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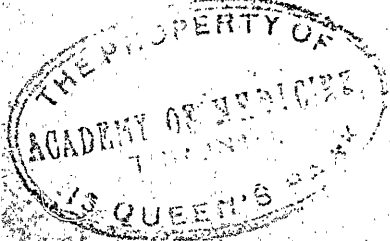
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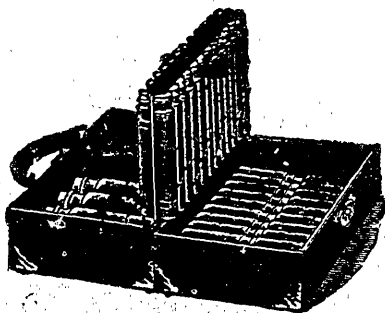
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A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

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THE MARITIME MEDICAL NEWS.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

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Original Communications.

OBSTRUCTION OF THE OESOPHAGUS*

By JOHN STEWART, M. B., Halifax, N. S.

The function of the oesophagus is to propel and convey material from the pharynx to the stomach. Any interference with this function, however caused, and in whatever degree; may be called obstruction. In a well marked case of obstruction, the symptoms are unmistakable, and the diagnosis self-evident. But the disease may exist in varying degrees, and is due to a variety of causes, hence also a variety in symptoms, prospects and treatment.

In studying the condition, certain anatomical and physiological data should be borne in mind. From its commencement at the cricoid cartilage to its passage through the diaphragm, the oesophagus is, in the adult, about nine inches in length. A measurement of more practical service in passing instruments, is that taken from the incisor teeth to the diaphragm. This, in the adult is, on an average, sixteen inches.

In its course, it presents various curvatures. There is an antero-posterior curvature corresponding to the contour of the spinal column. Lying at first in the middle line, it trends to the left at the lower part of the neck, but returns to the middle line at the level of the fourth or fifth dorsal vertebra, that is, about the level of the spines of the third or fourth vertebra, and here it lies under the arch of the

*Read before Maritime Medical Association, Halifax, July, 1904.

aorta, the left primary bronchus, and the bronchial glands. In its further passage through the mediastinum it is in contact with the pleura on each side and the pericardium in front, and is on the right of the aorta, gradually coming to lie in front of it, and it passes, with the pneumogastric nerves, through an opening in the muscular tissue of the diaphragm just in front of the aortic opening, and on a level with the tenth dorsal vertebra. The œsophagus has a narrower lumen than any other part of the alimentary canal, and there are three points where it is liable to be normally somewhat constricted, or, at least, to offer slight obstruction to the passage of a sound, namely, at its commencement opposite the cricoid cartilage, at the point where it is crossed by the aorta, and at its inferior extremity.

The musculature of the œsophagus, as in the rest of the alimentary canal, consists of an inner circular and an outer longitudinal layer of muscular fibres, of the smooth, or involuntary type, except in the upper third, which is furnished with striated muscle.

In the process of deglutition the action of the œsophagus is entirely reflex and involuntary. The sensory limb of the reflex arc lies in the glossopharyngeal, the palatine branches of the fifth nerve, and the pharyngeal branches of the vagus; the centre is in the medulla oblongata, and the efferent limb and motor nerve of the œsophagus, is the vagus.

If the œsophagus be divided transversely, or a section of it be removed, peristalsis of the lower end will result from stimulation of the mucous membrane of the pharynx, while, apparently, stimulation of the mucous membrane of the lower segment of the œsophagus itself produces no movement, indicating an imperfection in the sensory limb of the reflex circuit.

Section of both vagi is followed by spasm of the œsophagus. As the vagi are the motor nerves, we should have expected paralysis, but the vagus also contains inhibitory fibres which restrain the constricting action of the sympathetic ganglia in the œsophageal wall.

As regards their pathology, obstructions of the œsophagus may be classified under three heads. First, obstruction within the lumen; second, obstruction caused by pressure from without; third, obstruction due to changes in the wall.

Under the first heading come masses of food bolted without sufficient mastication, foreign bodies of all kinds, tumours, as polypi,

and parasitic growths, as thrush and diphtheritic membrane. In the next class are abscesses in the neck or mediastinum, aneurisms, enlarged bronchial glands, diverticula or pouches of the pharynx, or of the œsophagus itself, and tumours such as mediastinal sarcoma, or exostoses from vertebra or the sternum. In the third and most important class we have the various forms of stricture, spasmodic, cicatricial and malignant, and here also may be placed dysphagia due to dilatation and to paralysis. There are cases, of course, in which the obstruction may act in more than one class, as, for instance, when a malignant tumour projects into the lumen, blocking it, and also engages the wall, causing rigidity, or when a spicule of bone partially obstructs the passage of food, and also, by its irritation, causes spasmodic closure.

The cardinal symptom of obstruction, the earliest and the most persistent, is *dysphagia*. In the case of progressive disease it may at first be slight and intermittent: gradually the patient notices that he has to take smaller mouthfuls, and to masticate more thoroughly, and at last he finds difficulty even in swallowing fluids. But in some cases of stricture dysphagia develops suddenly, as it does of course in cases of impaction.

Dysphagia may or may not be accompanied by *pain*. The pain is frequently referred to a different area from that of the actual lesion. The patient may complain of pain or uneasiness behind the manubrium, or at the episternal notch when the lesion or the foreign body is at the lower end of the œsophagus. Pain is sometimes severe, often delayed, and sometimes almost entirely absent.

Dyspnœa,—cough and laryngeal spasm are not infrequent, especially in the case of injuries or blocking by foreign bodies, but it is rarely that asphyxia can be caused by impaction of the œsophagus. When suffocation does occur, the impaction is more likely to be in the pharynx and to occlude the opening of the larynx itself. But the nerve supply of this region affords ample scope for spasmodic reflexes, and in cases of ulceration the laryngeal nerves may be destroyed. One of the few recorded cases of complete bilateral paralysis of both recurrent laryngeal nerves was due to malignant disease of the œsophagus. A marked symptom in stenosis is the *regurgitation* of food, unaltered by the gastric secretions, and sometimes tinged with blood. There may also be the eructation of foetid slimy material, due to the decomposition of food, mucus and saliva, in a dilated œsophagus.

When obstruction in a marked degree has existed for some weeks *emaciation* becomes noticeable, and all the ordinary appearances of chronic starvation.

There are two points to bear in mind in considering these symptoms. The first is that the symptoms may, for a long time, be entirely absent, or so vague as to be misinterpreted. This is especially the case in disease of the lower end, and is probably due to the imperfection in the reflex nerve circuit already spoken of. In some cases evidence of obstruction has only been discovered on post mortem examination. Even in the case of impaction of foreign bodies the symptoms may subside, only to be remembered when an abscess has formed, or hæmorrhage takes place from an eroded vessel. Again, the symptoms may persist for a variable time after the removal of the cause.

The other point, and a very important one, is the intermittent character of the symptoms in many cases. In some instances this is due to the element of spasm, so well known in urethral stricture. Mental emotion may even influence dysphagia: in certain surroundings the patient may swallow with greater ease. In the case of a lady, the subject of malignant disease at the lower end of the œsophagus, recently under the care of Dr. Almon, it was observed that when in cheerful surroundings, or after the exhilaration of a drive in the open air, she could drink a tumblerful of milk with ease, while when alone in her lodgings she might require the greater part of an hour to take it. This feature is probably akin to well known examples of suspension of function in involuntary muscles under the influence of excitement. Certain physical conditions also, apart from spasm, may give rise to intermittent obstruction.

In the great majority of cases, a study of these symptoms and their history is sufficient to justify a diagnosis of œsophageal obstruction. But a careful physical examination must be made in order to determine the nature and position of the obstruction. Examination of the chest, spine, neck, and pharynx may detect aneurism, mediastinal tumour, enlarged thyroid, pharyngeal pouch, exostosis, or acute spinal curvature. Enlarged glands at the root of the neck are suggestive of malignant disease. The epigastrium should be examined; gastric ulcer or cancer may cause obstruction of the lower opening.

In addition to the usual auscultation of the chest, the stethoscope should be applied over the dorsal spines to detect alterations in the

deglutition wave. At the level of the ninth or tenth dorsal vertebra, we can hear the rush of fluid escaping from the narrow lumen of the gullet into the pouch of the stomach, and in cases of constriction there is not only an alteration in the character of the sound, but the progress of the deglutition wave is delayed, from four or five seconds in the normal condition, to twice or three times as long. Also gurgling sounds may be heard at any point in the course of the œsophagus, if constriction is present, especially at its lower opening, and at the level of the fourth dorsal vertebra, where it may be compressed by the aorta, or a mass of enlarged bronchial glands.

In cases of regurgitation, the material should be tested by litmus. If it be alkaline it is strong evidence that it has not been in the stomach, but has returned from a dilatation pouch.

Where a foreign body is suspected, great assistance may be had from the fluoroscope.

Finally, in the great majority of cases the œsophageal sound should be employed. In the absence of an x-ray apparatus, it may detect the position of a foreign body, in cases of stricture it defines the position and extent of the narrowing, and in spasm its passage proves the absence of organic stenosis.

The stem of the sound should not be too stiff: the bulbs must be smooth, and firmly attached to the stem. It should be passed as gently as possible. Disasters have occurred in using it, aneurisms have been ruptured, and the diseased wall of the œsophagus has been perforated, but with ordinary care these dangers are very remote. On removal, the tip should be examined, blood, pus, or specks of tumour substance may be found on it. It is, upon the whole, the most valuable instrument in diagnosing the conditions, but it may give fallacious information. For instance, a full sized bougie may pass into the stomach, pushing a foreign body aside without detecting it. Or it may pass into a diverticulum or into a pouching just above the stricture, and give a false impression of closure, or a small bougie which has passed this, may a few days later be caught in a pouch and give the impression that the lumen is closed.

Attention may now be directed to some points in the differential diagnosis of the more frequent forms of dysphagia.

Impaction is common in children, and in the insane. The impacted substance may sometimes be palpated in the neck, especially on the

left side. When it has passed completely into the œsophagus the symptoms are sometimes remarkably indefinite, trivial, and intermittent. A sound or stomach tube may pass with ease and yet such a substance as a coin, a marble, or even an toothplate may lie in the œsophagus. It is in such cases that the fluoroscope is invaluable. Also dysphagia may result from the impaction of very small bodies if they are sharp or irritating, as spicules of bone. These may also cause inflammation and abscess in the submucous tissue and so, in a secondary way, bring about obstruction.

Where aneurism is suspected, great care will naturally be taken in passing the sound: indeed the diagnosis may be made here, without recourse to it. When, in a case of dysphagia there exist also dyspnoea and cough, especially a hard clanging cough indicating laryngeal complication, we may suspect aortic aneurism or enlarged bronchial glands. Simple dilatation of the aorta has been known to cause compression of the œsophagus, at its lower extremity, where it is fixed in the diaphragm.

Diverticula or pouches of the pharynx and œsophagus are rare causes of dysphagia. They are generally, if not always, in the cervical portion, and at the back of the gullet. Becoming filled with food and secretion, they press forward against the yielding walls of the gullet. When sufficiently large to cause trouble, they may be palpated in the neck, and even emptied into the pharynx, by pressure with the fingers.

The commonest cause of obstruction is stricture.

Congenital stricture is not common.

Spasmodic stricture is most frequent in hysterical or hypochondriacal subjects. It probably depends on weakened nerve force, and recalls Schiff's experiment in dividing the vagi. The general condition of the patient, the intermittent character of the dysphagia, the absence of craving for food, all point to the functional nature of spasmodic stricture, and the use of the œsophageal sound clears up the diagnosis.

There is a peculiar form of dysphagia seen occasionally in drunkards. It may be called "dysphagia potatorum." The exact cause is not very clear, but it may be due to neuritis, and analogous to the wrist drop seen in alcoholic peripheral neuritis.

Progressive stenosis, continual dysphagia, hunger and emaciation are common to all organic strictures, but the history of the case is

often a great aid in distinguishing simple from malignant forms.

A history of injury from the presence of a foreign body, or operations for its removal, or of ulceration from the action of hot or corrosive fluids, indicate simple cicatricial stricture. Other forms of ulceration, acting more rarely, are tuberculous, syphilitic and typhoidal ulcers.

Dysphagia, with or without pain, in a man over forty years of age, with no history of injury, or any form of ulceration, is almost certainly malignant.

When a stricture is seated low down, the œsophagus becomes dilated above it. In slowly progressive cases, the dilatation or pouching may become very marked and give rise to the characteristic symptom of regurgitation of food, unaltered by gastric juice. It may be, hours after ingestion.

There is another form of dilatation known as idiopathic dilatation, in which there is no stricture. The dilatation is fusiform, and due to a weakness in the wall. Here the dysphagia is due to the disproportion between the weakened propulsive power of the œsophagus and the large mass of food or fluid contained in it.

A case seen sometime ago with Dr. C. D. Murray illustrated some of the difficulties in diagnosing stricture. The patient, a man of 45 or 50 years of age, after a period of vague dyspeptic symptoms, began to complain of dysphagia. A full sized bougie was passed into the stomach with no difficulty. The symptoms varied in degree, and there were other reasons to think of hysteria. Then the man was an alcoholic, and the cases reported of "dysphagia potatorum" came to mind. The systematic use of the sound was begun and the interesting fact came out that, corresponding with the intermittent character of the dysphagia, there were days on which the sound passed easily, and on other days it could not be passed at all. No blood showed on the bulb. But the dysphagia increased, and it became difficult to pass the sound. Regurgitation of slime occurred, emaciation set in, and finally a gastrostomy was performed, which gave considerable relief to the symptoms. Gangrene of the lung set in some weeks after the operation, and carried off the patient. A post mortem revealed the peculiar difficulty of the case. Progressive ulceration and sloughing of a malignant mass at the lower end of the œsophagus had resulted in the formation of a somewhat irregular

cavity. But on the left side of this a piece of tissue nearly as large as a walnut had escaped and remained attached by a pedicle at its lower part. It was evident that at times this mass lay pressed against the side of the excavation, and at other times fell across the lumen of the tube and blocked it like a ball valve.

The prognosis varies within wide limits. In spasmodic stricture, and in the great majority of cases of impaction, it is favourable. The impacted body may pass gradually into the stomach, or be pushed on into it by the probang; it may be expelled by vomiting or fished up by forceps. It is only rarely that operation is required, but in these cases, and in any case where a sharp or irregular hard substance has been swallowed, the possibility of serious consequences must be borne in mind.

In the case of non-malignant stricture also, the outlook is favourable, if dilatation is begun early and if the patient will return for treatment at the first indication of recurrence. In strictures of the oesophagus, as in those of the urethra, there is always a tendency to recontraction, and the use of the bougie may be necessary from time to time during the patient's life. It must also be remembered that a simple stricture may become subject to degeneration and malignant changes.

In malignant stricture of course the outlook is hopeless. The disease is always fatal, unless the patient is carried off by some intercurrent disease. Life is seldom prolonged for more than nine months from the establishment of wellmarked symptoms, though some cases live for a year or a year and a half.

In any case the prognosis should be guarded, and neither too favourable nor too depressing. A case is on record of death at eighty-four from malignant stricture of the oesophagus, forty years after the first symptoms of obstruction, and another of death at seventy-four, from simple cicatricial stricture in a man who had all his life suffered from a degree of obstruction.

An apparently hopeless case of malignant disease of the cardiac end may get some respite from the sloughing away of a portion of the growth, thus freeing the opening, as is also seen sometimes in cancer of the pylorus.

The treatment of oesophageal obstruction presents as much variety as its causes.

In cases of impaction it is well to ascertain, if possible, the nature of the obstructing body, before making attempts to remove it. In some cases, as in blocking by a piece of meat, the plug can be forced on into the stomach by the probang. The same course may be employed in the case of smooth hard bodies, as marbles. In the case of irregular, or sharp-cornered objects, the use of the probang may be contraindicated, and much force should not be used. If known to be smooth, small and rounded, vomiting may be induced by the hypodermic use of apomorphia, but, as rupture of the œsophagus has been caused by violent vomiting during impaction, this means must be carefully used. When the foreign body is engaged in the upper end of the passage it may be dislodged by the finger or by forceps. In using forceps, or any form of extractor, great gentleness should be employed, as serious injury may be done to the walls of the gullet either by seizing them in the forceps, or by forcibly driving sharp projections, as those of a tooth-plate, through the walls. Various ingenious instruments have been devised for removing foreign bodies. While very useful for its own purpose, the coin-catcher has caused trouble in the extraction of a tooth-plate, becoming entangled in it, so that neither toothplate nor coincatcher could be removed, an embarrassing situation for the practitioner. All efforts may fail to dislodge the foreign body, and an operation becomes necessary. The œsophagus may be opened in the neck. The incision is made on the left side, in front of the sterno-mastoid, this muscle and the great vessels are drawn outward, the trachea inward, and the opening in the œsophagus is made as far back as possible, to avoid the recurrent laryngeal nerve. In this way foreign bodies may be removed with forceps even when impacted as far down as the level of the bronchus, and probably, with the aid of the x-ray, from even lower down. If the impaction is at the lower end of the œsophagus, gastrotomy should be done and the foreign body removed through the stomach, as was first done by Maurice Richardson, of Boston, in 1886. The œsophagus may be reached and opened through the mediastinum, but the condition of the patient is not likely to be improved by this proceeding.

Few of the conditions which cause obstruction by pressure from without are amenable to treatment. Abscesses in the neck should be evacuated, and if in the mediastinum, may be reached by trephining

the sternum or by resecting a portion of one or two ribs posteriorly. In cases of pressure caused by aneurism or tumour interfering seriously with the passage of food, Symonds' œsophageal tube may be introduced. This is a tube of gum-elastic, somewhat funnel shaped at its upper extremity to fit the pharynx, and with a central opening below. Two strings are attached to the upper end. The tube is passed into the œsophagus by the aid of a guide, which is then removed, the strings are fastened to the outside of the cheek or round the ear, and so prevent the tube slipping down, and also aid in drawing it out when necessary for cleaning, or change. Patients have worn these tubes for months.

Spasmodic stricture must be treated on general principles, as a neurosis, but it would be wise to test the lumen of the tube from time to time, as an organic stricture might possibly be forming.

The treatment of cicatricial stricture may be preventive. After laceration by foreign bodies or inflammation caused by their presence, or after the swallowing of corrosive fluids more or less ulceration will occur, and its progress should be watched, and the œsophageal bougie should be used periodically, to make sure there is no contraction, and to overcome it, if it does appear, for considerable contraction of the œsophagus may take place before any symptoms declare themselves.

In the many instances the patient does not apply for treatment until contraction is well advanced, and a considerable portion of the tube may be converted into a tortuous and rigid canal. The whip-lash bougie is of great value in such cases, and filiform bougies may be necessary.

In cases of much difficulty, when once a fine bougie has been passed, it may be well to let it remain in the stricture, for a day or two, when a certain amount of dilatation may take place. When a passage has been effected the dilatation must be carried on if possible, until the natural lumen is restored, and a vigilant watch must be kept for re-contraction. It may be necessary to pass the bougie at intervals for the rest of the patient's life.

If all efforts to dilate the stricture fail, starvation threatens, and the only resource left is to open the stomach. In a few cases this has actually given so much relief to the symptoms that the passage of bougies has become possible, the contraction has disappeared, and the opening in the stomach has been allowed to close. In other cases,

when the stomach has been opened, it has been found that a bougie could be passed upwards from the stomach, and retrograde dilatation has been done on the spot. Or the ingenious method of Abbe may be successful. A strong string is passed from the gastric end of the tube into the mouth and by a sawing motion the cicatricial tissue is divided in several places, and a full sized bougie is passed. In these cases, the opening into the stomach has been closed at once, and further dilatation carried out through the mouth. Where the patient is very much reduced, it is probably safer to perform gastrostomy. It implies less manipulation of the stomach, and a smaller wound in it. There are several methods of performing the operation, and that of Witzel is one of the best. The results are generally satisfactory.

A boy about twelve years old suffered from a cicatricial stenosis at the lower end of the oesophagus, the result of swallowing some concentrated lye. The contraction came on so gradually and painlessly that when a physician was first consulted contraction was extreme, and all efforts to pass even the finest bougie failed. Nothing was swallowed but liquids and of these only a very small quantity could be taken in the twenty-four hours. In spite of the assistance of rectal feeding the condition became serious, and at the time of operation the temperature was subnormal, the pulse rapid and small, the extremities cold, and the patient drowsy. Witzel's operation was done: a full sized Jacques' urethral catheter with funnel attached was stitched into the stomach and food at once introduced. This operation was done eight years ago; the patient still feeds himself through the tube, masticating his food with relish and ejecting it into the funnel. Nothing has passed through his oesophagus during all these years. His nutrition is good, and there is no leakage about the tube.

The treatment of malignant stricture is one of the sad chapters of our profession. We can do nothing but strive to make as comfortable as possible the dreary path to the inevitable end. Resection of a malignant annular stricture has been done, and in one case the patient survived the operation for over a year, but the case was an exceptionally favourable one, and it is not clear that life was really prolonged by the operation or might not have been equally prolonged by the much simpler operation of gastrostomy.

In some cases the patients have been able to wear a Symonds' tube,

introduced through the stricture before it became too much occluded. While this proceeding relieves much of the difficulty of swallowing, it is almost certain to irritate the malignant tissue to more luxuriant growth.

In the majority of cases, at least in those seen before the last stages of inanition and lethargy have set in, it would probably be best to follow the advice given by Robson and Moynihan, and to advise gastrostomy as soon as a positive diagnosis has been made.

There is one thing *not* to do, when once the malignant nature of the case is clear, and that is to make any further attempt to dilate the stricture. This can only result in useless and even harmful irritation.

REPORT OF A CASE OF LYMPHADENOMA OR HODGKIN'S DISEASE.*

By DR. BUTLER, McAdam Junction, N. B.

Before proceeding with this report I wish to apologize to the members of this association for selecting a subject of so little practical importance to the general practitioner, and one that has been so accurately described by most writers of the present day, but with a limited practice of only a few years duration my choice of subjects was necessarily limited, and I therefore selected the one that interested me most not only on account of its comparative rarity, but because of some features that were atypical and not at all common to the disease.

In order to facilitate discussion and refresh your memories, a brief history of this disease might not be out of place at this point.

HISTORY.

In 1669, Malpighi described a condition of general enlargement of the lymphatics with nodules in the spleen, but did not consider it constituted a definite disease. Cragile, in 1628, defined the anatomical structures of the enlarged glands and differentiated between tubercular enlargement and cancer, but to Dr. Hodgkins belongs the credit of first describing, in 1832, the main features of the disease. Since that time many valuable contributions have been made on the subject. A collection of the cases was made by Cornif in 1865, giving a careful account of the pathological anatomy.

In 1878 the disease was discussed by the members of the Pathological Society of London (Trans. Vol. xxix) and a very comprehensive account was given by Sir William Gower the following year. Since then many contributions have been made and yearly one or more cases are admitted to the hospitals.

CHARACTERISTICS.

The chief characteristics of lymphadenoma are a general enlargement of one or several groups of lymphatic glands due to an overgrowth of adenoid tissue, which may later become converted into fibrous, frequently accompanied by enlargement of the liver and

*Read before the New Brunswick Medical Society, July 1905.

spleen, with anæmia and emaciation.

ETIOLOGY.

The etiology is rather obscure. In some cases heredity has been adduced as a possible cause, and an antecedent disease such as syphilis or tuberculosis. Some observers believe that a specific organism is the factor, while Trousseau lays special stress upon local irritation giving rise to local gland swelling. Males are more frequently affected than females, the proportion being 3 to 1. Climate seems to play no part in its development.

Different varieties have been described, but the difference seems to be only in the distribution of the glands involved and the duration of the disease, some cases, especially those following parturition, ending fatally in a few weeks, others lasting two or three years.

SYMPTOMS.

The symptoms are about the same as those to be described in connection with the case to be herewith reported, although pressure symptoms from involvement of the deeper glands are sometimes metwith. Usually the cervical glands are the first affected, one side as a rule months before the other. Large tumours ultimately develop, anæmia and emaciation follow, and pain from pressure on nerves. Fever of an irregular, hectic or continuous type with evening exacerbations is generally observed. In some cases ague-like paroxysms may persist for months.

The digestive symptoms are usually not marked.

Albumen may be present in the urine, while inequality of the pupils from pressure on the cervical sympathetic is sometimes noticed.

The skin may be bronzed, and occasionally a troublesome prurigo is present.

PROGNOSIS.

The outlook in most cases is bad—recovery rare, although periods of quiescence are not uncommon.

This report, covering a period of one year and nine months during which time the symptoms were many and repetitions common, will necessarily be somewhat disjointed, but I have endeavoured to piece the several parts and make all as lucid as possible.

The patient (a boy six and one half years old at the time) was first called to my attention by the mother in September 1901, on account of a superficial swelling about the size of a walnut, situated on the

right side of the neck, at the anterior border of the sterno-mastoid muscle in its upper third, fusiform in shape, hard and freely moveable. No constitutional symptoms evident. Considered it a tubercular adenitis and advised usual treatment.

FAMILY HISTORY.

The ninth child of a family of ten, six of which were living and well in 1901. One (the oldest) has since contracted pulmonary phthisis. Of those dead, one died in infancy, one after a lingering sickness from disease of the spine, and two from what was supposed to be poisoning from canned goods. Father died in 1900; diagnosis uncertain, either consumption or cancer. Mother living and well. Two uncles living, blood condition very unstable. Grand parents reached old age. Great grandfather on mothers side, a sea captain for years, dying at the age of 10. cause unknown.

PERSONAL HISTORY.

Family in good circumstances; food, clothing and surroundings of the best. From birth patient was always considered delicate but had few sicknesses and played around with others until within a few days of death.

PAST ILLNESS.

When about one year old, contracted measles; later at four years of age, scarlet fever, from which date a swelling the size of a bean was first noticed and called to the attention of the physician in charge. This continued to increase, although marked by periods of diminution until 1901, when he first came under my care.

PERSONAL CONDITION IN SEPTEMBER 1901.

With the exception of tumour referred to and somewhat lowered condition of the blood, the boy appeared in good health. Appetite good, skin clear and all systems apparently normal. Weight 50 lbs. Mental faculties unusually bright, remaining so until the end. Under tonic treatment general condition improved, weight increased, swelling became reduced and throughout the winter he attended school, walking $1\frac{1}{2}$ to 2 miles daily, but with the return of warm weather (May 1902) he again began to fail, weight diminished, and anæmia with its accompanying symptoms became marked. The swelling increased in size and new glands became involved, those in the upper part coalescing to form a mass, the size of a hen's egg, hard and movable,

with a soft spot in the centre slightly softer than the surrounding parts. The large tumour above extended into posterior triangle, and three or four glands, from the size of a marble to a pea, hard and freely moveable, extended downward, while some infiltration of the parotid was evident. Pain relieved on pressure was complained of in the central line of abdomen midway between umbilicus and pubes, and several glands of small size could be palpated, apparently retroperitoneal. The abdomen was flat, no tympanites present, spleen not palpable, temperature of an irregular type ranging between 99° F. and 104° F., pulse 120 to 140. Appetite poor and capricious, bowels somewhat constipated. Of nervous phenomena, increased irritability and peevishness were noticeable. The skin showed a slight bronzing and complaints of itching were frequent. From the 15th. of July until the 31st. there was an exacerbation of all symptoms with an irregular pyrexia gradually rising until the 21st, then dropping by lysis, marked by a rise at different parts of the day. Then rapid improvement commenced, independent of special treatment, which continued until December (1903), patient attending school a few days during that time. Then health again failed and the cyclic condition recurred with increased violence. The original enlargement, increased in size, was of stony hardness yet freely moveable, and new glands, extending inward to the middle line and downward almost to clavicle, developed. The general conformity of abdomen remained the same, but severe pain was complained of and new glands larger than on former occasion were present.

The examination of the urine showed a diminished amount of acid reaction. Specific gravity 1016, a trace of albumen and pus present.

There was difficulty in micturition and on examining penis a phimosis almost obliterating the urethra was revealed. Under ether was able to break down the adhesions and push prepuce over glands. Returning eight hours later found that the boy had not urinated on account of the inflamed gland, and ordered a hot bath as a temporary relief. In a short time urination was possible, pain in abdomen ceased and two days later glands were no longer palpable, while those in the neck were apparently smaller. Improvement continued until spring of 1903. In April another severe attack occurred, followed by improvement which continued until June 1st. 1903, when symptoms exaggerated more than on any former occasion returned. Many of

the glands in the neck joined to form a large irregular mass, the size of an orange or larger, extending over the angle of jaw and overlapping trachea, and a new growth of the same nature was evident in the anterior triangle of the left side. In the abdomen the pain was intense, glands much larger than on former occasions, and spleen palpable for the first time. A grave anæmia was also present and emaciation extreme. The blood count showed nothing characteristic. Hæmoglobin low, red corpuscles 4,000,000, white corpuscles 8,000 and a number of lymphocytes. Throughout June and July the disease progressed and on the 16th. of June he was taken to Somerville, Mass. where the diagnosis was confirmed. Returned July 1st. On the 8th took to his bed, and died, on the 13th. of general asthenia.

TREATMENT.

The treatment at first consisted of tonic preparations of iron, quinine and strychnine, nourishing food and plenty of air. Later, after July of 1902, of arsenic in ascending doses. Codeine and morphia when required. Hot baths were also instituted with apparently beneficial results, but were only given in a desultory way by parent. The drugs seemed of little avail, improvement occurring only when paroxysms had abated.

THE DIFFERENTIAL DIAGNOSIS.

At first a diagnosis of tubercular adenitis was made, but later after considering the different glandular conditions decided the case one of lymphadenoma. Before arriving at this conclusion, eliminated the following diseases: acute adenitis, tubercular adenitis, sarcoma, spleno-medullary leukæmia, spleno-lymphatic leukæmia and syphilis.

ACUTE ADENITIS.

Only a passing thought was given to acute adenitis, as skin, teeth and tonsils showed no avenue for the invasion of micro-organisms. The growth was slow and painless, with no inflammation of the surrounding tissues.

TUBERCULAR ADENITIS.

Between tubercular adenitis and Hodgkin's disease the differentiation was not so clear and for several months the case was treated for the former, but the site of glands in anterior and posterior triangles and not in sub-maxillary, their increase in size, hardness and numbers

without ulceration, suppuration or softening; the accompanying pyrexia, anæmia and emaciation, and subsequently the development of glands in the abdomen with pain over region and none of the usual signs of a tubercular peritonitis made the diagnosis seem probable.

In contradiction to this, spinal trouble in the brother, a possibility of consumption in the father, and later phthisis in the oldest brother would seem to indicate a tubercular condition, but the course of the disease not yielding to anti-tubercular treatment would seem to confirm the diagnosis. The anti-tuberculin test was not tried.

SARCOMA.

As a rule the extension of sarcoma to neighboring glands is much slower and once established there is no diminution in size.

SPLENO-MEDULLARY LEUKÆMIA.

In spleno-medullary leukæmia the spleen is generally enlarged before the glands, and the blood is characteristic showing an excess of leucocytes (myelocytes). In this case no change occurred in the spleen until near the end and blood was little changed.

SPLENO-LYMPHATIC LEUKÆMIA.

With spleno-lymphatic leukæmia simultaneous enlargement of the spleen and glands usually occur.

SYPHILIS.

Syphilis could be excluded from the history alone.

Before closing will point out three etiological factors that may have played a part in this case. 1st.—From birth the child was anæmic and delicate, certainly a suitable subject for the invasion of any specific organism that might as some believe be a causal factor in its production.

2nd.—A family history of tuberculosis and enlarged glands of four years duration, an unusual duration of time for lymphadenoma, would suggest an antecedent adenitis of tubercular origin.

3rd.—Two uncles on the mother's side with decided instability of the blood and a great grandfather dying at forty after following the sea for years might indicate a strain of syphilis transmitted through four generations.

With the exception of, the rarity of the disease, in this case the only facts noteworthy were its duration, extending from 1899 to 1903, a period of four years, and its tide-like rise and fall in severity, three or four months usually elapsing between each exacerbation, two or three weeks at its height, then rapid recovery but ever increasing in violence until the end.

ECTOPIC GESTATION.—REPORT OF CASE.

By G. H. MURPHY, M. D., Old Bridgeport Mines, C. B.

Mrs. S., age 33, stout, weight 198; menstruated first at 13 and has always been regular. Married at 18, and is now mother of 8 children. A healthy robust woman who apart from the diseases of childhood and ailments incident to pregnancy and parturition was never sick in her life. Menstruation always came on about 10 months after labour, during lactation, and was orbitory in character lasting from ten to twelve days, although her usual menstrual flow covered but three days. There was no hæmorrhage during this unusually long period, and she came to regard it as a perfectly normal occurrence, as after the re-establishment of the function she suffered no further inconvenience until pregnancy intervened.

She was nursing a ten months old baby, when on the evening of January 10th, last, she was suddenly seized with severe pain in right side, vomiting and headache. She was put to bed, hot fomentations applied, and after some hours the pain abated to some extent. I was called the first time on the following morning. I found the patient vomiting, tongue coated, temperature 103° pulse 115. She still complained of pain in right hypogastric region, and that during the night she had chills. Palpation showed tenderness in region of McBurney's point. The tenderness was not definitely localized over region of appendix, but extended more or less over the whole right hypogastric field. Taking this evidence together with a history of constipation into consideration, I concluded the woman was suffering from acute appendicitis. I gave an enema with good results, applied an ice bag over appendix, gave morphine to relieve the pain and came away. On my visit next day I found my patient much relieved. Temperature had dropped to 100°, pulse 90, no vomiting, and apart from a indefinite soreness in same region she felt comfortable. She mentioned that she had begun to menstruate during the night, stating that this was the usual time for its occurrence and that it usually lasted 10 or 12 days. I advised her to wean the baby, gave instructions about the diet, and ordered a daily enema. The next day

she was feeling very well and I came away telling her husband to send for me if any unfavourable change occurred.

During the three weeks following I heard from the patient through her husband, who said she was able to attend to her household duties, but had spurts of pain occasionally, that soon passed off.

On February 20th., I was called again. My patient told me that while walking about the house she was seized suddenly with sharp cutting pains in her right side, and it gave her all she could do to crawl to bed. She also told me she had considerable bloody discharge from the vagina, and that after this appeared the pain got better. She stated, too, that during the spurts of pain she had experienced during the previous weeks a bloody vaginal discharge would appear, and the pain always got better then. Had occasional chills, temperature 101.5° ; pulse 95. On palpation I failed to find much if any tenderness. The abdominal muscles were rigid here, and I even detected a tumor like mass through her thick abdominal walls. A vaginal examination showed a soft flabby uterus apparently considerably enlarged. The pain and tenderness on attempting to palpate the right tube and ovary prevented much investigation here, but I could detect a considerable swelling in region of right Fallopian tube. Tho' hampered by the early history of the case, particularly the rather high temperature, I was now being gradually but irresistibly borne to the conclusion that the case was one of tubal pregnancy, and that rupture had not yet taken place. I advised that the patient be removed to the hospital, stating that an operation might be called for at any moment and insisting on the importance of having the patient where this could be efficiently performed. This was refused by her husband; so I had to content myself with watching the case from day to day and conjuring up visions of impending disaster.

On March 1st, I was hastily summoned and found my patient suffering severe pain. The attack was much like the previous ones but more severe. She complained of a peculiar weighty sensation in lower part of rectum, and also that she experienced considerable pain in micturition. Pulse 90, temp. 105.5° . I made a vaginal examination and found a large boggy mass filling up Douglas's cul-de-sac. It seemed evident that rupture had taken place and outside the broad ligament too; yet there wasn't the slightest evidence in the patient's general condition to indicate that a severe or moderate hæmorrhage had occurred. She declared that she didn't feel weak

and that she experienced no feeling of faintness during the paroxysm of pain she had gone through. There was apparently no crisis, yet the evidence of rupture in Douglas's cul-de-sac could not be gainsaid. Next morning I arranged a consultation with Dr. D. S. McKay, Reserve Mimes, and we both urged the necessity of an operation. The patient entered St. Joseph's Hospital, Glace Bay, on March the 3rd and the operation was performed the following day. A large amount of clotted blood was found filling up Douglas's cul-de-sac, in which was found the foetal sac. The sac which was somewhat larger than a hen's egg, had ruptured, and the foetal contents could not be discovered. The rupture in the tube was in the direction of its axis and was about one and a half inches in length. The tube and ovary were tied off and removed, and the abdominal cavity flushed out with normal saline. The woman left the hospital five weeks after and has since been in the best of health.

The comparative rarity of cases of ectopic gestation, together with some difficulties in the way of arriving at a correct diagnosis in the present instance, furnish my apology for reporting this case. There was no history of missed menstrual periods to start with. The high temperature, too, which was a strong factor in determining my diagnosis of appendicitis at the start, is I think a very rare accompaniment of tubal pregnancy, and seems to me difficult of explanation. The woman is not of a neurotic temperament either. The complete absence of shock after there was clear evidence of rupture and hæmorrhage was another perplexing though grateful manifestation. Although at the time when I made the diagnosis of ectopic gestation the evidence was pretty clear, there were still enough eccentricities about the case to impress vividly upon my mind that the inspiration for diagnosis, that comes to one after reading text-book chapters on the subject, is often grimly inadequate when required to interpret the actual manifestations of this particular prank of nature.

SURGICAL DIAGNOSIS.*

By E. T. GAUDET, M. D., 1st Vice-President of the New Brunswick Medical Society,
St. Joseph, N. B.

In order that I may not be misunderstood it will perhaps be well for me to define my position. An exact and complete diagnosis is perhaps to be desired and sought after in all cases, but such a quest should not be pursued to the detriment of the patient.

That an overweening desire for an exact and complete diagnosis not infrequently leads to a fatal delay in operating is a fact that all surgeons of experience can attest.

A diagnosis which will lead to correct treatment is sufficient. The diagnostician's object should be the truth for the patient's sake, not the truth for truth's sake; in other words, our aim should be a diagnosis for the patient's sake, rather than a diagnosis for the science's sake. I am heartily in favor of all scientific investigations which have for their object the increase of knowledge, and especially am I anxious to encourage all medical and surgical research, but I insist that such search and investigation must not be carried on to the patient's detriment.

A timely working diagnosis is of more value to the patient than a delayed one that is complete. Given a case of obstruction of the bowels. The question often arises, is it due to invagination, or volvulus, or bands, or adhesions producing strangulation? Now it makes not one whit's difference to the patient which of these conditions exist, nor does it to the surgeon. The patient wants the obstruction relieved, and the best way to do it is through an open abdomen, no matter which of the above mentioned conditions exist. The coeliotomy clears up the diagnosis and determines the nature of the further operative technique. A man falls from a height and is immediately paralyzed from the waist down. In so far as the patient's good is concerned what difference does it make whether the paralysis is due to a depressed bone fragment, a clot, a dislocation, or even a destruction of the cord? In either event operation is the best treatment, for it offers the best chance for recovery in case of pressure on the

*Read before N. B. Medical Society, St. John, July, 1905.

cord from any cause and does no harm if the cord is destroyed. On the other hand to delay operation with a view to reaching a correct conclusion as to the nature of the injury to the cord may be to delay until pressure which might have easily been relieved has produced degeneration. A man gets a blow on the head or a fall and presents the well known symptoms of cerebral compression. From a scientific aspect it would be very interesting to determine, before operating, the exact nature of the lesion, but practically it makes no difference whether the symptoms be due to an epi- or sub-dural clot or a depressed fragment of bone. In either event the proper thing to do is to operate. It were better to open a dozen skulls to find no lesion requiring surgical intervention than to delay in one case demanding it. Many surgeons are urging the necessity and the advisability of early exploratory operations on the skull and spine under the same circumstances as exploratory operations are done on the abdomen, and many of their subsequent experiences confirm the belief that the general adoption of this rule would save many lives and much morbidity.

A child is threatened with suffocation from an acute laryngeal trouble. Better to put a tube in the child's throat, and give an injection of antitoxin, forever remaining ignorant of the exact nature of the trouble, than to wait twelve hours for a culture and sign a death certificate as a consequence of the delay.

With the bulk of the profession, and especially with the laity, there is still too great a tendency to turn to surgery only as a last resort. This tendency is growing less each year, to be sure, but in it to-day may be found the explanation of the loss of many lives and the existence of much unnecessary suffering and disability.

I know of nothing that will better illustrate the baneful effects of this tendency than to recite a personal experience in connection with an appendicitis case in the summer of 1902. While away in the neighboring republic, I was present at the treatment of six cases of appendicitis which I followed for over two weeks. One only was an early operation and was closed without drainage. The other five required drainage for the extensive suppuration, and in three cases fœcal fistulæ exist. In two of these cases practically all the fœcal matter was passed through the abdomen for a time. A case taken into hospital about the same time and in much the same condition as

the five, died within thirty-six hours after the operation. We have had here then one death, and five cases of unnecessarily prolonged and very trying invalidism, which might have been prevented by prompt action and prompt diagnosis. Nor is this all. It is almost certain that two or more of these cases will, within five years, develop hernias which will need operation, and not at all improbable that one or more may develop intestinal obstruction. In a recent paper (International Clinics, July, 1904) an eminent surgeon points out the fact that according to published opinions of writers upon the subject a death rate of over 33½ per cent. attended uncomplicated sub-parietal injuries of the kidney, and stated it as his opinion, based upon a study of the literature and his personal experience, that the mortality was unnecessarily high and could be materially reduced by earlier operative interference; which is equivalent to saying that an earlier diagnosis can be and should be made in these cases. The best way to cure a carcinoma or sarcoma is to remove it thoroughly before you are certain that it is either. To await the development of positive signs, or to depend upon examination of specimens removed by a harpoon or similar device is silly and dangerous. Given, for instance, a suspicious tumour of the breast; if it occur in a woman past twenty-five years of age a radical operation along the lines laid down by Halstead should be done. If such a tumour should occur in a younger woman it should be removed entire, but with a view of saving as far as is possible, the center of the breast, after which it should be thoroughly examined with the microscope. If this examination proves it to be malignant a radical operation should at once be done, but if it be proven benign, then no further operation is necessary.

Save through exploratory coeliotomy. And in each and all of these conditions the only salvation of the patient lies in timely operation. In conclusion, I would like to impress the fact that delay is responsible for a larger number of surgical failures than all other causes combined, that this delay often is unwarranted and unnecessary if we fully appreciate the fact that an adequate working diagnosis need not necessarily be a complete one, and that surgical exploration is oft-times the best means of arriving at a diagnosis.

'Tis better to cure a patient without a diagnosis than to bury him with one. Personally, I much prefer being alive and undiagnosed than to being diagnosed and dead.

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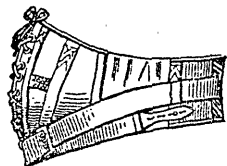
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PRE- AND POST-OPERATIVE RADIATION FOR CANCER.*

By J. J. CORBETT, M. D., St. John, N. B.

In the great world wide campaign now being waged upon this terrible disease cancer, new weapons are taking the place of the old ones in some cases, and in other cases, the old and new weapons are united in one grand effort for victory.

In the past we were only able to attack cancer from one position, *i. e.* the front. Now, like mighty armies opposing each other on a battlefield, who not only make frontal attacks but each try to surround the other so as to take the enemy in the rear, we not only attack cancer by the front as in surgery, but we are able to give drugs, which being absorbed into the system will fluoresce inside the human organism, and when reinforced by an attack from the outside by x-rays for a month or two will simplify the surgeon's task and make victory possible.

In my paper to-day I will not have time to speak of another weapon, radium. The remarkable case of Prof. Wm. R. Harper, President of Chicago University, who having abdominal cancer put himself under the care of Dr. Wm. Morton, of New York, and who has been reported cured or very much improved by the liquid sunshine treatment, has sent many new investigators into this field.

I will not even attempt the ætiology or symptomatology of cancer, but taking it for granted that we have a case of superficial or deep seated cancer which we are treating by x-rays, we may like to know what effect the x-rays have.

Experience has taught those who made use of the x-ray immediately after its discovery that its action was dangerous to normal tissue, but not to the same degree as to abnormal tissue. What produces this effect seems to be demonstrated by its action upon various conditions. It has been proved that protoplasm contracts when exposed to the x-rays, whether from the stimulating action due to intense vibration or some other specific action of the rays is not known. The contraction of the muscular structures of the circulatory apparatus at first lessens, by giving tone, and later completely occludes the lumen of

*Read before the New Brunswick Medical Society, July 18, 1905.

the vessels, to a degree in proportion to the extent of the exposure, which varies with the condition of the rays, the character of the structures exposed, and the capacity of the blood vessels. The larger vessels are not occluded to the same extent, relatively, as the smaller, and the arteries deeply placed are affected relative to the depth of the tissues and intensity of the radiance. It seems also that in the intervals between exposures there is a disposition for all the structures to resume a normal condition, hence, in the longer intervals between periods of exposure, the arterioles gradually relax and resume their function, and tissues that have not perished are restored. Under such process of tissue change the cancerous tissue element will have perished while normal structures recover.

The effect of breaking down a sarcoma or carcinoma, deeply seated or superficial, is to induce a degree of auto-infection which may imperil the life of the patient.

When drainage is possible, except in the alimentary tract, in which absorption will invariably take place, the prognosis may be fairly good. Experience has taught that a malignant growth breaking down or discharging into the alimentary canal is certain to be followed by dire results.

A tumour in the abdominal cavity may break down and discharge its contents into the peritoneal cavity, and thus be followed by fatal peritonitis. It thus becomes incumbent upon the attendant to weigh well every feature of effect and possibility of the results, when treating an abdominal cancer.

Whenever a malignant tumour, except one of small size, appears, the indication, if operable, is for its removal after a period of raying consistent with the indications of the case, usually for a period of 4 to 6 weeks. The disposition to-day is to use radiations of less intensity than formerly. Some early cases of epithelioma were x-rayed to produce a caustic effect; no one follows this technique now. A common practice a year ago was to x-ray to the point of severe dermatitis, namely a second stage with formation of vesicles and serious effusion; to-day mild dermatitis for the first series of sittings only is allowable. Again the x-ray was employed over a long period of time, viz., so many months. It is now a question of carrying the x-ray sequences of sittings along for a maximum of 4 to 6 weeks and then allowing an interval of half this period of time at least to watch for repair or cure.

It is a sad fact that one may carry the treatment of a facial

epithelioma steadily up to a point of complete cicatrization and cure, and then by prolonging treatment see the entire area break down again into a condition worse than at the start.

The moral of this experience is to know when to stop the application, and also in this class of cases not to x-ray except gently. Experience had to be gained, and it is now gained in many instances.

The main feature of successful technique is to standardize it, to measure accurately each step of the administration, pursue a steady cumulative treatment, each step of advance the same as the last one, until an end result judged of by the skin reaction is reached.

If some regular method as above outlined were adopted we should hear no more of those distressing cases of x-ray burns which are continually cropping up.

I would like to dwell more particularly on a new therapeutic method of treating cancer, as perfected by Dr. Wm. Morton of New York, It is the saturation of the human organism in whole or part with a medicine endowed with the property of fluorescence or phosphorescence, and then submitting the patient to the action of the x-rays or the radium radiation or the high frequency current. It is therefore a combined treatment. Dr. Morton calls it "artificial fluorescence." The sum total of his object was to develop light within tissue in the confidence that the well known external effects of this agency might now be duplicated internally, and especially in the expectation that certain wave lengths of the visible spectrum, like the blue-violet and yellow-green, might exert specialized effects. But it is obvious that the wave lengths of the visible spectrum cannot be reasonably supposed to be the sole out-put and resultant of the absorbed energy of the x-ray and of the radium radiation. Effects therefore may be attributed to transformations into other wave lengths, as for instance the ultra-violet or even into the well known secondary radiations lower in wave length than the x-radiations but still akin to them in their property of not being refracted and dispersed, as are the violet and ultra-violet. These secondary radiations in their turn set up fluorescence. The main point is that by reason of medicine administered to the patient a new set of radiations is set up within his tissues and that the most obvious of these radiations is light itself or closely akin to it.

We have not time today to consider the steps leading up to this plan, but they have been most interesting and have proven beyond a

doubt that artificial fluorescence and x-radiation is founded upon solid physical basis. To accomplish our purpose we must give medicine internally, and the said medicine must be harmless and have the power of fluorescing, and a radiation must be used which is able to excite fluorescence deep in the tissues of the body. The Finsen light radiation will not furnish the penetration needed so we must resort to x-radiation or radium.

Fluorescence is the property which substances have of absorbing invisible or visible rays and giving out visible light. The fluorescent substance does not give out the same wave length as that which it receives. Fluorescence and phosphorescence are much alike, the former lasts only so long as the exciting cause is maintained, the latter endures after the excitation has ceased. Fluorescence is only phosphorescence of short duration.

Dr. Morton holds the view that the effects of x-ray may be due to fluorescence of the tissue elements themselves, as we have natural fluorescence of the tissues of the body. It has been proved that the crystalline lens of the eye was fluorescent, and the aqueous humour less so; also that man and all animals possess in every part of the body a fluorescent substance resembling quinine.

Among the liquid fluorescent substances may be mentioned quinine, esculin, fraxin, eosin, fluorescein or uranin, rhodamin, cochineal, copper potassium chromate, gentian, henbane, litmus, naphthalene red, paraffin, petroleum, stramonium, tumeric, indigo, safranin, paolin magdala red, thallin, resercornfin, resorcin blue, and some of the salicylates.

It was quickly found that while the above substances were fluorescent to daylight a great variation in their capacity for fluorescence existed when exposed to x-ray and radium radiation. Some substances not fluorescent to sunlight are vividly fluorescent to the x-ray and to the radium, and vice versa.

The effect of light on animal organisms, including man, forms an interesting chapter by itself. Light acts as a stimulus to the animal functions, darkness hinders and prevents the growth of many of the lower forms of animal life. Young mammalian animals, including children, develop more perfectly in light. Light stimulates the action of unstriped muscular fibre; also pigment cells. It modifies the quality of the skin, reducing protoplasm to keratin, and will produce an intense inflammation of the skin. The haemoglobin gives off its oxygne

more quickly in light than in darkness, hence light increases the oxidizing power of the blood and correspondingly the process of oxidation in the human body. Many experiments tend to show that light also modifies metabolism by direct action on cells. Some deny this.

What is the application of the above to disease, more especially cancer? It is not a little curious that the very diseases amenable in greater or less degree to radiation treatment are those hitherto least amenable to any treatment. Such are some forms and stages of sarcoma and carcinoma, lupus, tuberculous glands, eczema, psoriasis, keloid, leukæmia, amoebic dysentery, alopecia areata, and chronic blepharitis.

SARCOMA.

Very many cases of sarcomatous growths have been cured. On the other hand, innumerable other cases have not been cured. Why this difference? This answer cannot be given. We can only say that the law of control in these cases is unknown. There is ground for hope that it may yet be discovered.

CARCINOMA.

Many cases of primary cancer of the breast have been reported cured, and also a large number of failures. An analysis of the success and failures show this among other things. If the initial tumour is seen early and is small, a cure may occur even if the lymphatics are indurated and swollen glands exist in the axilla. The lymphatics and glands quickly become apparently normal and the small tumour slowly disappears, but on the other hand a certain type of flat, disk-shaped, and not very large adeno-carcinoma will go on growing in size and invasion in spite of the most persistent use of the x-rays or radium. Why? We do not know. Or again a certain type of medullary or infiltrating tumour, "cancer foudroyante" (rapid cancer) will go on to a general metastatic infection regardless of radiation treatment. This type cannot be arrested by radiation. I think most surgeons will also admit that operation would not in the same class of cases have saved the patient's life. Again a large carcinoma (scirrhous) will not notably diminish in size and disappear under radiation. What will happen is a great reduction in the softer outer edges of the tumour, and its reduction to a harder and more clearly defined mass, and at same time a disappearance of the cord-like lymphatic vessels and enlarged glands. What then should be done in such cases?

The tumour is now simply a foreign body. Radiation will not remove it. It must be removed by surgical operation. A cancer is a most dangerous foreign tenant and must be cut out. But, and it is a very big but, the cutting out process carries with it another most dangerous feature and that is the incision of the lymphatics, to say nothing of innumerable small infected glands, impossible in many cases to dissect out. On the other hand radiation will not remove the tumour, but and this is equally a very important but, it will clear up of cancer cells all the outlying territory right up to the tumour itself, and now an operation can be a comparatively safe one. Therefore we should practice x-radiation thoroughly say for 6 or 8 weeks *before operation*, and practice as well after operation for about the same period of time.

By radiation treatment, we do not mean a destructive effect, but a radiation which just falls short of producing a mild dermatitis in from four to six weeks. With this degree of radiation the lymphatic vessels cease from being sensitive to the touch and cease to exhibit signs of inflammation, and if the axillary glands may not in this period of time subside, it is probable that they do not hold active cancer cells.

You may remark how do we know that the outlying areas of cancer infection are neutralized of infection and that the seat of the disease is again localized as in its beginning. We reply:—

I.—By the facts of the observed effect in many cases of recurrent cancer of the skin where this may be actually and visibly studied and may be verified by palpation. Nothing is more common in the history of radiation than to see large areas of skin infected by carcinoma clear up leaving a healthy skin.

II.—By the early cure of recurrent cancer in cicatrices.

III.—By the observation of the behaviour of cancer of mucous membrane where, under the radiation, a distinct line of demarcation unfolds itself between the affected and sound mucous membrane and by that sign affords a new indication to the surgeon where to incise.

IV.—By palpation of indurated lymphatic vessels in breast cancer.

What surgeons would prefer to cut through infiltrated lymphatics when he could later on cut through flexible and disinfected lymphatics? Some may object that a wound will not heal as well after radiation. Grant the full weight of the objection and I would reply better a slow healing than a recurrence, but this objection is not a

valid one as there is no delay in the healing process after radiation. Taking a broad view I believe that the best interests of the patient demand a combined treatment; early radiation and early operation. In short preoperative radiation should precede every operation for cancer with as much reason and force as preoperative aseptic and antiseptic cleansing of the skin to be incised. Radiation treatment exerts a retarding effect upon the growth of some cancers.

It cures some cases. The ratio to operative measures is not here discussed.

Preoperative radiation will increase ratio of cures by operation.

Preoperative radiation transforms some inoperable cases into operable ones.

Preoperative radiation is recommended as a precautionary measure probably quite as important as preoperative antiseptic preparations for surgical operations.

Now, ladies and gentlemen, you see that by the foregoing I am not exploiting a specific for cancer. First, before we can produce a specific, our pathologists and bacteriologists must produce the evidence needed as to the cause of cancer. But I am of the firm opinion that the two most dread diseases *i. e.* tuberculosis and carcinoma, are in some unknown way related to each other and that the time is not far distant when we will know the true cause of cancer as we now know the true cause of consumption.

But are we to stand idly by till some one of our German confreres makes that discovery? When we have so many cases on hand, what is our obvious duty? I claim and I think I claim fairly that physicians in general practice have not the time and means for investigation. But what of our medical schools and hospitals?

Bringing it more closely home are we here in New Brunswick doing anything to help to discover the cause and cure of cancer? We say that we have not the facilities; is that true? We have pathologists and bacteriologists and several radiologists and surgeons connected with our hospitals. What more do we want? Why should we wait any longer for others to do the pioneer work? Why not let us do our share? Let us be investigators.

My plea to-day is for pre-operative and post-operative radiation for cancer and all malignant neoplasms, and also for pre- not post-pioneer work, in all branches of medicine and surgery. Let us start and try to be discoverers. I know that I have not brought anything very new before you, nor is it very old, but in all your cancer cases I beg of you for the sake of your patients, that you practice artificial fluorescence with preoperative and post-operative radiation.

REF:—Morton (Medical Record, March 25, 1905; Journal American Medical Association, April 1, 1905): Snow.

PROVINCIAL MEDICAL BOARD OF NOVA SCOTIA.

REGISTRAR'S REPORT, 1904—1905.

During the year ending June 30th, 1905, there have been held six meetings of the Board. The two additional meetings were necessitated by the large amount of business that was on hand at the annual meeting last July. The total attendance at these meetings amounted to thirty-seven, making an average attendance of about six members, not as large as should be expected out of a membership of thirteen. Early in the year the vacancy caused by the death of Dr. D. H. Muir was filled by the appointment of Dr. P. N. Balcom, of Aylesford. It was of course known that it would be a difficult matter to find anyone who would be so punctual in attendance and so energetic in all matters relating to the business of the Board as Dr. Muir, but it is a matter of regret that not a single attendance has been recorded as yet for his successor. With this year also expires the term of service of six members appointed by the Nova Scotia Medical Society. It is hoped that all new appointees of the Society will take a more lively interest in the affairs of the Board than was done by some of the previous representatives, one at least of whom never attended a single meeting during his term of office.

Several cases of irregular practice have engaged the attention of the Board during the year and more or less active legal proceedings have been particularly satisfactory in their financial aspect. [1] With regard to Dr. Wm. M. Whelan;—at the time of last report he was not only defying the Board in persisting to practise, but was attempting to secure a mandamus to compel the Board to register him. His application was rejected by Judge Meagher and he became of course liable for costs, but all efforts to recover these have failed and in fact it would appear that practically the Board is helpless to stop Whelan and men like him unless the Act can be so amended as to make such persistent violations of it quasi-criminal and punishable by imprisonment. [2.] J. McD. Roy has also several times been reported as practising in several places in the western part of the province,

especially in the County of Digby, and proceedings have been more than once authorized against him, but nothing definite has been attained, chiefly, as it appears, through the difficulty of securing satisfactory evidence. [3.] Endeavours have been made in various ways to put an end to the practice of Rev. W. J. Arnold, of Margaret's Bay, but as no assurance could be placed upon his positive assurance that he would desist, the Board's counsel has been definitely authorized to proceed against him in open court. Drysdale and McInnis have accepted the defence but the matter has not yet come to trial. In the meantime Dr. Farquharson has left the district. [4.] The most prominent case the Board has had to deal with has been that of J. Drummond, a veritable quack, who was "doing" the towns along the western shore. Complaint was especially made to the Board by the Lunenburg County Medical Society. Before anything could be done with him in Lunenburg he left for Halifax. On his arrival here he called at this office and made extravagant claims as to his right to practise under British qualifications. He could not at that time produce any paper or certificate of any kind to substantiate these claims, but left promising to return with same that afternoon. The Board's counsel was immediately notified of his arrival in town and a watch was put upon him when it was ascertained that he was about to leave. There was no time to secure the papers necessary to have him arrested, but a writ was served on him as he was leaving the railway station. He was very loud in protesting his intention of returning and entering appearance to same. This he did not do and the case going by default our counsel filed a statement of claim and applied to the judge to determine the amount of judgment that should be entered against him. On the first of June judgement was entered against Drummond for \$1500.00 penalties and \$61.00 costs. The probabilities are that Drummond will not be heard from again, but at any rate the Board is now in a position to collect this amount from him should he show up anywhere in the British Dominions.

The professional examinations for the License of the Board have been held this year under the same conditions as adopted last year, that is, for registration in Nova Scotia examinations have been required in final subjects only, but arrangements were made to hold examinations in the other subjects also in cases where candidates wished to satisfy the requirements of other Boards. Somewhat lately it has

transpired, however, that registration in the North-West Territories could be accomplished simply on the official certificate. A great many Nova Scotia practitioners are taking advantage of these conditions which will hold good at least until the newly created provinces of the west, Alberta and Saskatchewan, shall have enacted special legislation in the matter.

During the year a petition was presented to the Board by the Nova Scotia students in attendance at McGill, asking that the date of the professional examinations be changed from April to June. The request was refused, the Board deciding to adhere to the dates which have been recently adopted, namely, the last Wednesday in April and the first Wednesday in September. As a special report of these examinations are submitted by the Education Committee, it may be simply stated here that during the year twenty candidates have taken these examinations and secured the Board's License. Only one candidate took the second professional examination. With reference to these examinations, in last year's report mention was made of the fact that the question of holding in some way a conjoint examination by which candidates should secure a Collegiate Degree at the same time as their Provincial License, was under consideration. It is satisfactory to report that what then appeared as objections to the scheme have been entirely removed and that things are in such a position now that this method may be brought into working order at the Autumn examinations.

With regard to reciprocity in registration there is nothing to report either as regards Interprovincial Reciprocity or the recognition of Canadian Degrees in Great Britain except as already stated, the Nova Scotia certificate allows candidates to register in the North-West Territories without examination.

Further attention was given to the question of Medical Witness Fees and a bill bearing on the matter was again introduced into the Legislature at its last meeting. This bill was, however, so much altered by the committee that the promoters thought it advisable to have it withdrawn altogether.

The attention of the Board was also drawn to the action of the so-called opticians and a committee was appointed to prepare a public circular in connection with the matter when it was found that these persons were taking a still more aggressive position, in the way of

endeavouring to secure legislation to legalize their practice. The attention of the Board was therefore concentrated for the time being on the defeating of this project and with the assistance of the profession generally the bill was thrown out. The matter of the circular still stands as at first.

The Preliminary Examinations have been held as usual, with Local Examinations at Pictou and Yarmouth. The following are the general results :

Date of Examination	Candidates.	Passed.	Passed in all but one.	Failed
August, 1904.....	13.....	7.....	2.....	4
May, 1905.....	4.....	4.....	0.....	0
Total, 1904—5.....	17.....	11.....	2.....	4
Total, 1903—4.....	27.....	13.....	1.....	13

The results show that the total number of Candidates was much smaller, but that the percentage of those who passed was much greater this year than last. Detailed results of each candidate are submitted for reference in connection with the Education Committee's Report. Including those who took the Board's Preliminary Examination above and those who have been exempt by recognized certificates, twenty-seven names have been added to the Medical Students' Register, being fewer by two than the registrations last year.

At the professional examinations in September, 1904, and April, 1905, as mentioned above, twenty persons secured the Board's License and of these nineteen were subsequently registered. In addition to these three others were registered without examination, two in accordance with previous decisions of the Board and one by reason of his holding a British Registration Certificate, so that the total number of registrations for the year was twenty two, being one less than the number of additions last year. During the same period five names were erased, which is one less than during 1903-4, so that the number of names on the register is only increased by seventeen. The erasures are all on account of death and were as follows :

- Dickie, Edwin Egbert, M. D., C. M., Dal. Univ., 1903 ; Lic. P. M. B., N. S., 1904, Wolfville, Kings.
- McDonald, Daniel, (Sec. 37 Med. Act, 1872) Pugwash, Cumb.
- MacKay, John Hector, M. D., Coll. P. & S., N. Y., 1868 ; L. R. C. S., Ed., 1871 ; L. R. C. P., Ed., 1871, Truro, Col.

Roach, Elisha, M. D., Univ. Penn., 1860, Tatamagouche, Col.
Townshend, Alexander Stewart, M. D., Univ. Penn., 1862,
Parrsboro, Cumb.

On June, 30th, 1904, the total number of names on the register was 609; on June 30th, 1905, the total number was 626, making an increase as was stated above of 17.

During the year Trinity College was added to the list of recognized Colleges: its certificates are, however, to be accepted only under certain conditions.

Three women, having satisfied the other requirements of the Board, passed the Examination prescribed under the Regulations for Qualified Midwives and were granted the Board's Diploma, viz.—

Miss Nellie Bell, Halifax.

Miss Mabel Cameron, Halifax.

Mrs. Minnie Cameron, Halifax.

The money receipts for the year have been as follows:—

I. Fees	20	\$35.00	Profess. Exam. Fees.....	\$700.00
	1	10.00	“ “ “	10.00
	1	5.00	“ “ “ (Suppl.)	5.00
	3	20.00	Medical Registration Fees.....	60.00
	18	2.00	Special Certif. Registration....	36.00
	9	10.00	Students' Prelimin. Exam.....	90.00
	4	5.00	“ “ “	20.00
	4	2.00	“ “ “ (Suppl)	8.00
	4	2.00	“ “ “ (Local)	8.00
	12	10.00	Students' Registration.....	120.00
	2	15.00	Midwives' Examination.....	30.00
				<hr/>
				\$1089.00

being \$203.00 less than last year.

II. Additional,

Proceeds sales Registers and Exam. Papers, \$ 9.00

making a total of.....\$1098.00

all of which amount has been transferred to the Treasurer and will be accounted for in his Financial Statement.

Respectfully submitted

A. W. H. LINDSAY,

Halifax, July 19, 1905.

Registrar.

PROVINCIAL MEDICAL BOARD, NOVA SCOTIA, *in account with*

A. W. H. LINDSAY, *Treasurer.*

YEAR ENDING JUNE 30, 1905.

1904.	Cr.	
June 30.	By balance in hand.....	\$2956 70
1905.		
June 30.	Received from Registrar to date.....	1098 00
	Int. Deposit, Dominion Savings Bank.....	81 88
		<u>\$4136 58</u>

1905.	Dr.	
	To Preliminary Examiners' Fee.....	\$ 62 00
	Local Examiners' Fees	18 90
	Professional Examiners' and Travelling Fees..	346 25
	Members' Attendance and Travelling Fees.....	267 00
	Legal Expenses.....	99 47
	Printing, Stationery and Typewriting.....	83 55
	Refunded Fees.....	30 00
	Premium Guarantee Bond.....	15 00
	Reg. Account, Postage, Telegrams, etc.....	38 85
	Letter File and Index.....	10 50
	Salary, Sec.-Reg.-Treas. & Sup. Examinations.	500 00
		<u>\$1471 52</u>
	Balance in hand	2665 06
		<u>\$4136 58</u>

THE
MARITIME MEDICAL NEWS.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XVII. HALIFAX, N. S., SEPTEMBER, 1905 No. 9.

Editorial.

THE MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

The meeting at Halifax is now a matter of history. We of the medical profession who claim Nova Scotia as our home had looked forward with much pleasurable anticipation to meeting our confreres from other parts of the Dominion, to extend to them a cordial welcome, to exchange ideas on topics of mutual interest, and to show them some of the attractive features of our province. It was indeed a very great pleasure to have with us, even for so brief a period, so large a representation of our professional brethren from the other provinces. We trust that they have formed as kindly an opinion of us as we have of them.

In our next issue we will give a brief synopsis of the work which was put through. Just now we must be content with saying that the meeting proved to be a very successful one. The various addresses were of a high order of merit. It was a special privilege to have with us Mr. Caird, of Edinburgh, whose address was a real treat, and Dr. Kelly, of Baltimore, who also favoured us with an address full of worth and interest. The papers, too, were timely, and many of them were of unusual value. We hope to be able to present several of them in succeeding issues.

CONTEMPTIBLE TACTICS.

It is not necessary to enter into the merits or demerits of the staff of the Victoria General Hospital to warrant us in characterizing the recent attack upon it in the Halifax Herald, during the session of the Canadian Medical Association, as outrageous and contemptible. It is quite on a par with, and bears the same ear marks as, the attack upon the profession in St. John, and upon Dr. Richardson of Boston, the guest of the Maritime Medical Association, last year in the Acadian Recorder.

It requires no stretch of the imagination to conclude that the individual who penned the one inspired the other, and that both of them are equally undeserving.

Some men rise by virtue of their ability and sterling qualities, while others float upon the wreckage their malignity devises. Their brother practitioners are above repaying them in kind. They are shielded by the etiquette which they ignore, but will find, sooner or later, that knifing their brothers will stamp them with the mark of Cain, when they might be patronized and loved.

By arrangement with other medical papers of Canada, the addresses delivered at the recent meeting of the Canadian Medical Association, with an account of the proceedings, will be published in the October issue.

Obituary.

Dr. George I. McKenzie.—On the 20th of August, Dr. George I. McKenzie, of Pictou, passed away at the age of 68 years. His genial, kindly disposition had made him very popular with all classes, and he was widely known as a capable and successful physician. For 34 years he had practiced his profession devotedly and unselfishly in the town of Pictou, and the citizens of that town and the surrounding country had become much attached to the warm hearted and self-sacrificing doctor who had for so many years laboured for their good.

Dr. McKenzie was born at Durham, Pictou County, and received his literary education at the Seminary of the Presbyterian Church which at that time was established at Durham, but which later removed to Halifax and became known as the Presbyterian Theological College. His medical course was taken at Jefferson College, Philadelphia, from which he graduated in 1864. For some six years he practiced in Maitland, and then he removed to Pictou, where he continued to reside until his death.

Although he had not been in his wonted health for some months, his final illness was but of a few days duration. We reproduce the following from the columns of the "Colonial Standard":—

"The end came somewhat unexpectedly, and when on Sunday morning last the sad tidings passed round that Dr. McKenzie was dead the universal regret and sorrow expressed indicated the prominent place he held in the community. His long existence and successful practice gave him a warm place in the affections of many, who will sorely miss his kind word and genial manner in his professional visit and social call.

"Dr. McKenzie will be much missed also as a citizen, for he was a public-spirited man taking a deep and patriotic interest in everything that concerned the welfare of his town and country. He was a devoted member of the Presbyterian Church, and an active member of the Prince Street Congregation. The place in the community, the influence he exerted, and the esteem in which he was universally regarded were shown in the large concourse which followed him to the grave, and in the tokens of regret everywhere apparent."



LATE DR. G. I. MCKENZIE.

Dr. McKenzie was one of the most successful practitioners in the province, successful in treating the sick, successful as any man may hope to be in this country from a business point of view, and successful in winning and holding the esteem and affection of his patients and of all who knew him. His practice was characterized by a judicious combination of caution and decision; he was not given to exploiting every new drug as it came out, but when he was convinced of the efficacy of any new line of treatment he used it with skill and discretion. In his relations with his professional brethren he was an admirable exponent of the golden rule, and possessed that kindness of heart and strong sense of right which make medical ethics easy and natural. His experience and a gift of keen observation made his advice in consultations valuable, and a more reliable and helpful colleague there could not be.

Dr. McKenzie was twice married. His first wife was a daughter of the late Dr. Mitchell, of Merigonish, by whom he had two daughters and one son, John J., who graduated in medicine at Dalhousie in 1902, and has since been associated in practice with his father. His widow is a sister of Mrs. Edmund McPhail.

Dr. H. W. Robertson.—The death of Dr. Henry W. Robertson occurred at his home in Crapaud, P. E. I., on the 8th inst. To him death came in the midst of service on behalf of his fellow man, and his demise was undoubtedly hastened by the practice of the work to which he had devoted his life.

In the district in which he had laboured as a physician for over a quarter of a century the entire community had found him a friend whose kindness was proverbial. In the home life none was more hearty in a welcome than Dr. Robertson; to the poor he was always a friend whose aid was never sought in vain. With a practice undoubtedly the most extensive in the province of Prince Edward Island his life was indeed a busy one such as only the most robust could endure. The last winter was especially trying and it was then that Dr. Robertson's health first caused alarm to himself and friends.

The late Dr. Robertson was 61 years of age, and was a son of the late Joseph Robertson, of Cavendish. He was a prominent member of the Independent Order of Foresters and the Masons, while at one time he occupied the position of President of the Medical Association of Prince Edward Island.

Dr. Simon Fitch.—We regret to have to chronicle the death of Dr. Simon Fitch, who was for many years a prominent Halifax physician. An extended obituary notice will appear in our next issue.

Book Reviews.

Manual of Diseases of the Eye. By Charles H. May, M. D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeon's Medical Department Columbia University, New York, 1890-1903, Ophthalmic Surgeon to the City Hospitals, Randall's Island, New York, etc., etc.

This volume contains four hundred pages, twenty one coloured plates, including sixty coloured figures, and three hundred and sixty engravings in the text. Price two dollars. Published by William Wood & Co., 51 Fifth Avenue, New York.

This is the fourth edition revised. Many illustrations have been replaced by superior ones. New figures have been added, including eight additional coloured plates. Among the latter are six presenting twenty nine coloured drawings of external diseases of the eye.

The work is a concise, practical and systematic manual of the diseases of the eye and is well adapted for the student and general practitioner. Excessive detail, extensive discussion and lengthy accounts of theories and rare conditions have been omitted, while the common diseases, which the general practitioner is most frequently called upon to treat are described with comparative fulness.

Color Vision and Color-blindness. A Practical Manual for Railroad Surgeons. By J. Ellis Jennings, M. D., (University of Pennsylvania). Formerly Clinical Assistant Royal London Ophthalmic Hospital; Professor of Disease of the Eye, Medical Department Barnes University, St. Louis; Ophthalmic Surgeon to the Centenary Hospital; Ophthalmic and Aural Surgeon to the St Louis and San Francisco Railway Systems, etc., etc. Second Edition. Thoroughly Revised with Illustrations. 132 Pages, Crown Octavo. Price, extra cloth \$1.00, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

This work should be in the possession of every practitioner who is employed by railroad and steamship companies. Every employee of such companies should be carefully examined as to his colour-sense.

Dr. Jennings' practical work contains all that is essential to a perfect understanding of the subject of colour-vision and colour-blindness.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles. Edited by A. O. J. Kelly, A. M., M. D. Vol. II, fifteenth series, 1905. Published by the J. B. Lippincott Company, Philadelphia and London. Price \$2.00.

The latest issue of this ever popular publication contains a number of valuable and suggestive articles on a wide variety of topics. The treatment of acute nephritis in childhood is considered by John Lovett Morse, who

opposes the use of diuretics and the administration of water during such time as secretion is suppressed or small in amount. An interesting article on the therapeutic indications of kephir is contributed by G. Hayem, of the Paris Faculty. Robert T. Edes offers suggestions regarding the treatment of neurasthenia which are both sensible and practical. The x-ray treatment of tinea tonsurans is considered by Drs. Sabourand and Noire, of Paris, who speak very highly of its efficacy. The principal paper is that of Robert N. Wilson, on the diagnosis of incipient thoracic tuberculosis, and covers more than fifty pages. He insists upon attaching importance to cough as a symptom and affirms that normal or even subnormal temperature is common in the incipient stages. Other contributors are Solomon Solis Cohen, H. Roger, J. Rutter Williamson, A. L. Benedict, Edred M. Corner, G. Frank Lydston, Daniel M. Eisendrath, Drs. Lermoyez and Bellin, the late Thos. H. Manley, Chas. Greene Cumston, J. Garland Sherrill Felix Terrier (who describes the manner of using scopolamin as a general anæsthetic, and speaks very favourably of it,) Chauncey D. Palmer, Mary Buchanan, Norval H. Pierce, John C. Hemmeter and Josef Wiesel. All of these writers present interesting and valuable papers, which go to make up a number which at least equals its precessors in merit.

Therapeutic Notes.

THE SUPERIOR QUALITIES OF SANMETTO IN CYSTITIS, PROSTATITIS AND GONORRHEA.—I have used Sanmetto quite extensively in cystitis, prostatitis and gonorrhœa, and find it far superior to any proprietary preparation or any prescription I have ever used. It controls admirably those cases of prostatitis where there is excessive desire to urinate frequently but an inability to do so.

Fremont, O.

R. B. Meek, M. D.

MODERN THERAPEUTICS AND PHARMACY.*—By Frederick Hadra, M. D. of San Antonio, Texas. In speaking of ethical proprietaries, he says: "I should be sorry, indeed, if the prejudices of any member of this society should so far overcome his better judgement as to banish all or most of these drugs from his practice without investigating their merits. So, if we desire a local antiphlogistic effect, and have to choose between the ancient, unsightly, unhygienic and troublesome flax-seed poultice and the newer proprietary article called Antiphlogistine, a physician must needs be prejudiced, indeed, who will prefer the former. . . . It may be a matter of theoretical indifference what preparation we prescribe, but it may be quite a different matter with the patient who has to use it for long periods."

"Does it not strike you as somewhat incongruous that we alone of all professions and trades should rise up in arms against a co-ordinate branch which is continually striving to assist us in improving our therapeutic weapons? If we would take advantage of the opportunity offered to make intelligent selection of such preparations of drugs of reliable concerns as appeal to reason and common sense, those of us who do so will certainly have advantage over those who do not."

As regards the refilling by the druggists of prescriptions of proprietary remedies, he says: "If I am called to treat a sprain of the ankle, and find it necessary to order an antiphlogistic application, it would be just as easy for the patient to send to his druggist daily for more flax-seed meal or iodine, as it would be for him to order more cans of the more cleanly proprietary preparation, Antiphlogistine. A tonic or cough medicine, quinine mixture or capsule would share the same fate whether proprietary or extemporaneous."

"If the intelligent use of drugs mentioned is not injurious *per se*, why should we protect the laity against their use any more than against the employment of any other drugs? Would the committee advocate the abandonment of calomel, castor oil, mag. sulph., quinine, flax-seed meal, paregoric, laudanum or carbolic acid because the laity can also go to the drug store and purchase these just as they can Cascara preparations, Phenacetin, Listerine, Antiphlogistine, etc.?"—*Extracts from an article in the *Texas Medical Journal* for March, 1905.

RELIEF IN NEURALGIA AND GIRDLE PAINS.—The efficiency of antikamnia tablets in neuralgia is beyond dispute and is well illustrated by the following case: An old nurse who had suffered from severe neuralgia at intervals for many years and whose hair had become gray on one side of her head from this cause, expressed herself as having gained more relief from antikamnia tablets than from all the many medicines which had been prescribed for her. For pain about the head from almost any cause, antikamnia tablets always have undoubted preference over all other coal-tar preparations. They are a useful adjuvant in the treatment of migraine, and the headaches of school children promptly yield to moderate doses.

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