little if any advance had been made. Pelouze estimates that 80% of the adult male population of the United States have, or have had gonorrhoea. Ricord, the famous French venereologist aptly summed up the general convictions as to its age in the words "Au commencement, Dieu crea le ciel, la terre, l'homme et les maladies veneriennes." There is proof that the Chinese were acquainted with the disease five thousand years ago, and the Bible specifically describes gonorrhoea, and lays down rules governing the treatment of afflicted patients. One may well ask the question "Why has nothing more been done to alleviate the scourge of gonorrhoea?" The reasons are many; the temptation to discuss them a strong one. But time does not permit me to more than mention a few of the more obvious reasons.

In the first place, there is a tendency among the laity to regard the disease lightly. Who has not heard the expressions "Gonorrhoea is nothing worse than a bad cold" and "A man is not a man until he has had at least one infection". Little do they realise that gonorrhoea is responsible for untold misery in men, and more especially in women, and that it is perhaps the main cause of human sterility. Secondly, there is the idea among many of the profession that gonorrhoea is an easy disease to treat. It is not fully realised that for efficient treatment there is required not only a detailed knowledge of the disease, but also time, understanding, equipment not usually possessed by the average doctor, and above all, patience and kindness. There is too often the tendency to regard the gonorrhoeal patient as an outcast, to be treated in the night hours and let out by the back door. Probably no patient is more deserving, or in greater need of sympathy and understanding. It is this very attitude of shame on the part of the laity, and to a lesser extent the profession, that has made treatment so difficult, and the spread of the disease so great. Millions are donated for the fight against cancer and tuberculosis, but who has ever heard of a gift for the battle against the gonococcus? It has been aptly said by one of the great Urologists that were gonorrhoea as commonly discussed as cancer, it would soon die a natural death. And the pity of the situation lies in the fact that gonorrhoea as a social problem could be wiped out entirely in the course of time, were it not for the fact that it is a sexual disease, and everything sexual is "taboo". Within the past few years attempts have been made in some of the larger centres to provide education regarding the disease, but this forward step has met with considerable opposition even among supposedly educated people. The third main reason for the spread of gonorrhoea is, in my opinion, inadequate treatment. And here the profession must accept its share of the blame. In many instances patients are allowed to discontinue treatment when the urethral discharge has ceased without being

thoroughly investigated for chronic hidden foci which may still harbour the gonococcus, and are distinct menaces as regards spread. More often the patient himself is at fault, because he is unwilling to carry on treatment when his subjective symptoms have disappeared. Perhaps some of the difficulties in the treatment of gonorrhoea in the male now begin to make themselves apparent.

To do the above paragraphs justice would entail a paper of great length, and while the subject is a fascinating and timely one, it is my wish rather to outline briefly and clearly as possible the clinical aspects of acute gonorrhoea in the male, and to discuss methods of treatment which have stood the test of time.

The clinical course is almost too well known to require repetition. The disease cannot, for all practical purposes, be acquired by the adult male except by sexual intercourse. The symptoms accompanying the earlier stages exhibit the widest variations in different individuals. In some there may be no discomfort, while in others there is intense pain and burning, especially on urination. In the average case, some four to five days after exposure there is noted a slight urethral irritation. This is followed, usually within twenty-four hours, by an urethral discharge, which is yellowish green in color, and which becomes more and more profuse. There may or may not be frequency, but there is nearly always some urethral burning during and especially after urination. It is usually at this point that the patient seeks medical advice.

It is not amiss to consider very briefly the pathology and anatomy of the condition. The consensus of opinion is that the mode of extension of the disease is by surface progression rather than subsurface. The bacteria pass along the urethra in this manner, then pass between the epithelial cells, in a perpendicular direction, into the submucosa. They never enter the protoplasm of the fixed tissue cells, but collect in groups in the intercellular spaces. This penetration apparently takes place rapidly, so that at the end of thirty-six hours the gonococci are well embedded in the submucosal layers. From the beginning of their penetration they cause a mild inflammation, due to toxins liberated from disintegration of the older bacteria. When greater numbers complete their cycle and liberate their toxins, the real clinical response is noted, as an urethral discharge. It is believed that the infection first involves only the anterior urethra, and the aim of every doctor should be to keep it there. It is, however, undoubtedly true that in the majority of even ideally treated cases, the disease does progress back to the posterior urethra. There may be no symptoms of posterior urethritis, but it is unwise to allow any case to be discharged as cured without complete investigation of the whole lower urinary tract.

The male lower genito-urinary tract for practical purposes of treatment, may be regarded as a simple double bulb syringe. The larger bulb, the bladder, the smaller the bulbar portion of the anterior urethra. Connecting the two is a short tube consisting of the posterior and membranous urethrae. The narrowest portion of the whole urethra is at the external meatus, an excellent thing in health, as it aids in projection of the urinary stream. But in gonorrhoea it acts as a barrier to drainage. The posterior urethra lies between two tonically contracted sphincters; the vesical sphincter, and the accelerator urinae, or cut off muscle. Thus the only time this area is drained is during urination. The cut off muscle acts as a barrier to the spread of disease into the posterior urethra, but once this portion has been infected, it also acts as a distinct barrier

to drainage. In addition, the entire mucous membrane of the urethra is puckered into countless irregular folds, which provide excellent sites for the colonisation of the gonococcus.

If the above few simple concepts will be kept in mind, the problem of treatment will be much simplified.

There now arises the problem of treatment. The first point I wish to make is that not every urethral discharge is specific in character. Not infrequently the patient, after an illicit contact, becomes alarmed, and will attempt treatment or prophylaxis himself. This is usually on the advice of a friend, or the corner druggist, with the result that often strong solutions are used, and the urethra considerable traumatised. There follows in due course a profuse urethral discharge which nearly always fools the patient, and not infrequently the doctor as well. This is the so-called chemical urethritis. No patient should be labelled as gonorrhoea until the diagnosis has been proven by bacteriological examination of the stained smears. Similarly, and perhaps more important, no case should be dismissed as a chemical urethritis until it has been established beyond doubt that the gonococcus is not present. The moral is obvious. Take smears, and more smears. In view of this, it is surprising how many patients are treated without ever having been given the benefit of such examination.

The majority of cases presenting themselves for treatment are acutely worried, and not a few will faint when treatment is begun. This is an important factor, and all too often lost sight of. The psychic side is often more difficult to treat than the pathological. To realise the seriousness of this, one only has to imagine himself in the patients place. The confidence of the patient can be gained or lost during his first five minutes in the office. If gained, one may be sure of the cooperation so essential to successful treatment. If lost, in my opinion, the case might as well be sent elsewhere, because the almost certain result is a dissatisfied patient. I believe the few minutes necessary to a complete explanation of the case, with reassurance of the patient to be well worth the effort. Cases have been known wherein severe consequences followed simply because the patient was not sufficiently informed regarding his condition. The disease should by no means be regarded lightly, but at the same time definite reassurance can usually be given, and confidence inspired. Once treatment has begun, the patient loses much of his anxiety.

When the history has been taken (with a grain of salt in many cases) the examination of the patient may be proceeded with. This consists in a thorough examination of the penis for urethral discharge, and the presence of any sores such as chancre or chancroid. It is well to examine the scrotum and its contents, and also the inguinal glands. Next smears should be taken for staining and examination, after which the patient is asked to pass urine into two glasses. In the acute case, the first glass will be cloudy or hazey, and the second clear. This two glass test should be repeated at every treatment, as it shows with considerable accuracy the progress of the disease toward cure or complication.

Next comes the question of local treatment. Various agents have been employed, most popular among which have been potassium permanganate and the various silver salts. These may be given by the gravity method, or instilled by means of the urethral syringe. Personally I prefer the latter method, and as an agent argyrol in weak solution. Great care must be taken to insure that the solution is not instilled too far, that is, that there is not

enough pressure used to force the solution, and the infection, into the posterior urethra. The drug should be instilled carefully and gently until the anterior urethra is comfortably filled, and kept there by pressure of the fingers or a penis clamp, for five minutes. The pressure is then released, the solution allowed to drain out of the urethra, and a dressing applied.

Recently there has been much discussion of the Corbus Ferry Gonococcus Filtrate. The manufacturers were most enthusiastic in their claims for this agent, both in acute and chronic gonorrhoea. However, at a recent meeting of the American Neisserian Society in Boston, where reports on the treatment of gonorrhoea from doctors all over the Union were read, no mention whatsoever was made of this agent. Undoubtedly some brilliant results have been obtained; also some miserable failures, because the therapy is not without its dangers. I feel that the question of its use must be left to the individual. Personally I have used it for two years, but in very small doses not exceeding 3/20 c.c. as a maximum. The first dose is given at the patient's first visit, and repeated weekly thereafter, gradually increasing the dose to a maximum, and stopping for three weeks rest after seven injections have been given. I do not have the same enthusiasm as the manufacturers, but feel it to be a distinct advance in treatment, and well worthy of trial. Vaccines have been tried, and I think, in the main found wanting. The only place for a vaccine in the acute case, is perhaps toward the end of treatment, and then in very minute doses.

As to oral treatment, I do not believe it to be of any value in the acute stage, with one exception which will be mentioned later. Occasionally it may do harm. There is, however, a certain psychic effect on the patient which is sometimes of value. When the disease has reached a chronic stage, it is often of value to employ one of the common urinary antiseptics, such as sandalwood oil. Also, in the acute stage, where there is pain or discomfort, relief may often be obtained by rendering the urine alkaline. As to diet, there are no restrictions beyond prohibiting the use of alcohol, and perhaps carbonated waters and spices.

It should be made quite clear to the patient that he must abstain absolutely from sexual excitement, intercourse and alcohol. It is well to advise forcing of fluids, especially during the day. Heavy exertion, especially when the bladder is full, should be avoided. Hot baths two or three times weekly are of great value, and the patient should be instructed to keep the parts clean with pure soap and water. He should be warned carefully of the danger of infecting the eyes. It is also useful to prescribe a suspensory to be worn during the course of treatment. It is well to repeat these instructions from time to time.

Two questions are often asked. "How often should treatment be carried out?" and "Should the patient be allowed to treat himself?" Personally I believe there is great danger in overtreatment, and there is a marked tendency on the part of the patient to make this error. No matter how gentle the treatment be, there is always some incident trauma. One injection, or at the most, two, in twenty-four hours, are quite sufficient. I do not allow any patient to treat himself until I am sure he has mastered the art of using a syringe. It has been my experience that most cases will accomplish this in the first week. Some of course never do. After a week, during which time I see the patient daily, I allow the patient to begin his own treatment. It is well to make sure that he has supplied himself with a *bulb* syringe, and not

one of the plunger type. The patient reports at the office two or three times weekly, depending on his progress. In this way a constant check can be maintained, and complications may often be spotted before they have a chance to become well established.

The main points in treatment are gentleness, the use of mild solutions, and care not to overtreat. If in doubt it is much better to rest the case. It is impossible to use a solution strong enough to reach and kill the bacteria in the submucosa without doing irreparable harm to the urethral mucosa. The most we can do is allow for adequate drainage, and keep the urethra as clean as possible. In the last analysis, it is the patients resistance that effects the cure. In passing, it may be well to note that occasionally one encounters a meatus so small that meatotomy is required for adequate drainage. This is a simple office procedure that should not be neglected. One has a wide variation in the choice of agents, and indeed, in the mode of treatment itself. Countless new agents make their appearance on the market yearly, and claims made for them are most encouraging. It is a sound principle for each individual to select that type of therapy that has given him the best results, and stick to it.

Certain complications may arise during the course of treatment. These may be caused by the therapy itself, or, as is most often the case, by indiscretions on the part of the patient. Space does not permit me to more than mention these most commonly encountered.

The most common complication is posterior urethritis. This is first noted by the second glass of urine becoming cloudy or hazey. The patient may complain of frequency, urgency and dysuria. Occasionally the complication may be so acute as to cause haematuria. All local treatment should immediately be stopped until such time as the patient has regained his vesical comfort, after which irrigations of the whole urethra and bladder may be cautiously undertaken, using a mild solution of potassium permanganate. Each irrigation should be followed by the instillation of argyrol. This latter should be done by gravity or by the syringe method, and no instruments or catheters should be passed into the bladder at this time.

Prostatitis is usually coincident with posterior urethritis, and may cause no symptoms. On the other hand, it may more rarely be acute, in which case there is considerable pain and distress. The acutely inflamed prostate must be treated conservatively with heat and rest until the acute phase has subsided. Then gentle prostatic massage, not oftener than twice weekly, should be begun, followed by instillation of argyrol into the posterior urethra. The normal prostatic secretion should contain not more than five pus cells per high power field. If a prostatic abscess develops, surgical drainage may be necessary.

Epididymitis occasionally occurs, and may be ushered in with fever and chills. Usually the first complaint is pain in the affected organ, followed by swelling. Not infrequently the urine becomes clear just prior to the onset of this complication. If the case be acute, bed rest is of value. Most cases, however, may be treated as ambulant patients, all that is required being regular application of heat locally, and the elevation of the scrotum by suspensory or other suitable means. Calcium gluconate injected intravenously is often of value in relieving pain and reducing inflammation.

Arthritis and stricture are later complications, seldom occurring during the course of an acute urethritis, and so will not be discussed here.

It may be taken as a general rule, that at the onset of any complication, all local treatment should immediately be stopped until such time as the acute phase of the complication has subsided. Whatever treatment that is indicated should then be resumed with gentleness and extreme caution.

Perhaps one of the most important points arising in the care of acute gonorrhoea is the length of treatment necessary. This of course will vary with the individual case, and will be greatly influenced both by the patients behavior during treatment, and the type of therapy employed. By the latter I refer not so much to the actual method used as to the mode of its use. Lack of cooperation on the part of the patient, or rough handling on the part of the doctor will prolong the course of treatment and make for complications. In a normal case, seeking treatment at the onset of the disease and cooperating in every way, the discharge will have pretty well subsided in from four to six weeks. By this time both glasses of urine should be clear except for shreds, and smears from the urethra should be negative for the gonococcus. In other words, as far as can be ascertained at this stage, the average urethra should be free from gonococci. It now becomes necessary to carry out investigation to determine whether or not the patient is really cured. This may well be termed the danger point, because it is at this stage that many patients cease treatment, and consider themselves cured.

I believe that one of the greatest danger points in treatment occurs when the therapy must be changed. That is to say, when prostatic massage has to be started, or the urethra must be explored. This is the point where complications may occur. It is the custom of many, at this stage, to allow the patient a months rest, and then recall him for investigation. This has much to recommend it, and much against it. At any rate, before allowing the patient to leave as cured, it is essential that the entire urethra, prostate and seminal vesicles be thoroughly investigated for the presence of the gonococcus. This investigation should on no account be started before the sixth week, and only then when both glasses or urine are clear except for shreds, and the discharge is absent, or remains only as a white morning drop. Note that up to this time no instruments have been passed into the urethra. The first step to be taken is a gentle massage of the prostate, examination of the fresh smear for pus, and the stained films for gonococci. It should be noted that the first massage is seldom sufficient for a determination of infection in the prostate, and should be repeated four or five days later. If there is infection present, as shown by the presence of pus or gonococci, prostate massage should be carried out until such time as the smears are normal. This, in the average uncomplicated case may not be long. In chronic cases it may take considerable time. It has been found better not to carry out massage longer than two months at a time. There should then follow a rest period of three to four weeks, after which the massage may be resumed. Very often the second course results in a speedy clearing up of the infection. Each massage should be followed by instillation of argyrol. The patient should be instructed to take hot sitz baths two or three times weekly, especially on the night preceding treatment.

At some time during this period the urethra must be explored, first with a bougie as far as the peno-scrotal angle. At the next visit the bougie may be advanced into the bladder. From then on the size may be gradually increased, until the normal calibre of the urethra has been reached. This serves two main purposes. It allows of stretching the urethra over the instrument,

with the ironing out of the mucosa and the expression of any infection that may be locked in the small crypts. It also assures one that there has resulted no urethral stenosis. Should the discharge reappear after the above, it must be treated in the usual manner until it has ceased.

Having assured oneself that the prostate is free from infection, that the urethra is clear and of normal size, we are now faced with the problem as to whether or not the patient is free from disease. It is well to use a few provocative tests, such as the ingestion of a moderate amount of alcohol. This is almost a specific, and should there be latent infection, there will almost always be a recurrence of the discharge, which should be carefully examined and treated as above. Other tests consist in the urethral instillation of a mild silver nitrate solution, and sexual intercourse. The latter must, of course, be carried out with full measures to protect the partner from possible infection.

If all the above tests prove negative, then we may rest pretty well assured that the patient is cured. It is unwise, however, to state definitely that cure has been accomplished. It is better to say that as far as can be ascertained, cure has been effected. The patient should be advised that he must use a condom during intercourse for the next six to twelve months. Also, that he must report any further urethral discharge that may occur. If, after that period of normal living there has been no recurrence of any kind, he may consider himself cured. Thus an average case of uncomplicated gonorrhoea will be cured in three to four months.

The above remarks are not intended as a detailed account of treatment. There are many points raising that space does not permit mentioning, and the reader is referred to standard text books on the subject. This paper attempts to give only the highlights in the treatment of acute gonorrhoea in the male, and to mention a few of the more common complications. No attempt has been made to discuss that large group of cases infected with chronic gonorrhoea.

SUMMARY

1. Gonorrhoea is one of the oldest known diseases. That it is so prevalent is in a large measure due to the public attitude concerning any venereal disease.
2. The gonorrhoeal patient is deserving of the utmost kindness and sympathy.
3. Treatment should be one with which the physician has had experience, and which he knows is efficient in his own hands. The keynote of successful treatment is gentleness.
4. A very brief outline of the pathology and anatomy, together with the treatment of acute anterior urethritis, a list of the more common complications, and a few criteria of cure have been given.
5. No attempt has been made to discuss other than acute anterior urethritis.

Dr. Ray F. Farquharson, Professor of Therapeutics, University of Toronto, will speak on "Diagnosis and Treatment of Conditions associated with Jaundice" and "Differential Diagnosis and Treatment of enlargement of superficial Lymph Glands" at the annual Refresher Course.

Some Pituitary Gland Disorders

J. W. REID, M.D.

THE pituitary gland was known to the ancients. Its function was thought to be the excretion of mucous (pituita-slime) from the brain to the nasopharynx. Some such idea persisted until the seventeenth century.

The gland is the most centrally placed and protected organ of the body, situated as it is in the sella turcica on the superior aspect of the body of the sphenoid bone. It consists of anterior and posterior lobes, made up of various parts and measures roughly about 1 c.m. in various directions and weighing normally about .6 gm.

Anatomically it is in relation anteriorly to the optic chiasm, above with the floor of the third ventricle, and on each side the cavernous sinus containing the carotid artery, and in the outer wall the 3rd, 4th, 6th, and ophthalmic divisions of the fifth nerve.

Developmentally, the various parts of the gland represent different structures, the anterior lobe being developed as an upgrowth from the primitive buccal cavity, the posterior lobe from a down-growth of the floor of the 3rd ventricle. Histologically, they differ also, the *anterior lobe* being composed of cells variously arranged in columns or nests surrounded by connective tissue. It is highly vascularized by *end arteries*. The cells of the anterior lobe are of various types. There are chromophobe and chromophile cells. The former are pale, non-granular structures which are thought by some workers to represent the mother cell of the lobe. The chromophile cells are of two kinds, eosinophile or basophile, thought to represent different stages of activity of the mother chromophobe cell. The cytoplasm may be thickly packed with granules, or sparsely granulated and vacuolated suggesting that the secretion has been discharged and the cell reverting to chromophobe or resting state. The gland is attached to the floor of the third ventricle by the infundibulum or stalk and many of the functions of the gland are controlled by the neural tissue in the hypothalamic region. It has been shown experimentally that extracts from the brain tissue in the neighbourhood of the stalk produce the same pressor, oxytocic and anti-diuretic effects that are shown by extracts of the posterior lobe, whereas extracts of brain tissue from other areas have a distinctly depressor action. The functions of this gland are so many and so varied that it has been named the Master Gland. It appears to have been about the last of the endocrines to attract the close attention of experimental workers and it was not until the beginning of the present century that it began to be carefully studied.

Of the posterior lobe the *pars nervosa* consists mainly of neuroglial tissue, apparently non secretory, usually described as containing masses of colloid material in transit, presumably from the *pars intermedia*. It is highly vascularized by anastomotic arteries.

The pressor, oxytocic and anti-diuretic functions of the posterior lobe are well known, if not clearly understood, through the action of extracts and the effects of disease and experimentation.

It was not until as late as 1926 that the vasopressor and oxytocic functions of the posterior pituitary were separated, and it is interesting that the gastrotoxic substance found present in the whole extract was shown to be present in the pressor but not in the separated oxytocic factor. The posterior lobe is thought to regulate the flow of urine, but stimulating the renal epithelium to absorb more water, although it is known that lesions of the hypothalamic region will lead to profuse diuresis and glycosuria.

The posterior lobe must also in some way influence the carbohydrate metabolism since extracts are definitely antagonistic to insulin. Further, Houssay, in South America, showed that *typical* diabetes will not develop when the pancreas is removed *provided* that the pituitary is removed also.

The posterior lobe may in some way influence the metabolism of fat, although it is well known that adiposity can be produced by injury to the hypothalamic region of the brain in the presence of an intact pituitary, and that the pituitary can be removed without adiposity.

The posterior lobe influences capillary tone as shown by the general contraction which follows intramuscular injection of extracts. It also presumably initiates the onset of parturition at term. It is supposed that the oxytocic principle increases in amount toward the end of term and initiates uterine action, although injections of extract are unable to do so except in conjunction with other drugs and measures.

The functions of the *anterior lobe* appear to be much more numerous and complicated than the posterior. Eleven or more separate functions are written of, though these are not necessarily due each to a separate hormone.

It was originally thought that extirpation of the pituitary was compatible with continued life. It is now known that such is not the case, although immediate death does not ensue. It would seem that the appellation Master Gland is earned by the anterior portion since it is this part which seems to control distant endocrine function.

Roughly speaking it is known to influence (1) skeletal growth; (2) sexual activity; (3) metabolism; but it has numerous other activities which have been shown by experimentation and the effects of disease.

Its influence on skeletal growth is shown by the dwarfing which follows its removal in animals, and by the specific action of the growth hormone when injected into immature animals or adult rats (whose epiphysis never unite) producing giant animals. Further acromegalic changes have been produced in adult dogs by continued injection.

This growth hormone is reducible to a white powder which is staple for months and will produce growth in doses of .5 mg. daily.

The *sex* hormone is very complicated. There are in fact two or more. They are recoverable from the gland, from the urine of pregnant females, from amniotic fluid, blood, and tumorous conditions such as chorio-epithelioma; recoverable also from the placenta and from plants and even petroleum oil. They are called Prolan "A" and "B". "A" produces follicular ripening and discharge of ova. "B" inhibits discharge of ova and follicular ripening and favours the formation of corpora lutea. It appears that there is some difference between the glandular extract and the urinary prolans; the former being more potent than the latter. It has also been shown that the pituitary produces a prolans activator, since prolans becomes many times more active than the hormone extracted from the gland after it has been acted upon by anterior pituitary extracts. This sex hormone is also reducible to a potent powder

which in a dose of 2 mg. will produce oestrus changes in an immature mouse. Also it secretes a Thyrotropic hormone which stimulates the thyroid gland to activity. If the anterior pituitary is removed the basal metabolic rate falls to -30 or -35. This can be raised by anterior lobe transplants or extracts. It can also be raised by thyroid feeding.

The thyroid tends to become atrophic after removal of anterior pituitary and to resume normal appearance after injection of extract.

Injection of the hormone into normal animals produces an increase in basal metabolic rate for a short time only. This is due in Colipp's opinion to the fact that it also secretes an antithyrotropic hormone when the thyroid becomes overactive. Further it secretes a *parathyrotropic* hormone as shown by hyperplasia of those glands following injections of extract and by the fact that the blood calcium level can be raised and maintained by such injections.

Anselmino has also isolated a pancreatic hormone by ultra filtration of crude extracts to remove the growth and other hormones known to be united to a protein fraction. He found that injection of this hormone led to a new development of islets in the pancreas as well as to hyperplasia of the existing islets; thus the whole pituitary is seen to produce diabetogenic and anti-diabetogenic hormones. (The work of Houssay demonstrated the diabetogenic hormone).

Further it produces an adrenalotropic hormone. It can be shown experimentally that removal of the anterior pituitary leads to atrophy of the cortex and that the cortex can be restored by extract injections of anterior pituitary and not of adrenal cortex. Also, it is known that whereas in tuberculous Addison's disease there is no change in the pituitary, in the atrophic type there is well known basophilic degeneration in the pituitary.

It plays some part in maintenance of blood pressure since changes in the gland are frequent post mortem findings in cases of nephritic hypertension and eclampsia. Further, Anselmino has extracted from the blood of eclamptics with high blood pressure and oedema, both a pressor and an antidiuretic substance, and in those cases without oedema the pressor substance was present alone. Cushing attributes the hypertension in disease of anterior pituitary to basophil activation of the posterior lobe, others to secondary adrenal hyperplasia.

Such in very brief and sketchy outline are the functions of the gland in so far as they are known, and the next consideration is of some of its disease states.

Generally speaking the clinical states are of hypersecretion, hyposecretion and certain mixed types called dyspituitarism. The first description of a clinical syndrome due to the pituitary was in 1876 when Marie described acromegaly. But it was not until the following year that Minkowski attributed the syndrome to the pituitary gland. Since that time many types of case have been rightly or wrongly attributed to pituitary disease, especially obesity. Now obesity is considered as Endocrine, Endogenous or Exogenous. The first requires a definite endocrine syndrome to be present with the obesity, the second is obesity occurring in a person whose description of his small diet you believe, and the last occurs in cases upon whose dietary faults you have accurate check. With all, there is a pituitary obesity as we shall presently see.

The hyposecretory states lead to stunting (in young), to sexual infantilism, to changes in skin and hair, mental states, low blood pressure and obesity.

They may be due to atrophy from thrombosis or embolism or to pressure effects, syphilis or tuberculosis.

The hypersecretory states are largely due to adenoma of the gland which may have a degree of secretory activity out of all proportion to size.

Many of these states, if not common, are well known. Such as Frahlich, Brissauds, Lorainx, etc., among the hyposecretory states, and acromegaly of the hypersecretory diseases, that symptoms complex resulting from an adenoma of the eosinophil cells of the anterior pituitary.

There is not space to consider all these diseases in detail, and I wish to consider briefly two conditions of disease in the anterior pituitary: one a hyposecretory state described in 1914 by Simmonds, the other a hypersecretory state described in 1932 by Cushing.

Simmonds disease, or anterior pituitary insufficiency, is a rare disease. It occurs more frequently in women but may occur in either sex and in children.

Etiology and Pathology. Many of the cases followed acute septic infections and were explained by Simmonds as embolic phenomena affecting anterior pituitary end arteries. Pregnancy was a common factor due to embolism or hyperinvolution of the gland.

Infectious diseases in children have preceded it shortly and tuberculosis, syphilis and tumors have all been etiological factors.

The pathological features are almost invariable. There is complete destruction of the anterior pituitary and atrophy of all the other endocrine glands, as well as small abdominal viscera.

Symptoms. Emaciation, loss of teeth, pubic and axillary hair, trophic changes in nails and a lack luster skin leads to the appearance of premature senility comparable to Hutchinson's Progeria. Another important sign described by Schellong is loss of the normal cardiovascular response to effort. Apathy, sleep, gastrointestinal weakness, vomiting, anorexia, subnormal temperature and chilliness are features. The blood pressure and basal metabolic rates are low. There is amenorrhoea and absence of sexual desire. The picture is much like Addison's disease except that there is no pigmentation and no response to cortical extract.

Treatment. Calder found (P. D. & Co. Antuitrin S.) in doses of 1 c.c. daily to be effective in treatment.

The other condition of which I want to speak is Cushing Anterior Pituitary Basophilism. It is a disease of the anterior lobe associated with painful rapidly developing obesity and high blood pressure.

Incidence. It occurs apparently more frequently in females than in males, and the ages rank between ten and twenty-five years, averaging about twenty years.

Etiology and Pathology. No etiological factors are known. No family histories have been relevant and no diseased states known to shortly precede it. The pathology is fairly constant there being found at P.M. a macroscopic or microscopic basophil adenoma of the anterior lobe, with hyperplasia of other endocrine glands, osteoporosis and abdominal obesity with cardio-vascular renal disease. Symptoms usually come on rapidly, the first signs often being redness of the face and a rapid, painful adiposity of face, neck and trunk, the limbs being spared. Other symptoms of more or less constancy are the following. A tendency to become round shouldered assoc-

iated with pain referred to vertebral column. Sexual dystrophy, early amenorrhoea, and in males, impotence. Hairiness of face and trunk in females. Dusky, plethoric appearance of the skin with big, purple, *linea cutis distensae*. High blood pressure. Tendency to erythraemia. Variable back ache, pain, fatigability and ultimately extreme weakness. Acrocyanosis with purpura like ecchymosis. Eye pain and possible exophthalmos. Dry skin. Polydipsia, etc., and polyphagia. Susceptibility to infections, and a sense of suffocation. Disturbed sugar and fat metabolism. Osteoporosis and pathological fractures.

Further development of the disease is slow with some remissions. Sometimes the condition wears itself out leaving the patient a more or less stationary physical wreck. Most of the cases which have been followed died within three to five years.

The symptoms are difficult to control and relieve, particularly the urine sugar and other diabetic phenomena. X-Ray therapy directed to the pituitary seems to offer the most hopeful means of treatment.

REFERENCES

- Proceedings of the Royal Society of Medicine*, Vol. XXVIII, No. 7, 1935.
Proceedings of the Royal Society of Medicine, Vol. XXVIII, No. 9, 1935.
Endocrinology, Vol. 15, No. 4, 1931.
Endocrinology, Vol. 1, No. 1, 1931.
British Medical Journal, Feb. 23, 1935.
British Medical Journal, Vol. 1, 1934.
Sampson Wright, Vol. 5.
Bulletin, Johns Hopkins Hospital, Vol. 35, 1924.
Journal American Medical Association, Vol. 101, No. 2, 1933.
Journal American Medical Association, Vol. 101, No. 6, 1933.
Journal Experimental Medicine, Vol. 57, No. 6, 1933.
-

Dr. Channing Frothingham, Chief of the Medical Service of the Faulkner Hospital at Jamaica Plain, Mass., who is interested in the organization of "community hospitals so that they offer physicians an opportunity to practise medicine" will speak on this subject at the annual Refresher Course. Dr. Frothingham will also speak on "The Present Status of Endocrine Therapy" and hold medical clinics.

Heat With Medication

Where long-retained heat, as well as capillary-stimulating medication, is an essential phase of therapy, frequently a cataplasm is the best means of application.

In Antiphlogistine the makers have obtained the maximum of hygroscopic effects, combined with stimulating, yet soothing, medication. The resulting cataplasm expands the capillary bed, withdraws toxic fluids from the parts and stimulates cellular activity. At the same time it affords the patient increased comfort.

Acute Pleurisy With Effusion— Diagnosis and Treatment*

By C. J. W. BECKWITH, M.D.

Nova Scotia Sanitorium, Kentville, N. S.

PLEURISY with effusion, wet pleurisy or sero-fibrinous pleurisy may be defined as an acute infection of the visceral and parietal layers of the pleura, incited by the presence and growth of tubercle bacilli in an allergic individual, characterized by the formation of fluid in the pleural cavity and associated with local and constitutional symptoms. It is, in other words, the manifestation of tuberculosis in an individual who has previously been infected with the tubercle bacillus, such infection producing the "allergic condition" referred to in the definition.

The infecting organism gains the pleura in one of three ways: by the lymphatics; by the blood stream; by contiguity from underlying pathology in the lung parenchyma. The disease is rarely primary, and is almost invariably dependent on a tuberculous process in the lung or lymph node at the hilum.

The clinical onset of pleurisy with effusion may be chronic or acute. In the chronic type of onset, vague pleuritic pains may be present for a matter of days, or indeed weeks, prior to the actual acute phase of the illness. In association with pain, easy fatigue or lassitude may be apparent. The acute onset is characterized by a sudden, severe, pleuritic pain with a rise in fever, which may be rapid or step-ladder in type. At this time, pain, acute, excruciating pain, which limits the respiratory movement to short gasps, is a common complaint. A more fortunate few will only experience discomfort at the base of the chest or in the shoulder, should the inflammation be diaphragmatic in origin. The outstanding symptom of pain gradually abates as the exudate is poured out from the diseased pleura, thus creating a cushion of fluid which separates the inflamed surfaces. Unless pressure symptoms develop, the patient is more or less comfortable, once the fluid has formed.

You are all familiar with the clinical chart of such a case. The temperature, which at first rose either suddenly or in step-ladder fashion, settles at a level ranging from 100°—103°, or even higher. A valuable point to remember in differential diagnosis is that the pulse rate usually remains relatively slow, compared with the degree of temperature. If the pulse rate begins to climb, it is almost invariably evidence of an embarrassed heart, the result of displacement due to altered intra-pleural pressures. The course of an uncomplicated case is about three weeks, the temperature falling by lysis about the beginning of the third week. The condition may last, however, for six weeks.

The physical signs occur in direct proportion to the amount and location of fluid present. An effusion which occupies only the costophrenic sinus is extremely difficult to pick up clinically. An inter-lobar effusion, which frequently occurs in children and which may manifest itself as an unexplained bronchitis can only be diagnosed accurately by X-ray. The "run-of-mine" case, if seen from the beginning, is extremely interesting to observe from day

* A talk given before the Valley Medical Society, May 1936.

to day. The patient should be examined sitting up. At the onset of symptoms, aside from the grunting type of breathing, restriction of movement in the affected side is very noticeable on inspection and palpation. There may or may not be pleural rubs present, but the air entry, when compared by auscultation with the unaffected side, is poor. The difference in the percussion note between the two sides, if any, is only slight. As the fluid forms, the following may be observed. The percussion note changes gradually from slight dullness—to dullness—to flatness over the fluid as it develops. By auscultation, one finds breath sounds diminished and finally absent, although an area of bronchial breathing may exist over the upper limit of the effusion, where, figuratively speaking, the breath sounds are conveyed to the surface through compressed lung. This is particularly noted where the extent of the effusion is limited by previously existent adhesions. Vocal resonance gradually becomes diminished and finally absent. Occasionally one is unfortunate enough to see a patient for the first time when a massive effusion is present, the physical signs of which are not typical, but suggest the presence of pneumonia. The court of appeal lies in the heart. The position of the apex beat should be taken into consideration in the diagnosis of any chest condition, for the mediastinum is very sensitive to changes in intra-thoracic pressures. In effusions therefore, we find the apex beat displaced toward the unaffected side.

When it is available, the X-ray, including plate and fluoroscope, is of great value in diagnosing an effusion. Fluoroscopic examination will, from the first, show cloudiness at the base of the affected side, and restriction of expansion of that side of the chest, as well as restriction of diaphragmatic movement. It will also give valuable information concerning the position of the heart, which is a further check on clinical examination.

The diagnosis of pleurisy with effusion is never complete without a diagnostic puncture. It is extremely important that this procedure be carried out for the reason that the type of effusion must be ascertained. The withdrawal of 20 cc. of fluid at the most, is sufficient to give all the information required. The fluid of a sero-fibrinous pleurisy ranges in color from straw to amber, although bloody or sero-purulent fluid may be found. On standing, a deposit of fibrin will form. Examination by smear is usually negative for tubercle bacilli, although guinea pig inoculation may reveal the germs. Cell counts are of little value as an aid to diagnosis.

Space does not permit of dealing with differential diagnosis in detail. Four conditions must be mentioned, however. Malignancy of the lung or pleura can, and does, cause signs and symptoms resembling an effusion. The fluid may resemble a sero-fibrinous effusion in that it is frequently straw-colored, but is of lower specific gravity and is without the fibrin content. Rapid re-accumulation follows aspiration, and the fluid formation is most intractable when malignancy is present. In addition, the temperature, if elevated, is of the low grade type and marked weakness is a prominent symptom. Searches for enlarged superficial nodes, especially Virchow's gland, will frequently be rewarded, and a biopsy will give valuable information.

The other conditions which require mentioning are in association with the diaphragm. In this day and age, operations on the phrenic nerve occupy a prominent place in the treatment of tuberculosis. Interruption of the function of this nerve causes elevation of the diaphragm, frequently to a considerable height. A patient suffering from some chest affection can present physical signs suggestive of effusion at the base. If one takes time to look above

the clavicle and notes a longitudinal scar, this patient has probably undergone such an operation.

Elevation of the diaphragm may be caused by atelectasis. This condition is never primary, but always secondary to some other pulmonary disease. The patient may be very ill. Flatness and absence of breath sounds at the base may lead to the suspicion of effusion. The position of the apex beat is all-important again, for in atelectasis, the heart is drawn to the affected side, instead of being pushed away, as in pleurisy with effusion.

Finally, there is the confusing picture of a pleurisy in children producing signs and symptoms of acute appendicitis. A diagnosis has to be established on its own merits, but it is imperative to remember that no child should be subjected to abdominal operation without a careful examination of the chest.

Treatment in the early stages of effusion is directed to making the patient as comfortable as possible. Painting the side with iodine and the use of codeine gr. 1/8 to 1/4 by mouth will do much to allay the pain. The use of a tight binder for limitation of respiratory movement is preferable to adhesive tape, in that it permits repeated examinations with a minimum of discomfort to the patient. The application of a hot water bottle or electric pad will further aid the control of distressing pain. Fluids should be restricted, although not prohibited, for fluids may be the only food the patient can tolerate. The usual attention to the bowels is all that is required. Repeated saline purgatives are radical and extremely weakening.

The treatment of the effusion should be conservative. So long as the inflammatory process is present, fluid will form. While fluid is present, it is fulfilling two functions: 1. It is causing collapse of a lung which is the seat of a tuberculous process, however slight. 2. It is maintaining separation of inflamed surfaces. These two functions in themselves are very important. Further, observation has shown that the majority of effusions will in time absorb spontaneously and that aspiration during the febrile phase has little, if any, effect on the temperature, for the reason that the effusion is the result of the inflammatory condition in the pleura and this inflammatory condition, not the effusion, causes the fever. The small effusion, therefore, requires confirmatory diagnostic puncture. Larger effusions require special or individual attention.

The only definite indication for aspiration is respiratory embarrassment, which is due to displacement of the heart and poor aeration, secondary to altered intrapleural pressures. The function, therefore, of aspiration is the re-adjustment of the normal intra-thoracic relationships. Not only is aspiration of a large amount of fluid rarely necessary, but it may be actually dangerous, for a relatively sudden swing of the mediastinum, following on rapid aspiration, can produce very untoward symptoms. Subjectively, the function of aspiration is the comfort of the patient. It is not advisable to undertake the withdrawal of a large amount of fluid (say over 700 c.c.) without facilities for the introduction of air at intervals. Furthermore, the introduction of air requires an exact knowledge of the amount of fluid removed, and the amount of air introduced. A pneumothorax apparatus is desirable for this procedure. A working principle, which varies widely with certain cases, is to introduce 50 c.c. of air for every 100 c.c. of fluid removed.

The particular apparatus for aspiration is a matter of choice. If a Potaine Aspirator is used, a low negative pressure in the bottle should be employed. The use of syringes or an aspirator involving the principles of a syphon is,

we believe, safer and preferable. A one-way stopcock, with adaptor to fit the needle on one end and the particular aspiration unit on the other, is indispensable if air in controlled amounts is to be introduced into the pleural cavity.

The after treatment of a patient with wet pleurisy is, if anything, of greater importance than that of the acute stage. Wet pleurisy is definitely a precursor of pulmonary tuberculosis, and unless fibrosis of the tuberculosis pleura is established at this time, parenchymal involvement of the lung will develop in a large percentage of cases.

A general plan for treatment is as follows: 1. An X-ray of the chest as soon as possible to determine accurately the condition of the lung parenchyma. 2. Six months of supervised rest treatment, some of which time should be spent preferably in a sanatorium for the purposes of satisfactory convalescence and education. 3. X-ray plates of the chest should be taken every six months for two years after the acute illness, and then every year for a considerable period of time. To avoid pulmonary tuberculosis in these patients, eternal vigilance on the part of the physician is necessary. If disease in the lung substance is found at any time, then treatment for actual pulmonary tuberculosis is, of course, indicated.

In conclusion, pleurisy with effusion means that the patient has been infected with tubercle bacilli. The responsibility of the physician should not end with the affected individual, but rather should he examine, or refer for examination, all intimate contacts of the patient to ascertain the source of the infection. In this way only can the catastrophe of pulmonary tuberculosis be avoided.

HOUSING OF TUBERCULOSIS FAMILIES

The Middlesbrough scheme enabling tuberculous persons and their families to be housed on one of the Corporation estates, is the subject of a note in the annual report of Dr. C. V. Dingle, M.O.H. Up to the end of December, 1933, 37 families had been housed under this scheme and 32 families were still occupying their houses at that date. Dr. F. J. Henry, T. O., writes: "The results of the above scheme up to now have been excellent, and the number of new cases of tuberculosis arising among these families who have been in contact with infectious persons, is practically negligible. The annual sum allocated for assisting the payment of rent is £500, and the subsidy for each family has been scaled according to family income in relation to the size of the household. In the annual report of the Ministry of Health for 1932, reference is made to the effort Middlesbrough is making in this rather exceptional attempt to prevent the spread of tuberculosis, and it is quite likely that the success of this scheme for the prevention of tuberculosis, especially among the child contacts with persons in the house suffering from tuberculosis, will be emulated in future by other local bodies." Dr. Henry adds that, generally speaking, the amount of money spent throughout the country for the prevention of tuberculosis is out of all proportion to the expenditure on methods to prevent the spread of tuberculosis and that the comparatively small cost to the community of a subsidised housing scheme is likely to achieve results in prevention far beyond the costs incurred in the treatment in sanatoria of only a few patients.—*The Medical Officer*, 16 February, 1935.

CASE REPORTS

Medical Treatment of Pyloric Stenosis.

Sept. 16th, 1936. Patient L. W. admitted to the public ward, Service of Dr. Carney; age 7 weeks.

Personal History—Normal full term infant. Weight at birth 7 lbs. 1 oz. Was nursed in hospital for ten days. Small amount of vomiting but child gained weight. One week after leaving hospital the baby was weaned, because of vomiting which occurred after every meal, usually immediately but sometimes delayed, but never more than twenty minutes. Practically the whole of the feeding was lost, although the vomiting was not of the projectile type. The infant lost considerable weight; the appetite was good; sleep was good. The stools were infrequent but were of normal colour and consistency. No history of infection; Kahn test negative at birth.

Physical Examination—White male infant in an extreme state of emaciation and moderate dehydration; weight 5 lbs. 8 ozs.; skin loose, dry and wrinkled; no subcutaneous fat. Heart and lungs negative. Mouth;—tongue and gums clean and moist. Throat negative. Abdomen;—The abdominal wall was very thin. No tenderness. On inspection waves of peristalsis were easily seen moving from the left costal margin downwards and to the right. These were much more pronounced on the giving of food or water. After several examinations a small mass was felt in the mid-clavicular line below the right costal border.

A diagnosis of congenital hypertrophic pyloric stenosis was made. As the baby was in such a severe state of emaciation it was believed that he could not stand the shock of an operation, though myopylorectomy seemed sorely needed; however our surgical consultant came out flatly against operation on an almost moribund child. It was then up to the Medical Service and the question was, apart from other measures, what to feed the baby. He had been on, prior to this time, various milk mixtures, whey and glucose mixtures, with no lessening of the vomiting and with continued loss of weight. Thick mixtures, along the principles of Sauer were thought of, as it was recognized that the baby must have a food of small bulk and that it must be concentrated. It is practically impossible for vomiting to occur if a very small quantity of highly concentrated food be given at reasonable intervals. We felt that milk thickened with cereals would not be concentrated enough so we decided to try undiluted condensed milk feedings, being a food highly concentrated and of high caloric value, after the method used in the Infants Hospital, London. The treatment is begun by giving the infant one dram of sweetened condensed milk at a time from a spoon, at three or four hours intervals, and two and a half hours after each milk feeding the baby is allowed to take as much water out of a feeding bottle as he likes, and to encourage him a little orange juice or sugar is added to it. As a rule part of this fluid is returned but uncontaminated with milk residues, proving that the condensed milk has left the stomach before the water is taken. So the following treatment was instituted. One teaspoonful of undiluted sweetened condensed milk was given from a spoon, every four hours, and 2½ hours after each spoon-

ful of milk 2 ounces of water was given. It was found that the milk was taken well and after the first few doses there was no vomiting, beyond an occasional mouthful of clear water; and almost immediately there was an improvement in the bowel movements; they became more bulky, more frequent and of a normal colour; showing that the condensed milk was being passed through the pylorus, as the eructations of clear water had suggested. Three days later, the infant's condition, being extremely poor with subnormal temperature and a rapid pulse, the amount of milk was increased to $1\frac{1}{2}$ teaspoonsful at the same interval and with the same amount of water, $2\frac{1}{2}$ hours after it.

One week later the amount of condensed milk was increased to two teaspoonsful, and from this point on improvement was marked and rapid, in every way. From this time on the feeding was gradually increased and also the water, until at the end of eight weeks four teaspoonsful of condensed were given followed by three ounces of water flavoured with a few drops of orange juice. The weight was now 6 lbs. 8 ozs. a gain of one pound and two ounces.

No change was made in the feedings for a month during this time a further gain to 7 lbs. 6 ozs. was made, notwithstanding the fact that during this period the infant developed nasal diphtheria, with a temperature of 104, was given antitoxin and continued to run a temperature for some days. Following the diphtheria he developed a pustular eruption, wide spread, sufficiently severe to require incision of several small abscesses. The feedings were now increased to 5 teaspoonsful of the condensed milk, $3\frac{1}{2}$ ounces of orange water and a $\frac{1}{4}$ teaspoonful of egg yolk added, and remained at this for two months.

This little patient seemed most unlucky, perhaps he was prone to infections, he developed a series of them, among which was acute Otitis Media Purulenta, the otorrhoea persisting for sometime, a cervical adenitis which required incision for drainage, and a few minor ones, but in spite of all these he continued to gain weight, putting on two pounds and even during the periods of high fever, there was only a very occasionally small emesis. The feedings during all these attacks were well taken and the stools were normal. After these two months of many vicissitudes the feeding was increased to six teaspoonsful of condensed milk, and four ounces of barley water in place of the plain water was given as before. Measles being epidemic in the hospital, the baby contracted the disease, but sailed through it in a mild way with no digestive disturbances and continuous weight gain.

On May 3rd, seven months after the treatment was started, the patient weighed 14 pounds. was in a good state of nutrition, colour was very good, he was bright, cheerful, strong and showed no evidence of rickets, etc.; and as for the last few weeks no evidence of peristalsis could be made out, and as the vomiting had entirely ceased, cereals and rusks were added to the diet and were well tolerated; then the barley water and the condensed milk were combined and given every four hours in the usual manner. There is now no vomiting and the child not only seems well in every way but he is a particularly bright, robust, cheerful, active little baby.

This case is interesting as a feeding problem. On admission the condition seemed hopeless, so bad that operation was turned down, during the baby's stay in the hospital, there were many hazardous complicating factors, as diphtheria, suppurative adenitis, otitis media, measles, pyoderma, yet on the treatment outlined the vomiting was not only controlled but the child in spite of all these adverse factors, triumphantly rode to a complete recovery.

In using condensed milk one of the difficulties is to give it in exact quantities. It is some help to know that one ordinary teaspoonful filled to the

brim, but not coated on its lower surface or up the stem, contains about three drams by weight of condensed milk, and since the caloric value of condensed milk is 100 per ounce (by weight) it is easy to calculate the number of teaspoonfuls the child requires in the 24 hours to afford the required number of calories. A further check on the accuracy of the dosage is the knowledge that one tin of condensed milk holds about fourteen ounces by weight, so that if, for instance the infant's requirements are 700 calories a day, a tin of condensed milk should last two days.

F. A. MINSHULL.

Subarachnoid Haemorrhage.

Feb'y 11, 1935. Master A. W. Age 13 years. White.

HISTORY

Complaints. Physician was called as parents became alarmed when boy could not be aroused from sleep.

Personal History. Had always been in good health.

Family History. Mother died of pneumonia. Father, four brothers and two sisters living and well.

Present Illness. Went to bed Saturday evening Feb. 10th feeling as well as usual. Awakened at 10.00 a.m. Sunday morning with no complaints, read the funny papers then dressed and came down stairs to breakfast at 11.00 a.m., but apparently did not feel hungry (which was quite unusual for him) as he immediately went back to his room without making any comment; a few minutes later his step-mother went to his room and found him in bed apparently asleep; he did not answer when spoken to. At 12.00 they heard him vomiting but as he could not be aroused they became alarmed and sent for a physician.

Examination. When examined at 12.15 he was in bed partly dressed, unconscious, pulse 68 and very weak, resp. 22, temp. 97, pupils moderately dilated, reflexes all negative with the exception of a positive Babinski. Catheter specimen of urine negative for albumin and sugar. During the afternoon he had three or four vomiting spells and at times he appeared very pale, and at times cyanosed. At 4.00 p.m., reflexes strongly positive, head retraction and pupils contracted. At 8.00 p.m., condition unchanged except that he opened his eyes but could not speak. Shortly after this he was admitted to hospital and it was apparent that he suffered a paralysis of his right arm and leg. A lumbar puncture revealed blood-stained fluid under moderate pressure and 10 c.c., was removed. A few hours later another lumbar puncture was done and 10 c.c. of very bloody fluid under marked pressure was removed. Shortly after this there seemed to be some improvement in his condition.

PROGRESS NOTES.

Feb'y 12. During the night was very restless, complaining of pain in the left side of head. Another lumbar puncture and 25 c.c. of bloody fluid, under marked pressure, removed.

Feb'y 13. Complains of pain in head but seems brighter. Able to move right arm a little.

- Feb'y 14. Restless and vomiting. Lumbar puncture with removal of 25 c.c. of bloody fluid.
- Feb'y 16. Improvement noted; able to move limbs more freely; some rigidity of neck muscles still present.
- Feb'y 17. Vomiting some; severe headache; removed 25 c.c. straw colored fluid under moderate pressure.
- Feb'y 21. Continued improvement, with slight headaches, up until to-day when headaches increased in severity with vomiting. Does not seem so bright. 25 c.c. bloody fluid again removed under marked pressure.
- Feb'y 22-25. Continued improvement generally, slight headaches and occasional vomiting.
- Feb'y 26. Severe headache. 25c.c. clear fluid under marked pressure removed. Slight rigidity of neck.
- Mar. 4. Lumbar puncture with removal of 25c.c. clear fluid under considerable pressure.
- Mar. 7. Condition not so good; headache vomiting and says he feels generally bad. 25c.c. blood tinged fluid under slight pressure removed. Says he felt much better very soon after this was done.
- Mar. 8-15. Slight headaches but otherwise recovery steady and uneventful.
- Mar. 16. Lumbar puncture, fluid normal as to color and pressure.
- Mar. 17-29. During this time he continued to improve steadily until his discharge on Mar. 29. Two more lumbar punctures were done during this period and both were normal.

During his stay in hospital his temperature varied from 99 to 100 until Mar. 2 when it became normal until his discharge.

Examination of the first clear specimen of spinal fluid taken on Feb'y 26 was as follows: Appearance, Cloudy. Cell Count, 15. Protein, 50 mg. per 100 ml. Copper red, Normal. Chlorides, 680 mg. per ml. Lange Curve, 0000000000. Kahn test, Neg. Red Blood Cell None, No organisms of any kind seen.

G. RONALD FORBES,
Kentville, N. S.

Dr. J. H. Couch, Fellow in Surgery, University of Toronto will take as his subjects at the annual Refresher Course "Recent Advances in treatment of Fractures" (slides and models), and "Injection Treatment of Varicose Veins and Haemorrhoids".

PHYSICIAN WANTED

Mr. W. T. Penney of Caledonia, Queens County, has written to the Secretary asking him to secure a physician for that district. Any Doctor interested may secure full particulars by communicating directly with Mr. Penney.

**THE
EIGHTY-THIRD
Annual Meeting
of the
MEDICAL SOCIETY OF
NOVA SCOTIA**

will be held at Halifax in co-operation with the Dalhousie Medical School Fifteenth Annual Refresher Course from

**AUGUST 31st to SEPTEMBER 4th
(Inclusive)**

Headquarters - NOVA SCOTIAN HOTEL

Features:

An excellent scientific programme.

The matter of federation with the Canadian Medical Association.

A good time for all in the spare moments. The local Committee have arranged with golf, tennis and swimming clubs for guest membership for members and their families so bring along your golf bag, your tennis racquet and your swim suit.

THE PROGRAMME IS
PUBLISHED ELSEWHERE

when attending
the MEDICAL SOCIETY OF N



The NOVA SCOTIAN
HALIFAX, N. S.

Make reservations now by communicating
with the Resident Manager.

A CANADIAN NATIONAL RAIL

NOVA SCOTIA CONVENTION *stay at* THE NOVA SCOTIAN

The Nova Scotian has been chosen as Headquarters for the Convention of the Medical Society of Nova Scotia from August 31st to September 4th. It is the acknowledged headquarters of Maritime business and social activity, because of its convenience to railroad and steamship traffic, and because it is the hub of the city of Halifax.

Make The Nova Scotian your headquarters too. Its beautifully appointed public rooms, its comfortable and tastefully furnished guest rooms have been planned to make your stay an enjoyable one. Thoughtful, efficient Canadian National service at every turn, and many little personal services that will make you feel entirely at home.

On your way to or from the Convention, stop off at Pictou Lodge at Pictou, N.S. for deep sea fishing, surf bathing, boating, golf. A perfect spot for a vacation.

WAYS HOTEL OF DISTINCTION

[SOLUS]

Ultra Short Wave Therapy Unit

We have pleasure in announcing the new SOLUS Ultra Short Wave Therapy Unit—entirely designed and produced in Canada. Wavelength 6 metres or 50 megacycles.

Power input 800 watts, with approximately 380 watts in the patient's circuit.

Employs full wave rectified direct current on the oscillator tubes—ensures deep penetrating heat with unusually long tube life.

Beautifully constructed and finished—an electrical engineering masterpiece.

Price Complete, \$495

Further details gladly furnished. Immediate delivery.

Distributor for the Maritime Provinces

DR. JOSEPH HAYES,

82 Oxford Street, Halifax, N. S.

SOLUS ELECTRICAL CO.

(CANADA)

Manufacturers of X-Ray and Electro-Medical Equipment

92 JARVIS ST., TORONTO

PROGRAMME OF ENTERTAINMENT

The Annual Meeting of the Medical Society of Nova Scotia

Tuesday, September 1st.—11 A.M. Coffee party for the ladies.

Wednesday, September 2nd.—Afternoon tea for the ladies.
3 P.M. Annual golf tournament and a sailing party R.N.S.Y.S. for the men. 8 P.M. Bridge for the ladies: Annual Dinner for the men, Nova Scotian Hotel. 10.15 P.M. Dance, Nova Scotian Hotel.

Thursday, September 3rd.—Motor drive to Hubbards for the ladies.

The Nova Scotia Medical Bulletin

Official Organ of The Medical Society of Nova Scotia.

Published on the 5th of each month and mailed to all physicians and hospitals in Nova Scotia. Advertising forms close on the 15th of the preceding month. All Mss should be in the hands of the Business Editor on or before the 10th of the month. Subscription Price:—\$3.00 per year.

Editorial Board, Medical Society of Nova Scotia

DR. N. H. GOSSE, Halifax, N. S.

Editor-in-Chief

DR. J. R. CORSTON, Halifax, N. S.

DR. A. L. MURPHY, Halifax, N. S.

and the Secretaries of Local Societies

It is to be distinctly understood that the Editors of this Journal do not necessarily subscribe to the views of its contributors, except those which may be expressed in this section.

VOL. XV.

AUGUST, 1936

No. 8

MEDICAL EDUCATION AND THE DALHOUSIE REFRESHER COURSE.

MEDICAL education is an evolutionary process. It is a continuous never-ending unfolding, not only in the realm of the scientific and technical but in other directions, in which it provides opportunity and responsibility unknown to the practice of Medicine of an earlier day. We say the *practice* of Medicine because we are told that in the days of Hippocrates the *ideal* was proclaimed that "Medicine should continuously endeavour to improve the quality of its service by increasing the efficiency of its members." It is only relatively recently however that we have come to bring that ideal into the realm of practical Medicine, and it is now everywhere evident, because of this, that changes have been so great and so rapidly effected that virtually our evolution has become a revolution.

Nothing should be more natural then, though it is difficult not to be surprised at the spectacle, than to find that many thousands of doctors feel impelled each year, because of this acceleration in medical evolution, to attend some gathering where new chapters in Medicine are presented and where old ones are re-interpreted. "Clinical Congresses", "Post-graduate Medical Assemblies", "Post-graduate Courses", "Annual Meetings" etc., are the names, familiar to us all, under which they gather.

When one seeks to examine the forces that produce this effect one finds the fact that the educational process has so increased its speed that the past forty years or so show a greater accomplishment than do the preceding thousand years, and it might be suggested that our accelerated post-graduate activities are the natural result of our desire to keep abreast. That is obviously an inadequate explanation, nor do we find one at all satisfactory until we include consideration of the changes which we have undergone as a profession in consequence of social exigencies. There would seem to be no doubt but that the trend is very definitely away from the pursuit of the culture of Medicine and towards the more dynamic response to the increasingly strong demands of

our social order. An interpretation which has been suggested for this trend is that Medicine, which was for so long aloof from social considerations has been finding its soul and is endeavouring to serve.

Dalhousie University would appear to have recognized the truth which inheres in some of this, and through her Medical faculty translates that recognition into the effort which we know as the *Dalhousie Refresher Course*. By it she annually reiterates the fact that medical education does not culminate in the granting and receiving of a degree but is a process that must continue throughout our lives, and for sixteen years now she has made this course a modest reminder of that fact. Though really an extension of the Dalhousie medical course yet she welcomes graduates from any other school and from any other province or country and under the same terms—a registration fee that is merely nominal.

That it fills a very real place in our scheme of things no one doubts who has noted how that the attendance has been maintained from year to year and how that among its most regular attendants are some of our most forward-looking medical men. That it costs a good bit for a man to leave his practice for several days must often bring up the question "Can I afford it"? But in the nature of things, should not the question rather be Can I afford not to go? Can I afford not to take the stimulus that it would mean to my work? Can I afford not to endeavour to so extend my usefulness to my people? And finally—for the ego instinct has a right to be satisfied also—can I afford to deny myself the pleasure of fraternizing with my fellows and of contributing my bit to the value of corporate unity, and can I deny myself the joy that accrues from enhanced usefulness? In this regard Ruskin's statement will be readily subscribed to by all our readers: "The training which makes men most serviceable to others makes them happiest in themselves."*

The fact that this year again the Dalhousie Refresher Course and The Nova Scotia Medical Society meet jointly, and that the latter has very important matters to discuss is additional reason why the attendance this year should be the largest possible.

N. H. G.

*With apology to Ruskin for the change of emphasis.

NOTICE

All Doctors attending the annual meeting are kindly requested to wear their identification badges.

Programme Eighty-Third Annual Meeting of the Medical Society of Nova Scotia and Fifteenth Dalhousie Refresher Course

August 31st to September 4th, 1936, inclusive

Daylight Saving Time.

August 31st, 1936.

MONDAY

- 9.00 - 10.00 a.m.** Surgical Clinic, Dr. C. E. Kinley, Dr. A. L. Murphy.
Victoria General Hospital.
- 10.10 - 11.20 a.m.** Urological Clinic, Dr. F. G. Mack, Dr. G. A. Winfield.
Victoria General Hospital.
- 11.30 - 1.00 p.m.** Clinics (conducted simultaneously) by the Staff of the
Public Health Clinic.
- | | | | | | | |
|---------------|---|---|---|---|---|----------------------|
| Skin | - | - | - | - | - | Dr. F. G. Mack |
| Immunization | - | - | - | - | - | Dr. A. L. McLean |
| Minor Surgery | - | - | - | - | - | Dr. V. O. Mader |
| Well Baby | - | - | - | - | - | Dr. F. A. Minshull |
| Heart | - | - | - | - | - | Dr. C. W. Holland |
| Posture | - | - | - | - | - | Dr. J. C. Acker |
| Chest | - | - | - | - | - | Dr. T. M. Sieniewicz |
- 2.30 - 3.00 p.m.** Chairman: Dr. J. R. Corston.
"Protamine Insulin." Dr. C. H. Best, Professor of Physiology,
University of Toronto.
- 3.00 - 4.00 p.m.** (a) "The Problem of Maternal and Infant Welfare."
Dr. A. L. McLean.
- (b) "The Care of the Mother during Pregnancy and the Puerperium."
Dr. H. B. Atlee.
- 4.00 - 5.00 p.m.** Film: "Spinal and Intravenous Anaesthesia."
Dr. W. L. Muir.
- Discussion on Anaesthesia to be led by Dr. C. E. A. deWitt,
Wolfville, Dr. D. A. Campbell, Bridgewater, Dr. K. M. Grant, Halifax.
- 7.30 p.m. SPECIAL LECTURES AND DEMONSTRATIONS.**
Exhibit by the Department of Pathology, Dr. R. P. Smith,
Dr. G. A. McCurdy, Dr. N. H. Gosse, Dr. C. W. Holland.
- 8.00 p.m.** Meeting of the Executive of the Medical Society of Nova Scotia.

September 1st, 1936.**TUESDAY**

- 9.00 - 10.20 a.m.** Surgical Clinic, Dr. W. A. Curry, Dr. E. F. Ross.
Victoria General Hospital.
- 10.30 - 11.50 a.m.** Gynaecological Clinic, Dr. H. B. Atlee, Dr. W.G. Colwell.
Victoria General Hospital.
- 12.00 - 1.00 p.m.** Medical Clinic, Dr. Channing Frothingham,
Physician-in-Chief of the Medical Service at the Faulkner Hospital,
Boston, Mass.
- 2.30 - 3.30 p.m.** Chairman: Dr. K. A. MacKenzie.
"The Organization of a Community Hospital for the best of Service."
Dr. Channing Frothingham,
- 3.30 - 4.30 p.m.** "The Present Maternal Mortality Rate with Special
Reference to Labor." Dr. E. K. Maclellan.
- 5.00 p.m.** **SPECIAL LECTURES AND DEMONSTRATIONS.**
"Principles and Practice of Radiation Therapy." (Part I.)
Dr. S. R. Johnston.
- 8.00 p.m.** Business Session, Medical Society of Nova Scotia.

September 2nd, 1936.**WEDNESDAY**

- 9.00 - 10.20 a.m.** Medical Clinic, Dr. Channing Frothingham.
- 10.30 - 11.50 a.m.** Surgical Clinic, Dr. N. H. Gosse, Dr. J. A. Noble.
Victoria General Hospital.
- 12.00 - 1.00 p.m.** "The Present Status of Endocrine Therapy."
Dr. Channing Frothingham.
- 3.00 p.m.** Golf, Halifax Golf and Country Club. "Ashburn."
- 8.00 p.m.** Dinner, Nova Scotian Hotel, Medical Society of Nova Scotia.
(Dress informal).

September 3rd, 1936.**THURSDAY**

- 9.00 - 10.20 a.m.** Medical Clinic, Dr. K. A. MacKenzie, Dr. J. R. Corston.
Victoria General Hospital.
- 10.30 - 11.50 a.m.** Clinic by the Staff of the Children's Hospital at the
Public Health Clinic.

- 12.00 - 1.00 p.m.** "Differential Diagnosis and Treatment of Enlargement of the Superficial Lymph Glands." Dr. Ray F. Farquharson, Professor of Therapeutics, University of Toronto.
- 2.30 - 3.30 p.m.** Chairman. Dr. G. H. Murphy.
"Recent Advances in the Treatment of Fractures," (with slides and models), Dr. J. H. Couch, Fellow in Surgery, University of Toronto.
- 3.30 - 4.30 p.m.** "Infant Mortality and its Prevention."
Dr. Gordon Wiswell.
- 5.00 p.m. SPECIAL LECTURES AND DEMONSTRATIONS.**
"Principles and Practice of Radiation Therapy." (Part II).
Dr. S. R. Johnston.
- 8.00 p.m.** Business Session, Medical Society of Nova Scotia.

September 4th, 1936.

FRIDAY

- 9.00 - 10.20 a.m.** Surgical Clinic, Dr. H. K. MacDonald, Dr. V. O. Mader.
Victoria General Hospital.
- 10.30 - 11.50 a.m.** Medical Clinic, Dr. M. J. Carney, Dr. G. R. Burns.
Victoria General Hospital.
- 12.00 - 1.00 p.m.** "Injection Treatment of Varicose Veins and Haemorrhoids," Dr. J. H. Couch.
- 2.30 - 3.30 p.m.** Chairman: Dr. J. G. MacDougall.
"Diagnosis and Treatment of Conditions associated with Jaundice,"
Dr. Ray F. Farquharson.
- 3.30 - 4.30 p.m.** Clinico-pathological Conference, Dr. R. P. Smith
and Clinicians.

NOTICE—Clinics and lectures will take place in the Lecture Room of the Public Health Clinic unless otherwise indicated.

Echoes From Moose River

WE had thought to philosophize at some length on the following excerpts from letters received by the physicians in charge of Alfred Scadding, victim of the Moose River disaster. On second reading, we feel that they carry their own moral. St. Paul's three precepts are evinced to the full in all. And we are reminded that the greatest of these is charity.

"I do not believe Mr. Scadding's toes will have to be amputated, if you would try Dr. Thomas' Electric Oil. Perhaps you have; bathe freely, I believe you will get good results. I have used it and found it very beneficial for almost everything." A well wisher from Toronto.

"Surely it is all right for me to write you of the wonderful cures in gangrene, and worse disease, that have been made by the use of our own Dr. Beale's discovery. His plates have been shown at many big medical conventions, where he lectured. A large Dental Society has engaged him for a two hour lecture this month. He knows nothing of this letter but I just have to tell you, especially in regard to gangrene, and awful sores, and circulation." Sandwich, Mass.

"Interested and well wisher, wants to do something to help Mr. Scadding's feet. Simple cure but good. Have one or two lambs killed, remove some of the intestines, just enough to make room for his feet, plunge the feet into the lamb while it is *hot*, also take the skin and fold around his legs. This will draw all poison away. "God's" blessing rest on both you wonderful men. I will pray this will help. Pardon me but I am an old nurse."

"Pardon me for writing but there is a dear old lady living on our street who wishes very much to get this message to you both, and it will please her very much if you will kindly write and let her know you have received her message. She is 90 years of age and reads without glasses, and does her own mending, and she is so worried for fear the modern doctors do not know the value of onions soaked in kerosene or coal oil for all pain. She used it years ago when her feet were frozen and the longer the onions stand in the coal oil the better it is. Having thus fulfilled my promise and thanking you and wishing you well and speedy recovery I will sign the dear old lady's name and address." Toronto.

"We have been greatly interested in the recovery of Mr. Alfred Scadding and Dr. Robertson since their rescue from the terrible mine disaster, and from reports both are suffering from trouble in their feet. We have a mineral water discovered at a depth of 1,732 feet, which has given wonderful results for rheumatic pains, eczema, varicose ulcers, etc., as you will notice by copies of original testimonials which we have enclosed. We recommend using a solution of one of mineral water to four of ordinary water

at first, then as the solution improves a stronger solution can be used. We are sending you one gallon prepaid, and will be pleased to send more if necessary. Hoping this meets with your approval, and gives you some assistance in bringing about the complete recovery of these men, a reply would be very much appreciated." Inglewood, Ont.

"Hope you will pardon the liberty I am taking in writing you. It is with regret I have learned that amputation may be performed. I would certainly like the following to be tried on the toes. Take a bucket, fill with bran and butter-milk, to this add handful of salt, put on warm as a poultice. I have heard of this cure for years. Trusting you may have a speedy recovery." Peterboro, Ont.

"The newspapers give considerable prominence to the infected feet of Scadding. The statement is made that it is "trenchfoot", which may or may not be the case as newspapers so often do not give the facts as understood by the physicians in charge. I am a practicing physician and surgeon and am offering this suggestion, which may be you have or are trying. Where I practice we have had a great many "trench foot" and "athletic foot" cases. I have had uniformly good results in treating them with the "quarz" light, not the water cooled, but the regular body grid. I have had no failures in a long series of cases."

"I trust you accept this suggestion in the spirit it is given. I do not want any publicity, or notoriety, I am an ethycal practitioner, as you are yourselves, but if a suggestion will be of help I will be very happy. If you are using the ultra violet, no harm is done. I do not practice in Detroit, but just happen to be passing through. Trusting that all will be well with the sufferers." New York.

"I wrote some time ago to Dr. D. E. Robertson. He may not of got my letter, as he left Halifax before it could get there. I mentioned in it about Fluid Extract Pichi which i am sure it would of helped your feet and legs. So by all means please try and get your Doctors to get some for you. The latin name is called Fabianna Imbricata, and there is not 5 per cent of Doctors or Druggists who know about it, I have been using it 32 years and i know what i am talking about. I am not selling it or advertising it, but I have never yet failed to help or cure anyone i recommended it to. Its good for anything pertaining to kidney trouble also good for some cases of spinal trouble. only a week ago i cured a fellow worker of malaria in his legs inside of 3 days the malaria had left him which he claimed he had for two years and was laid up in bed a week at a time with it. But by all means do not let them take your toes off. Give the Pichi a trial if anything can help you it will. You can take about 40 drops in a glass of water about 4 times a day and drink enough water in between as it works the Pichi better. If the world only knew how good it was they never would be without it. $\frac{1}{2}$ onz bottle which cost 20c. would cure a dozen ordinary cases. But when you tell some people about it they think you are a nut. Dr. Robertson has a brother here in Chicago at 307 N. Michigan Ave., who could get the Pichi here for you, if they have not any in Halifax, or i would be only too glad to send you $\frac{1}{4}$ pint bottle free. But remember it is not a case of selling or advertising. Its for Humanity's Sake.

So if you still have your toes please give it a trial, and you will reap some benefit and probably cure you. Two firms in this country quit making Pichi as there was no demand for it, Parke & Davis, of Detroit, Mich., and John Wyeth & Brother, of Philadelphia. Only one firm makes it now, Lilly of Indianapolis, Ind., who have branches in New York, St. Louis and Chicago. But some English firm make it and you may be able to get it in Halifax. I was born and raised in Toronto. I get the Toronto Star every day and since your trouble at the Moose River Mine I get the Halifax Chronicle. 40 drops in a full glass of water. Anything is better than amputation. I am not telling you where to get it, but by all means do insist on it. All that soreness and pains will pass out in your urine. So good luck to your feet and legs." Chicago, Ill.

"Reading about you in the paper of your sad case all through, and if they find they can't do anything for your feet, I would like for your last hopes for to try a good poultice of fresh cow manure from a healthy cow, this is some dose I know but I know two men, one my grandfather, they were going to take his leg off and I have heard of other cases which saved them. Put it right on it I in fact had a case of my own big toe." Yours (anxious) from Dundas, Ontario.

"I learned from a news account of the seriousness of your infected feet. Cannot recall name of Doctor or Hospital, but am hoping this suggestion may prove helpful, and that it will reach the proper persons. I have been studying and observing the fungus which causes trench-foot for twelve years. Have observed some two hundred people suffering from various forms of fungus infection; have made hundreds of tests, and experimented with various treatments, and find that alternate poultices of sol. of epsom salts, then one of cod liver oil is quite effective. Internal doses of the same given alternately has affected a cure. Following these treatments, or in conjunction with them, the application of the rays from a large sized light globe, 100 c.p. has proven quite effective. I used this treatment for a most serious case of erysipelas, for trench foot, and so called ring-worm, for severe cases of sore throat, and intestinal influenza. I believe all these plus angina-pectoris, asthma, gastritis, and many so-called acid conditions are due to the invasion of a fungus. Hoping for your complete recovery, I am, just an amateur bacteriologist from Indianapolis, Indiana."

"Explaining my night letter sent to you this evening. Like all of Canada and most of the world I have followed with anxious interest the progress of Dr. Robinson and Mr. Scadding since their miraculous rescue from their terrible ordeal. My anxiety for Mr. Scadding's recovery prompted the wire. I trust that you will not consider me presumptuous in offering these suggestions and sincerely hope that under your skillful care the feet may be saved and that both Dr. Robinson and Mr. Scadding have entirely recovered. You possibly have used the light treatment I mentioned. I have never seen anything give better results and I have used it and seen it used in the most extreme cases of gangrene. Either method is very simple and effectual. The only care necessary being to avoid burning by continuous movement of the 200 watt lamp and at a safe distance. The late Dr. of New York, where gangrene is very common among the Russian Jews, after trying many means of treatment found this the most satisfactory and his results approached the miraculous.

He favored the continuous use for hours of the radiant heat and used a 50 watt lamp at such distance to avoid possibility of burning. With kind regards and very best wishes for the speedy recovery of your patients, I am, fraternally yours, London, Ont. Ultra violet usually prescribed, in my experience, may as well be neglected and dependence put on radiant heat alone."

"Case Wm.: retired farmer, age 60; most gangrene rt. foot; toes, heel and sides of foot, cause unknown. Patient unconscious, delirious, temp. 101-102, when seen in consultation with three other doctors who said amputation only resort but agreed patient would die. Radiant heat from 200 Watt lamp A.M. & P.M. at 8 to 24 inches distance kept constantly on the move over leg and foot until skin well reddened; 30 minutes each treatment or more. Foot recovered; no recurrence. Patient alive and well. Some years later sugar found in urine for first time. The secret of success on this treatment is patient persistence."

"I notice that you fear that gangrene will develop in Mr. Scadding's feet. My father was cured of gangrene in his foot, which developed from infection caused by trimming a corn on a toe with a razor. Dr. Harvey's anti-septic ointment was what we used. It is made in Saratoga Springs, N. Y. It may be your druggist may have it. My father suffered such excruciating pain that the Doctor used everything he could think of to relieve it, but with little success until we heard of this Dr. Harvey's anti-septic ointment. It relieved the pain at once and he slept peacefully after the second dressing. Hoping this may prove of benefit and that you can procure the ointment in time." Very truly yours from Pueblo, Colorado.

Anahaemin B.D.H.

The British Drug Houses Limited report that they have undertaken the manufacture on a commercial scale of the active haematopoietic liver principle described by Dakin and West (Journ Biol. Chem. 1935, cix. 489).

The clinical trials of Anahaemin, B.D.H. arranged by the Medical Research Council, London, England, were published in the "Lancet", February 15th, 1936, page 349. These trials demonstrate that by the use of Anahaemin, pernicious anaemia can be treated successfully with the minimum of inconvenience and expense.

One injection of 2 c.c. of a solution containing 200 mgm. of Anahaemin, produces an immediate reticulocyte response, followed by a striking increase in the number of red blood corpuscles which is sometimes maintained for a period of over thirty days. In many cases, one such injection at monthly intervals will constitute effective treatment, indeed, according to the report "...no other liver extract given in the small amounts used...has produced such striking results".

Anahaemin, B.D.H. is available in ampoules of 1 c.c. and 2 c.c. in boxes of 3's and 6's, from principal drug stores, and descriptive literature is available on application to The British Drug Houses (Canada) Limited, Terminal Warehouse, Toronto.

Notes and Comments

At the Annual Meeting of the Cape Breton Branch of the Nova Scotia Tennis Association held recently Dr. B. C. Archibald of Glace Bay was elected President for the coming year.

Dr. H. V. Kent and Mrs. Kent of Truro, were recent visitors to Montreal to assist at the marriage of their daughter, Helen Tupper, to Dr. William Daggett Norwood of South Carolina. The ceremony was performed by Rev. Henry Dickie, a native of Stewiacke and uncle to the bride, and the wedding march was played by Dr. Alfred Whitehead, formerly an organist in Truro. Dr. and Mrs. Norwood will reside in New York.

Dr. Florence Murray, well known medical missionary to Korea, after visiting many friends in Nova Scotia, is now visiting with her parents, Rev. and Mrs. Robert Murray at Bedford.

We have often heard and read much of "The High Cost of Living" but some one from the Country, River John, to be exact, now complains of the High Cost of being buried. Perhaps that is our own fault, for if one has not made a great success in life, why grudge him the swellest funeral he can get? He needn't worry about its cost.

A Book Review. With the present day talk of health insurance, state medicine, adequate hospitalization, education of the public in health matters and all allied subjects, a book that should be of general interest to the medical profession has been recently published. It is entitled "Economic Problems of Medicine", was written by A. C. Christie M. S., M. D., Professor of Clinical Radiology, Georgetown University Medical School, published by the Mac-Millan Company and sold in Canada by McAinsh & Company, Toronto. All members of the Profession should study this presentation of these present day problems for they are of vital interest to us, as well as our patients.

How comprehensive it is may be noted by its chapter headings, which are these:—

- (1) Medical Ethics in its relation to medical economics.
- (2) Economic aspects of medical education.
- (3) Economic aspects of the private practice of medicine.
- (4) The physician and the hospital, group hospitalization.
- (5) The relation of the physician to medical organization.
- (6) The relation of the physician to the community. Taxation for medical care.
- (7) Medical care and Medical Compensation Boards.
- (8) Health Insurance, voluntary and compulsory.
- (9) Industrial Medicine, Contract Practice.
- (10) New methods of medical care under trial or recommended by medical organizations.

- (11) Health Insurance as a solution to the problems of medical care.
- (12) Essential elements in a comprehensive plan for medical care."

Perhaps someone will tell us what these chapters teach, and do they explain why the merger of the Medical Society of Nova Scotia with the Canadian Medical Association is only worth a saving of \$2.00 per year in fees? In other words union will cost 100 N. S. doctors \$8.00 per year more than they are paying now, and only a Journal for that amount as the visible gain, and that should not cost more than five or six dollars. Should a composite fee of \$15.00 be named, this federation might be considered, otherwise not.

From July 7th. to the 10th. very careful consideration was given to the many hospital problems that concern the people in these Maritime Provinces. The occasion was the meeting of N. S. & P. E. I. Hospital Association and that of the Catholic Hospital Association. Strange to say, while, of course financial matters came up for discussion, they were chiefly concerned with the payments for indigent patients. But all through the meetings there was a feeling that it was time to carefully look over the entire situation. Health Insurance was openly discussed. This is a matter one would expect to see considered by the Dominion as a whole, but, while the C. M. A. is looking for an amalgamation of all Provincial Societies with itself, the Federal Department of Health appears willing, if not anxious, to have the Provinces experiment with the matter individually. If each Province has to work out its own solution of this very vital matter, why have an amalgamation of our Provincial Societies?

The C. M. A. was represented at the Hospital Associations meetings by Dr. G. Harvey Agnew of Toronto who is always a welcome visitor to the Maritimes. Rev. H. G. Wright of Inverness and Mr. L. D. Currie of Glace Bay are, probably the two best versed laymen in connection with hospital work in this Province. Nor do they forget for a moment that the medical men need to make a living as well as any other portion of our population.

We have yet to learn why there need be two hospital Associations in these Maritime Provinces. If federation is desirable, which undoubtedly it is in principle, why would it not be well for our three Provinces to begin that federation. If we, whose interests are almost identical cannot agree, and if the federated Department of Health leaves the Provinces to solve their own problems, why amalgamate with the C. M. A.?

Incompatibles. In our pharmacology we learned much about Incompatibles; but the darky who said he 'had got religion' caught up his Minister in this manner. "Dat's fine" said the Minister, "But is you shure, Brothah, you is going to lay aside sin?"

"Yessuh, Ah's done it already."

"And is you gwine to pay up all yoh debts?"

"Wait a minit, Pahson, you ain't talkin' religion now, You is talkin' Bissness."

Department of the Public Health

PROVINCE OF NOVA SCOTIA

Office—Metropole Building, Hollis Street, Halifax, N. S.

MINISTER OF HEALTH - - - - HON. F. R. DAVIS, M.D., F.A.C.S., Halifax

Chief Health Officer - - - - DR. P. S. CAMPBELL, Halifax.
 Divisional Medical Health Officer - - - - DR. J. S. ROBERTSON, Sydney.
 Divisional Medical Health Officer - - - - DR. J. J. MACRITCHIE, Halifax.
 Director of Public Health Laboratory - - - - DR. D. J. MACKENZIE, Halifax.
 Pathologist - - - - DR. R. P. SMITH, Halifax.
 Psychiatrist - - - - DR. ELIZA P. BRISON, Halifax.
 Superintendent Nursing Service - - - - MISS M. E. MACKENZIE, Reg. N., Halifax.

OFFICERS OF THE PROVINCIAL HEALTH OFFICERS' ASSOCIATION

President - - - - DR. F. F. EATON - - - - Truro.
 1st Vice-President - - - - Dr. P. E. BELLIVEAU - - - - Meteghan
 2nd Vice-President - - - - DR. H. J. TOWNSEND - - - - Louisburg
 Secretary - - - - DR. P. S. CAMPBELL - - - - Halifax.

COUNCIL

DR. F. O'NEIL - - - - Sydney
 DR. G. V. BURTON - - - - Yarmouth
 DR. R. M. BENVIE - - - - Stellarton

MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

ANNAPOLIS COUNTY

Hall, E. B., Bridgetown.
 Braine, L. B. W., Annapolis Royal.
 Kelley, H. E., Middleton (Mcpy. & Town).

Murray, R. L., North Sydney.
 Townsend, H. J., Louisburg.
 Gouthro, A. C., Little Bras d'Or Bridge, (Co. North Side).

ANTIGONISH COUNTY

Cameron, J. J., Antigonish (Mcpy).
 MacKinnon, W. F., Antigonish.

COLCHESTER COUNTY

Eaton, F. F., Truro.
 Havey, H. B., Steviacke.
 Johnston, T. R., Great Village (Mcpy.)

CAPE BRETON COUNTY

Tompkins, M. G., Dominion.
 Fraser, R. H., New Waterford.
 Martin, H. J., Sydney Mines.
 McNeil, J. R., Glace Bay.
 McLeod, J. K., Sydney.
 O'Neil, F., Sydney (County), South Side.

CUMBERLAND COUNTY

Bliss, G. C. W., Amherst.
 Drury, D., Amherst (Mcpy.)
 Gilroy, J. R., Oxford.
 Stewart, Chas. E., Parrsboro.
 Eaton, R. B., River Hebert (Joggins).
 Walsh, F. E., Springhill.

DIGBY COUNTY

DuVernet, Edward, Digby.
Pothier, H. J., Weymouth, (Mcpy.)
Doiron, L. F., Little Brook.

GUYSBORO COUNTY

Chisholm, A. N., Port Hawkesbury, (M.H.O. for Mulgrave).
Sodero, G. W., Guysboro (Mcpy).
Moore, E. F., Canso.
Monaghan, T. T., Sherbrooke (St. Mary's Mcpy.)

HALIFAX COUNTY

Almon, W. B., Halifax.
Forrest, W. D., Halifax (Mcpy.)
Glenister, E. I., Dartmouth.

HANTS COUNTY

Bissett, E. E., Windsor.
MacLellan, R. A., Rawdon Gold Mines (East Hants Mcpy).
Reid, A. R. Windsor (West Hants Mcpy.)
Shankel, F. R., Windsor, (M.H.O. for Hantsport.)

INVERNESS COUNTY

Chisholm, A. N., Port Hawkesbury.
Boudreau, Gabriel, Port Hood, (Mcpy. and Town).
MacLeod, F. J., Inverness.

KINGS COUNTY

Bishop, B. S., Kentville.
Bethune, R. O., Berwick (Mcpy.)
de Witt, C. E. A., Wolfville.
Morash, R. A., Berwick.

LUNENBURG COUNTY

Marcus, S., Bridgewater (Mcpy.)
Reh fuss, W. N., Bridgewater.
Morrison, L. N., Magone Bay.
Zinck, R. C., Lunenburg.
Zwicker, D. W. N., Chester (Chester Mcpy).

PICTOU COUNTY

Blackett, A. E., New Glasgow.
Chisholm, H. D., Springville, (Mcpy.)
Bagnail, P. O., Westville.
Crummey, C. B., Trenton.
Dunn, G. A., Pictou.
Benvie, R. M., Stellarton.

QUEENS COUNTY

Ford, T. R., Liverpool (Mcpy.)
Smith, J. W., Liverpool.

RICHMOND COUNTY

Digout, J. H., St. Peters (Mcpy.)

SHELburne COUNTY

Brown, G. W. Clark's Harbour.
Fuller, L. O., Shelburne. (Town and Mcpy)
Wilson, A. M., Barrington, (Barrington Mcpy.)
Lockwood, T. C., Lockeport.

VICTORIA COUNTY

MacMillan, C. L., Baddeck (Mcpy.)

YARMOUTH COUNTY

Hawkins, Z., South Ohio (Yarmouth Mcpy).
Burton, G. V., Yarmouth.
Lebbetter, T. A., Yarmouth (M.H.O. for Wedgeport).
Chiasson, B. I., (Argyle Mcpy).

Those physicians wishing to make use of the free diagnostic services offered by the Public Health Laboratory, will please address material to Dr. D. J. MacKenzie, Public Health Laboratory, Pathological Institute, Morris Street, Halifax. This free service has reference to the examination of such specimens as will assist in the diagnosis and control of communicable diseases; including Kahn test, Widal test, blood culture, cerebro spinal fluid, gonococci and sputa smears, bacteriological examination of pleural fluid, urine and faeces for tubercle or typhoid, water and milk analysis.

In connection with Cancer Control, tumor tissues are examined free. These should be addressed to Dr. R. P. Smith, Pathological Institute, Morris Street, Halifax.

All orders for Vaccines and sera are to be sent to the Department of the Public Health, Metropole Building, Halifax.

Report on Tissues sectioned at the Provincial Pathological Laboratory from July 1st, 1936, to August 1st, 1936.

During the month, 219 tissues were sectioned and examined, which with 26 tissues from 6 autopsies, makes a total of 245 tissues.

Tumours, malignant.....	34
Tumours, simple.....	25
Tumours, suspicious.....	
Other conditions.....	160
Tissues from 4 autopsies.....	26

**Communicable Diseases Reported by the Medical Health Officers
for the month of July, 1936.**

County	Chickenpox	Diphtheria	Cerebro Spinal Meningitis	Influenza	Measles	Mumps	Paratyphoid	Pneumonia	Scarlet Fever	Typhoid Fever	Tbc. Pulmonary	Tbc.-other Forms	V. D. G.	V. D. S.	Whooping Cough	Erysipelas	German Measles	Glandular Fever	TOTAL
	Annapolis.....	1	6
Antigonish.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape Breton...	..	2	..	..	..	..	..	..	2	..	..	..	..	..	10	..	..	..	14
Colchester.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cumberland...	1	1	..	..	..	..	8	..	1	..	..	..	..	..	..	..	1	..	12
Digby.....	2	..	..	..	19	5	..	..	..	3	2	..	..	..	..	..	15	..	46
Guysboro.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	3
Halifax City..	2	6	..	..	1	..	..	..	19	1	6	..	..	..	2	..	..	..	37
Halifax.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hants.....	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2
Inverness.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Kings.....	..	..	..	4	..	1	..	..	..	..	1	..	2	1	2	..	..	..	11
Lunenburg....	..	3	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	4
Pictou.....	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2
Queens.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shelburne....	..	..	..	10	1	..	..	1	..	..	1	..	2	..	5	..	4	..	24
Victoria.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yarmouth.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL.....	7	12	..	14	28	6	10	1	23	4	11	..	6	1	22	..	23	1	169

Positive cases Tbc. reported by D. M. H. O's. 94.

RETURNS VITAL STATISTICS FOR JUNE, 1936.

County	Births		Marriages	Deaths		Stillbirths
	M	F		M	F	
Annapolis.....	14	11	9	8	5	0
Antigonish.....	17	10	7	14	8	3
Cape Breton.....	154	141	52	70	58	13
Colchester.....	29	20	22	14	7	2
Cumberland.....	35	36	49	13	15	3
Digby.....	18	13	16	13	12	3
Guysboro.....	17	16	14	10	13	3
Halifax.....	83	104	116	48	49	7
Hants.....	25	20	15	12	11	0
Inverness.....	19	12	3	9	11	2
Kings.....	32	30	29	11	15	2
Lunenburg.....	21	33	26	11	12	1
Pictou.....	36	37	37	13	16	2
Queens.....	14	11	4	7	5	2
Richmond.....	17	17	17	10	11	0
Shelburne.....	32	23	8	13	14	0
Victoria.....	6	6	0	2	2	0
Yarmouth.....	12	15	6	12	5	0
	581	555	430	294	269	43

One of a series of advertisements prepared and published by PARKE, DAVIS & CO. in behalf of the medical profession. This "See Your Doctor" campaign is running in *Maclean's* and other leading magazines.



The Friend that Hurts

NOBODY welcomes pain. Yet it can be a friend in disguise.

Without a sense of pain to flash "Stop!" at the first hint of physical injury, we would be constantly burning, cutting or otherwise harming ourselves.

Without pain's insistent "Do something about it!" when things go wrong inside the body, many serious conditions would not be discovered until too late.

Yet many people fail to recognize that pain is a *warning*. The natural impulse is to regard it simply as something to be stopped—rather than as a signal that other things may be radically wrong.

And this is a mistake that sometimes proves serious. For, when pain is deadened by self-treatment, one

can easily be lulled into a false sense of security. The warning has been stopped—but the trouble continues.

Moreover, pain has a mysterious side that makes self-diagnosis doubly dangerous. Some pains are "*referred*" or "*sympathetic*" pains. That is, they occur in one part of the body, but are caused by disturbances in an entirely different part.

For instance, headaches need not start from trouble in the head. Frequently the primary cause is to be found in remote parts of the body; a headache is not uncommonly the first symptom of one of the infectious diseases.

The stomach, too, is more often the seat of *pain* than of *disease*. Frequently when pain evidences itself there, it is because of trouble in the

heart, appendix, intestinal tract or other part of the body.

When a pain persists, or recurs frequently, there is only one sensible thing to do . . . see your doctor.

He can nearly always relieve your pain. What is more important, he can usually trace it to its source. And having located the trouble, he can take the necessary steps to correct it.

PARKE, DAVIS & COMPANY

WALKERVILLE, ONTARIO

*The World's Largest Makers of
Pharmaceutical and Biological Products*

OBITUARY

ERASED from the register of the Medical Society of Nova Scotia of which he was an Honorary Member is the name of Dr. George E. Buckley of Guysboro, whose death occurred on July 31st, at the place where he lived and worked for the good of the community and its people for the greater part of a century.

Dr. Buckley, the son of a Wesleyan clergyman, was born at Sydney, N. S., in the year 1847, so had almost reached the ninetieth milestone. He received his preliminary education in the Maritime Provinces, though not known as such at that time, and later graduated from Jefferson Medical College in the spring of 1867, and July 1st the same year began to practise in Guysboro. He often humorously remarked that July 1st, 1867, was a day of two great events in world history, viz., he entering the practice of medicine and Canada entering confederation. He completed his sixtieth year of continuous active practice in 1927 when forced to retire, following an accident, but he continued doing office work until 1934, thus rounding out sixty-seven years of ministering to sick and suffering humanity. To be actively engaged in the practice of medicine for sixty or more years is really hard for us to grasp. That span of time in itself is a good long life time. Those of us who think we are entering the veteran class can only be considered as fledglings by comparison.

To know Dr. Buckley was to appreciate him, and his name will long be a household word in Guysboro County. His book of reminiscences covering over half a century of toil and hardship, joy and sorrow, methods of practice and the changes, mode of travel, and so forth, would be interesting, instructive and entertaining. It will be hard for the people of Guysboro to realize that Dr. Buckley's familiar figure is gone from their midst; the little man with the white hair, round face, pink complexion, bright eyes, sunny smile, the keen sense of humour and ready wit. He served the generations long and well setting up a standard of citizenship and devotion to the profession well worthy of emulation. The large number of people that attended the funeral service was a tribute to the respect and esteem in which he was held by the citizens of his beloved Guysboro.

There passed away on July 17th in the 99th year of her age, Elizabeth (Bessie) Bell Bond Gray, widow of the late George Guthrie Gray, of Sydney, C. B., and of Yarmouth, and daughter of the late Dr. Joseph B. Bond of Yarmouth, and last surviving grandchild of Joseph Norman Bond, surgeon of Cornwall, England, and of Yarmouth, who with his Cornwallis forces surrendered his sword to Washington at Yorktown, Virginia, in 1781. The funeral services were held from Holy Trinity Church, Yarmouth, N. S., on Sunday afternoon, July 19th.

Dalhousie University

HALIFAX, NOVA SCOTIA

Maintains a high standard of scholarship.
Includes all the Faculties of a University.
Largest Staff, Libraries, Laboratories in Eastern Canada.

Arts and Science Faculty.

Degrees: B.A., B.Sc., B.Com., B.Mus., Phm.B.

Diplomas: Music, Engineering, Household Science, Pharmacy, Education.

Four Year Advanced Courses in:

Classics, Mathematics, Modern Languages and History.

Graduate Courses of recognized standing, leading to Degrees of M.A., M.Sc.

Courses preparatory to Professional Faculties.

Many valuable scholarships, on entrance and through the courses.

The Professional Faculties in

Law, Medicine, Dentistry, enjoy an unexcelled reputation.

Inclusive Fees, in the B.A. course average about \$160.00 a year; in the B.Sc. course about \$190.00 a year.

Residence

Shirreff Hall, residence for women.

Carefully supervised residential facilities for men.

Personal Interest Notes

DR. Kenneth W. MacKenzie, son of Mrs. Ethel MacKenzie of Moncton, N. B. and the late R. W. MacKenzie, former travelling auditor, C.N.R., opened an office in Moncton early in July. Dr. MacKenzie was born in Sunny Brae, N. B. He matriculated from Mt. Allison Academy and was Valedictorian of his class. He later attended Mt. Allison University where he received the degree of B.A., and graduated in medicine from Dalhousie in 1935. During the past twelve months Dr. MacKenzie has been doing post-graduate work in Toronto, where he has been a resident surgeon at the Toronto Western Hospital.

Congratulations are extended to Dr. and Mrs. A. M. Marshall of Halifax on the birth of a son on July 15th, and to Dr. and Mrs. T. W. McLean of Scotsburn, on the birth of a son on June 3rd.

Given by Doctors. London, Ontario.

Sign on display at the Ontario Medical Association convention in the Hotel London points out the advantage of regular physical examination in the following words: "It is better to be inspected when suspected than dissected when infected."

We note with interest that Dr. J. Sinclair Robertson, son of Mr. and Mrs. Rod Robertson of Sydney, has received the Provincial Government appointment to the late Dr. Bayne, who was Division Medical Health Officer for the Eastern Health Division. Dr. Robertson graduated from Dalhousie Medical School in 1934, and since then he has been on the medical staff of the Nova Scotia Sanatorium at Kentville. The BULLETIN extends congratulations to Dr. Robertson.

Dr. John H. J. Upham of Columbus, Ohio, Dean of the Ohio State University College of Medicine, was elected the next President of the American Medical Association in convention at Kansas City, Mo. Dr. Upham, who is sixty-four, is a strong advocate of "keeping medical practice individualistic".

Dr. H. J. Davidson of Badger, Newfoundland, Dalhousie, 1935, has been visiting relatives and friends in Nova Scotia.

The marriage took place on July 9th at Kentville of Helena Margaret Sophia, only daughter of Dr. and Mrs. B. S. Bishop to Ewan Somerville Clark, son of Rev. Dr. J. A. Clark and Mrs. Clark of Halifax. Mrs. Clark graduated in Arts, Dalhousie, 1933, and Mr. Clark is a B. A., Dalhousie, 1927, and M. A. Toronto University. He has also studied at Sorbonne University, Paris, and at the University of North Carolina, and is at present on the teaching staff of Kings County Academy. Following a honeymoon trip in the United States Mr. and Mrs. Clark will reside in Kentville.

DIARRHEA

“the commonest ailment of infants in the summer months”

(HOLT AND McINTOSH: HOLT'S DISEASES OF INFANCY AND CHILDHOOD, 1933)

One of the outstanding features of DEXTRI-MALTOSE is that it is almost unanimously preferred as the carbohydrate in the management of infantile diarrhoea.

In cases of malnutrition, and indigestion in infancy, the stools improve rapidly, and the stools soon become normal in appearance. The sugars are intelligently prescribed. By this I refer to proper proportions of dextrin and maltose. When there is a tendency to looseness, I have used the preparation known as "dextrin-maltose" for carbohydrates; . . . —M. Ladd: *Further experience with dextrin-maltose*, *Arch. Pediat.*, 33:501-512, July, 1916.

In diarrhoea, "Carbohydrates, in the form of dextrin-maltose, well cooked cereals or rice, in the form of A discussion of some of the commoner infantile diarrhoea, and the diets used in their management." —B. B. Jones

SERIOUSNESS OF DIARRHEA

There is a widespread opinion that, thanks to improved sanitation, infantile diarrhoea is no longer of serious aspect. But Holt and McIntosh declare that diarrhoea "is still a problem of the foremost importance, producing a number of deaths each year. . . ." Because dehydration is so often an insidious development even in mild cases, prompt and effective treatment is vital. Little states (*Canad. Med. A. J.* 13:803, 1923), "There are cases on record where death has taken place within 24 hours of the time of onset of the first symptoms."

"Dextrin-maltose is a very excellent carbohydrate. It is made up of maltose, a disaccharide which in turn is broken up into two molecules of glucose—a sugar that is not as readily fermentable as levulose and galactose—and dextrin, a partially hydrolyzed starch. Because of the dextrin, there is less fermentation and we can therefore give larger amounts of this carbohydrate without fear of any tendency of fermentative diarrhoea." —A. Capper: *Facts and fads in infant feeding*, *West. J. Med.*, 1923, pp. 11-12.

"Maltose is more easily absorbed than cane or milk sugar, and by changing the carbohydrate we may prevent a deficient supply of sugar. "When sugar causes diarrhoea one can change the form of it. Mead's Dextrin-maltose in small doses is more quickly absorbed and so superior to castor (cane sugar). Lactose is expensive and seems not to be better than castor sugar." —H. B. Gladstone: *Infant Feeding and Nutrition*, William Heinemann, Ltd., London, 1923, pp. 11, 79.

• In cases of diarrhoea, "For the first day or so no sugar should be added to the milk. If the bowel movements improve carbohydrates may be added. This should be the one that is most easily assimilated, so dextrin-maltose is the carbohydrate of choice." —W. H. McCaslan: *Summer diarrhoeas in infants and young children*, *Alabama*, 1:278-282.

"The more complex carbohydrates, of which dextrin is the type, ferment more gradually and do not have this laxative effect." Regarding the treatment of diarrhoea, "In our experience, the most satisfactory carbohydrate for routine use is Mead's dextrin-maltose, No. 1." —F. R. Taylor: *Summer Complaints*, *Southern Med. & Surg.*, pp. 555-559, Aug.

"If there is an improvement in the teaching of the originator the carbohydrate added should be the one that is most easily assimilated. Dextrin-maltose is therefore the carbohydrate of choice." —*Summer diarrhoeas in the young*, *International J. Pediat.*, 6:111-118.

"In the treatment of diarrhoea, "The sugar is added gradually as tolerated, preferably dextrin and maltose." —H. E. Small: *Diarrhoea in bottle-fed infants*, *J. Maine M. A.* 12:154-158, Jan. 1922.

"The condition in which dextrin-maltose is particularly indicated is acute attacks of vomiting, diarrhoea and fever. Recovery is more rapid and recurrence less likely to take place if dextrin-maltose is substituted for milk sugar or cane sugar when these have been used, and the subsequent gain in weight is more rapid. "In brief, I think it safe to say that pediatricians are relying less implicitly on milk sugar, but are inclined to split the sugar element giving cane sugar a place of value, and dextrin-maltose a decidedly prominent place, particularly in acute and difficult cases." —W. L. Hoskins: *Present tendencies in infant feeding*, *Indianapolis M. J.*, July, 1914.

"It should be noted that a percentage of lactose may cause diarrhoea. If a percentage of sugar be required it is better to replace it by dextrin-maltose, such as Mead's Nos. 1 and 2, where the maltose is only slightly in excess of the dextrins, thus diminishing the possibility of excessive fermentation." —W. J. Pearson: *Common practices in infant feeding*, *Post-Graduate Med. J.* 6:38, 1930; *abst. Brit. J. Child. Dis.* 28:152-153, April-June, 1931.

"A gradual transition to a whole milk or evaporated milk formula, which will supply about one and one-half to two ounces of whole milk to every pound of body weight, is reached. This also amounts to the addition of dextrin-maltose to the formula." —R. A. Strong: *Summer diarrhoeas in infancy and early childhood*, *Arch. Pediat.*, 1923, pp. 11-12.

"That group of organisms thrive on) and high in sugar (the food which nate milk accomplishes this purpose. In our series of cases, we found then stopped it, and added dextrin-maltose to the formula." —A. G. DeSanctis and L. V. Poider: *The value of calcium caseinate milk in fermentative diarrhoea*, *Arch. Pediat.* 38:233-236, April, 1921.

Just as DEXTRI-MALTOSE is a carbohydrate modifier of choice, so is CASEC (calcium caseinate) an accepted protein modifier. Casec is of special value for (1) colic and loose green stools in breast-fed infants, (2) fermentative diarrhoea in bottle-fed infants, (3) prematures, (4) marasmus, (5) celiac disease. MEAD JOHNSON & CO., EVANSVILLE, IND., U.S.A.

When requesting samples of Dextrin-Maltose, please enclose professional card to cooperate in preventing their reaching unauthorized persons.

Dr. H. H. Banks of Barrington Passage, and son Herbert, paid a visit lately to Prince Edward Island.

Dr. M. R. Elliott and Mrs. Elliott of Wolfville left on July 29th for Montreal where they sailed for Glasgow, Scotland. Dr. and Mrs. Elliott will spend two months travelling in the British Isles and on the continent, after which Dr. Elliott plans to study in London for about two months. Dr. Elliott was tendered a farewell dinner at the Evangeline Inn by members of the medical profession of Wolfville, Kentville, Canning, seventeen being present.

Dr. and Mrs. G. W. T. Farish of Yarmouth who have been on a trip to the Pacific Coast and Jasper Park for the past three months have returned home.

Dr. O. R. Stone, Mrs. Stone and son, Harland, of Bridgetown, have returned from a three week's visit to Montreal.

Dr. George Covert of Halifax is at present visiting friends at Maidenhead. Later he will go to Scotland to visit Dr. J. Cameron, who was formerly Professor of Anatomy of the Medical Faculty of Dalhousie.

Dr. J. B. Reid with Mrs. Reid and their two children, of Truro, have returned home following a pleasant motor trip through Upper Canada.

Dr. Donald M. MacRae, Dalhousie 1934 arrived recently at Kentville from Montreal. At present they are visiting Dr. MacRae's parents in Sydney.

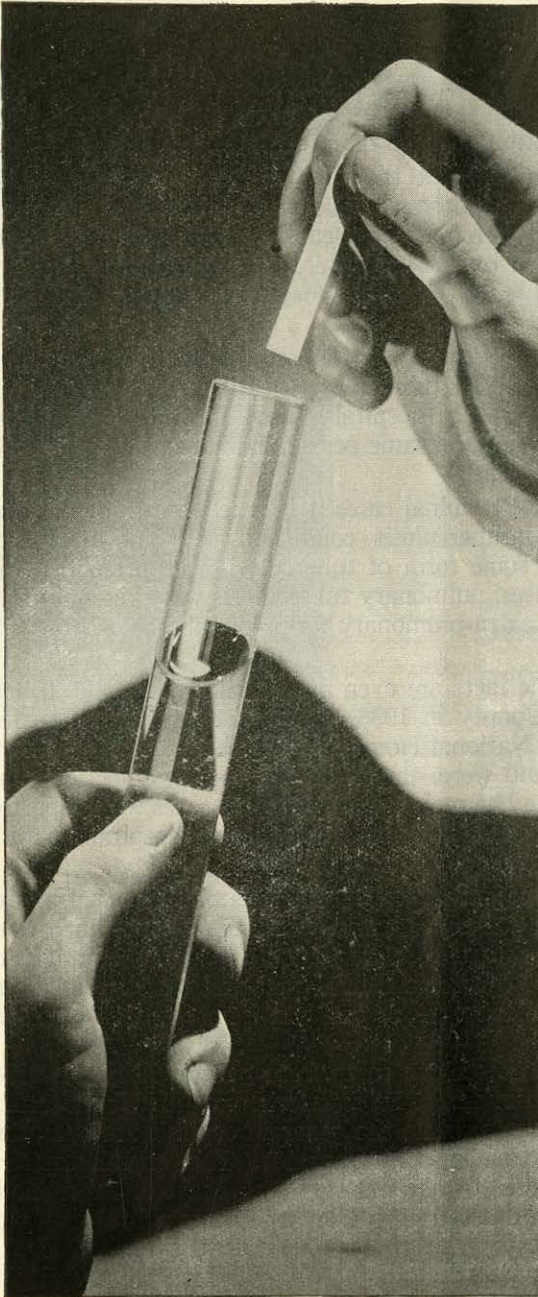
Dr. Montford Haslam, Dalhousie 1926, now on one of his frequent visits to Halifax from Connecticut, was stricken ill several days ago and taken to the Victoria General Pavilion for treatment. Dr. Haslam is remembered in the Province, particularly because of his outstanding career as an athlete during his college days.

Dr. and Mrs. Hugh R. Peel and son, David, of Truro, returned recently from an extended motor trip to California where they visited at Whittier, guests of Dr. Peel's parents, Mr. and Mrs. W. S. Peel. The Truro visitors travelled over 9,000 miles on the trip and experienced terrific heat. On the return trip they travelled across country in stifling heat that did not for several days go below 111 degrees in the shade. When they came to Boston they had it comparatively cool, the thermometer registering 88 degrees. At Los Angeles Dr. Peel visited the Los Angeles County Hospital and the Good Samaritan Hospital, where he was much impressed with the equipment and facilities of the hospitals.

INTERNES WANTED

The following telegram was received by the Secretary from the Department of Welfare and Health of St. John's, Newfoundland—"Can you make contact for us with four young graduates prepared accept appointments, internes general hospital, beginning salary six hundred and living in. If four not available can you secure any number up to that limit?"

Dr. Charles H. Best, Professor of Physiology, University of Toronto, will lecture on "Protamine Insulin".



CYSTITIS

Prompt symptomatic relief

Prompt relief of the distressing symptoms which often accompany cystitis may be obtained by the oral administration of Pyridium. Shortening of the duration of treatment has been reported in many cases. Pyridium is non-toxic and non-irritative in therapeutic doses. The use of Pyridium Solution for irrigation or topical application may be effectively combined with the oral administration of the tablets.

TRADE **PYRIDIUM** MARK

Phenylazo-Alpha-Alpha-Diamino-Pyridine Mono-Hydrochloride

MERCK & CO., LTD.

Manufacturing Chemists

MONTREAL

TUBERCULOSIS, GENERAL HOSPITALS, AND NURSES

From the *Quarterly News* of the New York State Nurses Association the following comments by Miss Jessamine S. Shitney, Statistician of the National Tuberculosis Association, will be of interest to our readers:—

Many general hospitals throughout the country have a rule by which tuberculosis cases are excluded. Although this rule is formally regarded, there is, nevertheless, much tuberculosis present in these hospitals. The following quotation from a paper by A. A. Pleyte, M.D., and Harold Holand, entitled, "Tuberculosis Patients in General Hospitals,"* gives admirable proof to this statement.

"One tuberculosis death in every five in Wisconsin today occurs in a general hospital. Among the 1,217 tuberculosis deaths in Wisconsin last year, 222, or 18 per cent, occurred in hospitals, some of which presumably exclude tuberculosis cases. During the same period, Wisconsin's 21 sanatoria reported only 327 tuberculosis deaths.

"A good many of these 222 terminal cases it is true were treated,—and presumably admitted,—for nontuberculosis condition, yet, known or unknown till the time of death, some form of tuberculosis was present. And in 161, or 73 per cent of the cases, pulmonary tuberculosis was present, either singly or in combination with extra-pulmonary forms of tuberculosis or with other disease conditions.

"In Milwaukee County the facts are even more striking. Of 430 tuberculosis deaths in Milwaukee County in 1933, 104, or 24 per cent, occurred in hospitals (not including the National Home). Of these, 81, or 78 per cent, had pulmonary involvement and were, therefore, presumably infectious and dangerous to their attendants. The majority of these 104 cases were reported from the County General Hospital, but nine other general hospitals in Milwaukee County also reported tuberculosis deaths."

As was pointed out in the same paper, the dangers of this situation are three: (1) the danger to the patients themselves of treatment which does not reckon with the presence of a tuberculous condition; (2) the danger to other patients of the spread of tuberculous infection; and (3) the danger to nurses in care of unrecognized tuberculous patients from constant exposure to the disease.

The formal exclusion of tuberculous cases from general hospitals gives rise to a rather ridiculous situation. The sanatoria are filled and cannot possibly take care of all applicants, while the general hospitals are operating for the most part at the present time far below capacity. The general hospitals, bound by their rule, must refuse to take patients who boast of tuberculosis alone, yet welcome them with open arms if they can offer a broken leg or ptomaine poisoning as the reason for admission. Then the broken leg, or other condition, is carefully tended while the hospital regimen proceeds righteously, and ignores with complete delicacy the possibility of the presence of tuberculosis.

When such is the case, is it difficult to recognize the importance to the nurse in the general hospital of the hazard of tuberculosis infections? How much better to bring the hidden tuberculosis cases out into the open—admit them to general hospitals in separate wards, and examine all admissions for possible tuberculous conditions! When such a practice is developed, proper



BARIUM SULPHATE

Mallinckrodt

Unexcelled Shadow Forming, Perfect Suspension. No hardening and retention of excreta. Satisfactory for oral and rectal use.



Write for folder on
Suspension and
residue tests.

Gives Best Results—Least inconvenience to physician and patient when Mallinckrodt Barium Sulphate is used because it is made by the precipitation process, the only method that gives a uniform fine powder remaining satisfactorily in suspension.

Mallinckrodt

CHEMICAL WORKS

Makers of Fine Medicinal Chemicals

378 St. Paul St. W., Montreal

TORONTO

ST. LOUIS

NEW YORK

precautionary measures can be inaugurated to protect both the patients and the nurses caring for them.

Dr. Pleyte and Mr. Holand recommend three measures which, if properly undertaken, will obviate the risks associated with the care of tuberculous patients in general hospitals. These measures are:

(1) The early discovery of the presence of tuberculosis in all admissions by means of tuberculin test, X-rays, and sputum analysis.

(2) The education of all hospital patients in the simple sanitary precautions which are taught to sanatorium patients, with special care in the instruction of those known or suspected to have pulmonary involvement.

(3) Strict supervision of the health of all nurses and other members of the hospital staff coming in contact with the patients, with periodic tuberculin testing, X-raying, etc., made a part of the regular routine. . . Editorial, *Journal of the Outdoor Life*, March, 1935.

Ascorbic Acid, B.D.H.

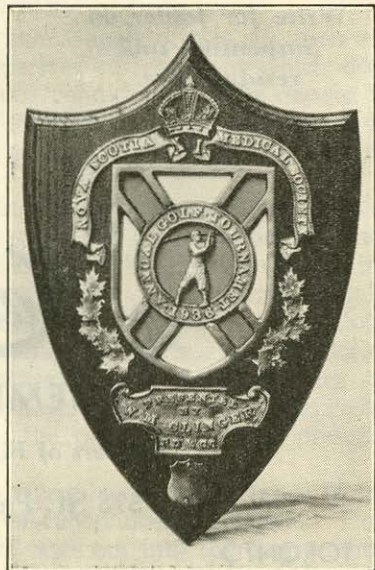
The British Drug Houses Limited, have, for a long time past, been manufacturing Ascorbic Acid, Crystalline Vitamin C, from the early days when its use was almost exclusively confined to research workers, down to the present time when its position in medicine has become established.

The manufacture of this anti-scorbutic vitamin is now being undertaken on such a scale that they are able to reduce considerably the price of Ascorbic Acid Tablets, B.D.H.

The new price for tubes of 25 tablets, each containing 25 mgm. is 85 cents.

To the Golfers:

Another reason why you should be at the 1936 meeting—This is a permanent feature and is retained by the winner.



D^R COLLECTEM

The Medical Audit Association specializes in the collection of past-due accounts for physicians, dentists and hospitals ONLY.

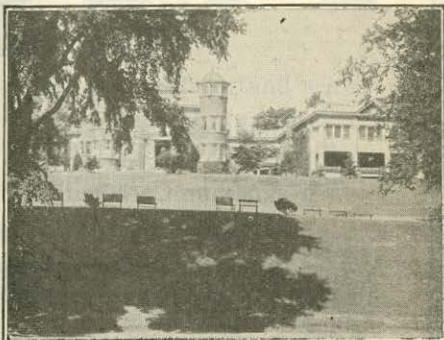


And, because we do specialize, we collect past-due accounts which could not be converted into cash by any other means. That's what your colleagues have been telling you for years. You will thoroughly appreciate our service, too!

THE MEDICAL AUDIT ASSOCIATION
45 Victoria Street, Toronto

Homewood Sanitarium

GUELPH, ONTARIO



Nervous cases including Hysteria, Neurasthenia and Psychasthenia.

Mild and incipient mental cases.

Selected habit cases will be taken on advice of physician.

For rate and information, write

HARVEY CLARE, M.D.

Medical Superintendent

B. D. H.

Sex Hormone Preparations

GONAN

The gonadotropic substance from the urine of pregnancy standardised in terms of its power to produce corpora lutea or corpora haemorrhagica in the ovaries of immature rodents.

OESTROFORM

A standardised preparation of the ovarian follicular hormone.

OESTROFORM 'B'

An ester of the ovarian hormone for use in cases in which intensive and prolonged therapeutic effect is desired.

PROGESTIN

The hormone of the corpus luteum standardised for its proliferational activity in the immature rabbit uterus previously treated with oestrin.

Stocks are held by leading druggists throughout the Dominion, and full particulars are available from

THE BRITISH DRUG HOUSES (CANADA) LTD.

Terminal Warehouse

Toronto 2, Ont.