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# The Canadian Practitioner and Review.

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## Original Communications.

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### TIC DOULOUREUX (TRIGEMINAL NEURALGIA). REMOVAL OF THE GASSERIAN GANGLION. RECOVERY.\*

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By HERBERT A. BRUCE, M.D., F.R.C.S., ENG.

Associate Professor of Clinical Surgery, University of Toronto; Surgeon St. Michael's Hospital;  
Surgeon Out-door Department, Toronto General Hospital.

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Mr. M. C., Cayuga, aged 63, consulted me in January last (1902), when he gave the following history:—

About two years ago the trouble commenced in his lower lip, on the right side, as a sort of itching, followed by darting pains. This was accompanied by numbness. There was soreness of the right side of his mouth, gums, teeth, and of the right side of his tongue. After about a year the pain spread upwards and downwards, until the whole side of his face, above and around the eye and ear and down under the jaw bone, was affected. The pain was present almost constantly. He had taken a great deal of medicine from a number of doctors, without getting relief. I diagnosed the trouble as tic douloureux, and told him that as he had no doubt been given all the remedies that were generally used for this trouble, I did not look for any benefit from further medication, but would give him a prescription which he might try for a month or so, and if he did not obtain relief, I would advise a neurectomy of the superior maxillary nerve. I accordingly gave him strychnia, 1/20 gr. three times a day, and he used this for about a month without relief.

He then decided to have an operation performed, and returned about the middle of March. As the pain seemed to be chiefly confined to the distribution of the superior maxillary nerve, I decided to perform Carnochan's operation, *i.e.*, to remove the superior maxillary nerve, together with Meckel's ganglion by

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\* Read, and patient presented, before Ontario Medical Association in June, 1902.

the antral route. This I did at St. Michael's Hospital on March 21st, assisted by Dr. Oldright.

The anterior wall of the antrum was laid bare, through a Y-shaped incision, and the infra-orbital nerve, as it emerges from the foramen, was isolated, and a silk ligature placed around it to act as a guide, and the nerve divided beyond this. A square hole, measuring three-quarters of an inch in each direction, was cut out of the front wall of the antrum with a chisel. This was so planned that the foramen was situated slightly above the centre of the hole. An electric head lamp was used to throw light into the antrum, and a smaller hole, similarly shaped, was cut in the posterior wall of the antrum. Then, with a director, the floor of the infra-orbital canal was broken through, so that the nerve was set free, and could be traced back into the sphenomaxillary fossa. There was a good deal of hemorrhage from the sphenomaxillary fossa, which was controlled by sponge pressure.

As soon as it had ceased the nerve was divided with a long pair of scissors, close to the foramen rotundum. The portion removed measured a little over an inch and three-quarters. The skin wound was closed without drainage. The supra-orbital nerve was now exposed by a transverse incision, and as much of it removed as possible. These wounds healed by first intention, and the patient was able to leave the hospital in two weeks time, having considerable relief from his pain.

After being home for a couple of weeks he wrote me that the pain had returned again, although not quite so severe as formerly. I told him that he had better wait for two or three months, and if, at the end of that time, the pain was not considerably relieved, I would remove the Gasserian ganglion. At the end of another week, however, as he was still suffering considerable pain, he decided to return and have the further operation done.

Then, at St. Michael's Hospital, on the 2nd of May, I started in to remove the Gasserian ganglion by the Hartley-Krause method, assisted by Drs. Nevitt and McCollum. Dr. Crawford gave chloroform.

An omega-shaped incision was made in the temporal region, with its base at the zygoma. The squamous portion of the temporal bone was trephined with a one-inch trephine half an inch above the zygoma, and a square portion of bone mapped out with saw cuts. The upper horizontal saw cut was placed about three inches above the zygoma. This was joined by a vertical one extending in front of the ear, and anteriorly by another saw cut half an inch behind the external angular process of the frontal bone.

After the disc of bone was removed with the trephine, the

bone between the trephine opening and the saw cuts was removed with bone forceps, and the dura mater exposed. This was very adherent to most of the bone, and it was with some difficulty that it was separated. Then the dura mater was separated from the floor of the middle fossa as far as the foramen ovale and rotundum. There was a great deal of hemorrhage accompanying this separation.

At this stage of the operation the patient stopped breathing and his pulse became very weak, so that we had to do artificial respiration for a few minutes, when his breathing returned, and his pulse improved. We decided, however, that as he had suffered a considerable amount of shock, it would be unwise to continue, and we would divide the operation into two stages. Gauze was therefore packed in between the dura mater and the floor of the middle fossa, and the skin incision closed, allowing the packing to come out at lower angle of the incision, in front. The operation took fifty-five minutes. There was no hemorrhage from the middle meningeal artery, and it was not tied.

For the first twenty-four hours after the operation the patient was wildly delirious, and we had great difficulty in keeping him in bed. During the second twenty-four, although he was still delirious, he was more manageable, and at the end of sixty hours he became conscious and partly rational. At the end of five days he was quite himself again. On the second day after the operation, as there had been a considerable amount of oozing, the dressing was changed, and while doing it a smart hemorrhage occurred. I tried to catch the bleeding point with artery forceps, but was not successful, and I therefore packed in a quantity of iodoform gauze. This had the desired effect, and the bleeding ceased.

Eleven days after the first operation, on the 12th of May, he was given ether, and the second stage of the operation was performed. Owing to the former experience, which we thought attributable to chloroform, we decided to give him ether, and this was administered by Dr. McMahon—and I may here state that he took the anesthetic nicely, and his pulse remained good throughout, and I regretted that ether had not been used on the first occasion. Drs. McCollum and Nevitt again assisted me.

The sutures were removed and the flap turned down, and the gauze packing taken out. The dura mater was covered over with lymph. A retractor was placed beneath the temporo-sphenoidal lobe, and it was lifted up from the floor of the middle fossa, and by means of a reflector and a head lamp a good view of the deep wound could be had. The foramen rotundum was found, and the superior maxillary nerve was surrounded by a blunt hook and a ligature passed around it, and the nerve was cut beyond the ligature, close to the foramen.

The foramen ovale was then sought for and a hook passed around the inferior maxillary nerve. It was then secured by a narrow pair of pressure forceps and the nerve cut as it entered the foramen ovale.

These nerves were traced back to the Gasserian ganglion, and the dura mater over it being divided, it was exposed lying in the cavum Mecklei, at the apex of the petrous portion of the temporal bone. The nerve trunk behind it was divided with scissors, and the ganglion lifted out, together with portions of the superior and inferior maxillary nerves, between the ganglion and their respective foramina. The ends of the nerves were pushed into the foramina with a probe. Some iodoform gauze was placed on the floor of the fossa and the wound was closed with s.w.g. sutures. The operation lasted forty minutes. The gauze was left undisturbed for a week, when it was removed. At the second stage of the operation, also, there was no trouble with the middle meningeal, and I did not require to tie it.

The margins of the right eyelid were drawn together by a couple of interrupted sutures, and were left in this condition for four days. Then the sutures were removed, and the eye was flushed out with boracic acid and a Buller's shield put on to protect it. The eye was flushed out with boracic solution and the shield kept on for ten days. The wound in the temporal region healed by first intention, and the eye looks quite healthy. The lower lid droops a little, probably owing to injury of some filaments of the facial nerve during the peripheral operation. The patient has been free from his old pain since, and although there is some numbness around the mouth, this is not troublesome. I think we can look upon this as a complete cure. It is to-day twenty-five days since the operation, and the patient has been going about for a week.

Dr. Scott, of the Biological Department, Toronto University, was present at the operation, and I gave him the ganglion and portions of the nerves for microscopic examination immediately after they were removed, and I will read the report which he has given me:—

BIOLOGICAL DEPARTMENT,  
UNIVERSITY OF TORONTO,  
June 4th, 1902.

DEAR DR. BRUCE,—

I have examined the Gasserian ganglion which you submitted to me at the operation on May 2, 1902, and beg to report as follows:—

The ganglion, immediately after removal, was fixed in a saturated solution of corrosive sublimate for twenty-four hours, dehydrated and imbedded in paraffin. As your report shows,

there had been a neurectomy of the superior maxillary division of the fifth nerve, about six weeks previous to the removal of the ganglion.

The chief changes found in the ganglion are the "ascending degeneration changes" found in cells of a ganglion after division of a sensory nerve. On division of a nerve there is a peripheral or Wallerian degeneration of nerve fibres, but there are also ascending degenerative changes. This degeneration affects chiefly the cells of origin of the fibres of the nerve. It has been found that while the cells of origin of a motor nerve suffer changes, they ultimately recover, but the cells of origin of a sensory nerve ultimately degenerate. This has been observed by all who have experimented on animals—Nissl, Tugare, Van Gehuchten, Fleming.

In this Gasserian ganglion there are very few cells remaining, but instead, the capsular cells are greatly increased. The ganglion cells present have a somewhat swollen appearance, and in only a very few can a distinct nucleus be observed. There is, in the cytoplasm, very little of the chromatophile substance (Nissl granules) which is so characteristic of normal nerve cells.

Beyond these changes the only one observed was an increase of thickness in the walls of the blood vessels. Owing to lack of time, the nerves themselves have not yet been examined.

Yours truly,

(Signed) F. H. SCOTT, PH.D.,  
*Demonstrator in Physiology.*

Dr. Keen strongly advises the performance of a peripheral neurectomy before removal of the Gasserian ganglion, on account of the mortality of the latter operation, even though the former only gives a temporary relief. He has even performed a second peripheral operation after a few years, and found that the nerve had been reproduced. Sensation is not always lost after resection of a branch of the fifth nerve. Many investigators believe that the facial nerve contains sensory fibres. It is curious that the right tri-facial nerve is more commonly attacked than the left. In 135 cases collected by Dr. Spiller, the affected side is given in 72. In 58 the right nerve was diseased, and in 14 the left.

Dr. Cushing states that in all true cases of tic douloureux, in which all three divisions of the trigeminal nerve are affected, surgical measures alone can with any degree of certainty be depended on to afford relief, and that the removal of the Gasserian ganglion must ultimately be contemplated, and he regrets that this is looked upon as so hazardous as to be generally not recommended.

He thinks that two factors may be held responsible for the

ill-repute in which the ganglion operation at present stands. In the first place the considerable attendant mortality, ordinarily placed at 20 per cent., and secondly, the impression which is prevalent regarding the recurrence of the neuralgia, an impression which has been occasioned by the reports of cases in which incomplete operations have been performed with a subsequent return of pain.

One of the great difficulties of the operation is the severity of the hemorrhage, which obscures the field of operation. The objective point of the operation is necessarily located at the bottom of a close-walled operative well whose depth varies from 5 to 8 centimetres, and blood staining, even in slight amount, will obscure the ganglion, and be incompatible with its complete removal.

On account of the troublesome hemorrhage, Dr. Cushing proposes a new method of removing the ganglion, which differs in detail only from the Hartley-Krause method. The trephine opening through the temporary fossa is made so low that the manipulations may be conducted underneath the middle meningeal vessel.

As far as medical treatment is concerned, the greatest amount of success seems to have been obtained by the administration of strychnia in heroic doses, as suggested by Dr. Dana, of New York. Keen also reports the recovery of a few cases after the administration of large doses of strychnia. He gives 1/20 gr. three times a day, and gradually increases this until the patient is taking 7/20 gr. in a day, and this treatment is kept up for a month or even longer.

As to the pathogenesis of tic douloureux, Dr. Dana looks upon it as a degenerative neuralgia, occurring at, or after the middle period of life, and due to a degenerative change, amounting to a neuritis, in the nerve and its ganglion, and probably in the blood vessels which supply it.

Dr. Lewellys F. Barker, after the study of a number of cases, says:—

1. If a ganglion be entirely removed, there need be no fear of return of pain from irritation of the stump of the trigeminal nerve, left behind, for all the axones of this stump will degenerate to their terminations in the pons and medulla, down as far as the cervical cord. The end of a nerve in an amputation stump is not analagous.

2. Complete removal of the Gasserian ganglion utterly abolishes the possibility of calling forth sensations in consciousness by applying stimuli to the domain of peripheral distribution of the nerves connected with the ganglion of the corresponding side.

3. If pain persists after the complete removal of the ganglion, a lesion of the central neurons of the trigeminal afferent path is indicated.

## PREMONITORY SYMPTOMS OF FAILURE OF THE HEART IN DIPHTHERIA.\*

BY DR. FREDERICK FENTON, TORONTO.

It has been my fortune, or misfortune, to have seen a number of deaths from the condition called "heart failure" during or following attacks of diphtheria. In, I think, every case there occurred, at longer or shorter periods before death, a group of symptoms which may admit of an anatomical explanation, and which appear to me to bear a definite relation to the cardiac condition, the whole forming a pathological and clinical entity.

It is quite possible that I am about to describe a group of symptoms familiar to you all; if so, I can still take consolation from the fact that the literature on the subject is, with the exception of one or two instances, so far as I have been able to find, very indefinite and unsatisfactory.

This complication usually arises during the second or third week of the disease, but may be met with much earlier or be delayed for a month or more.

Some patients, it is said, die suddenly and without warning, usually during some exertion or excitement, but in the majority of cases, if not in all, there are premonitions which may precede the fatal issue for times varying from hours, to days or even weeks.

Most authors in recording the subjective and objective signs do not associate them in such a way as to present a symptom complex, but rather as isolated facts, without indicating their relation to or dependence upon one another.

The first indication of the approaching trouble is, almost invariably, *abdominal pain*, usually in the epigastric region, but occasionally first referred to the region of the umbilicus.

The pain is of moderate severity, though usually sufficient to make a child cry out. At times it may be so slight as to pass almost unnoticed, while in some cases it is very intense, requiring good doses of morphia for its relief.

In one case, in a child of 14 years, the pain extended to the precordia and radiated to the left shoulder and arm, as in *angina pectoris*.

Though generally pale and depressed during the attack of pain, the child may appear quite itself in the intervals.

Occurring with the pain, or more frequently beginning a few hours after its incidence and continuing at intervals till death, there is vomiting.

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\* Read at meeting of Toronto Clinical Society.



The pulse is always disturbed during the attack of pain. It may be either increased or decreased in frequency, more frequently the latter, and it is always very much weakened. During the intervals between the pains the weakened pulse may be the only indication of trouble, though even this may improve if attacks of pain are not severe or close together. If vomiting has occurred the pulse remains weak. The weakness of the heart is in striking contrast to the preservation of muscular strength of the body generally. In a recent case, though for nearly twelve hours before death no pulse could be felt at the wrist, the child almost up to the end would at times raise up in bed in spite of the attendant, in her efforts to breathe more easily. The mind almost always remains clear to the end.

The points to which I wish particularly to direct attention to, and elicit discussion on, are the epigastric pain and the vomiting.

On more than one occasion I have found it difficult to get the friends to believe that the danger was as great as I represented, where a convalescent patient had what they called "colic," and whom I found, perhaps quite bright and content but with a weaker pulse of increased or decreased rapidity and perhaps a slight tendency to vomit. So much have I been impressed with the association of these symptoms that I have come to regard the occurrence of abdominal pain in diphtheria as an almost hopeless sign, even before the occurrence of vomiting and cardiac disturbance.

In three instances there was pain in the stomach before convalescence was established, but with little other disturbance. In two of these the pain recurred during convalescence, but before the patients were out of bed, this time having the other symptoms as already detailed. One of these proved fatal in two days, the other recovered after a tedious convalescence of three months duration, weakness of the heart being very marked and at times alarming. In the third case there was no recurrence of pain but the heart remained weak for several weeks, during which time the boy was confined to bed. These two recoveries are the only cases which terminated favorably out of eight having the symptoms I have referred to.

In one case a poorly nourished child, of about three years, had epigastric pain about the end of the first week of the disease but nothing was apprehended from it. Owing to general weakness it was kept in bed for a much longer time than usual, and was under observation in the hospital for some time further. Within a week after going home it dropped dead while running to the window to see the fire-reels passing on the street. As I have already said the literature on the subject is unsatisfactory. E. W. Goodall, *Encyclopedia Medica*, in

connection with cardiac complications in diphtheria, says: "The most common is dilatation, which leads to irregularity and attacks of syncope. When acute, the dilatation is accompanied by vomiting and severe epigastric pain." Goodall and Holt are the only authors I can find who mention the group of symptoms as such. Goodall describes the pain and vomiting as accompanying rather than preceding as well as accompanying the heart failure.

Holt says: "When prodromal symptoms are present, and particularly when it is accompanied by vomiting, abdominal pain and disturbed respiration, it is probably the result of a toxic neuritis affecting either the pneumogastric or cardiac nerves, and is to be regarded as a form of post-diphtheritic paralysis."

Osler says nothing of pain. "In some instances vomiting has preceded the serious heart attack," being his only reference to the condition I speak of.

Frederick Taylor and Burney Yoe do not mention either vomiting or pain in this connection.

Goodhart mentions vomiting but not pain.

Fage and Flint incidentally mention vomiting but make no reference to abdominal pain. Allbutt says nothing of premonitions in speaking of "heart failure," but under the heading "Vomiting" he says: "Another serious symptom, and one often associated with cardiac failure, is a tendency to vomit. The cause of it is not always the same. But whatever it be, repeated vomiting is a dangerous symptom; most of such patients die in a state of heart failure and algidity within a few hours or a few days." No reference is made to pain at all.

So far as pathology is concerned, I have nothing to say other than that it would appear that the condition is due to some involvement of the vagus, the distribution of that nerve being such that each symptom might be explained on the theory of changes affecting its fibres. Occurring as it does about the time that neuritis appears elsewhere, the assumption might fairly be made that a toxic inflammation of the vagus is the condition present.

Before closing, let me again emphasize the points I wish to make, viz.: The occurrence of abdominal pain in a case of diphtheria should be regarded with apprehension, and if associated with vomiting be looked upon as the forerunner of death.

## MASTOIDITIS DUE TO GONOCOCCUS.\*

By DR. CHARLES TROW, TORONTO,

Professor of Aural Surgery, Trinity Medical College; Aurist to Toronto General Hospital and Hospital for Sick Children.

Robert W., aged 22, a farmer's son, was admitted to Toronto General Hospital under my care on January 6th last, suffering from a somewhat diffuse swelling over and about the mastoid process with moderate degree of pain.

*Personal History.*—Patient is a poorly built man, anemic, and not at all vigorous. Although he has never been really well he has had no definite illness excepting a chronic diarrhea off and on for 10 years, which 5 years ago was diagnosed tubercular. He says he has never had scarlet fever, typhoid, rheumatism or chorea. Has slight attacks of la grippe each winter. He denies absolutely ever having had gonorrhoea or other venereal trouble, also says that none of his friends have been so afflicted.

*History of his present illness.*—Patient got wet through one day last November and was severely chilled. Next day he had considerable pain in both shoulders and neck. A small lump appeared in submaxillary region near greater cornu of the hyoid bone and at same time he experienced a sore throat. This condition prevailed for a week or two, to be succeeded by a sharp pain in the right ear. The patient referred it to the "drum." Some six weeks later, that is about one month before admission, he noticed a slight swelling behind his right ear, and about the same time a creamy yellow discharge from right ear and right nostril. The former continued until operation, and the latter for about two weeks after. Accompanying the swelling behind the ear was a moderately severe pain which seemed to shoot up over the vertex. This persisted until the application of ice on admission to the hospital. Temperature before operation was generally about normal, occasionally it went to 100°. Pulse varied from normal to 108.

*Examination of affected parts.*—A diffuse swelling in the mastoid region was very apparent. It seemed to extend for some distance below the tip of the process into the neck. The skin over it was normal in color. Pressure showed pitting and but very little tenderness. Pain was never a marked symptom. Hearing watch 6 inches, whispering 1 foot, speaking 1 yard.

The discharge spoken of above was moderately abundant. There was no bulging of the posterior wall of the external meatus. The drum was very much congested and irregular, with a perforation about the size of a pin's head at the lower anterior

\* Read at meeting of Toronto Clinical Society.

quadrant. The swelling of the soft tissues went almost completely away under ice bag, but the mastoid was prominent but not tender to deep pressure or percussion. On January 22nd the soft tissue began to swell again and I operated next day, and found the outer wall somewhat thinned and bulging, the whole mastoid carious, and the lateral sinus bathed in pus, and an opening through the posterior inferior part of process into neck. Cleaned it all out with chisel and curette and plugged it and the ear with iodoform gauze. No discharge from the ear after operation and hearing perfect.

*Examination of discharge from ear and nose* as reported by the house surgeon in charge. Some half-dozen examinations were made with uniform results:

1. *Before operation.*—Smears showed readily by ordinary stains pus cells were abundant and within the cells, and in many cases closely clustered about the nucleus were a number of pairs of diplococci. Morphologically and in point of size these were identical with the diplococcus of gonorrhoea. Further, the microorganism was decolorized in Gram's method of staining. Cultures were then made on nutrient agar-agar and on Löffler's blood serum, but no growth could be obtained. Löffler's blood serum was then smeared with blood carefully drawn with all antiseptic precautions from the ear of another well patient, and inoculations made from the discharge from ear. Incubation at 37.5° C. for 36 hours showed a growth which on staining proved to be a non-capsulated diplococcus.

[I obtained some gonorrhoeal pus, and compared the gonococcus there found with the form present in pus from this patient, and morphologically, in size, in situation *within* the cell and in staining peculiarities they were identical].

The discharge from the nasal cavity showed the same form. The only other diplococci I knew of are the pneumococci and the diplococcus intracellularis found in epidemic cerebro-spinal meningitis, and both these forms, unlike the gonococci, are encapsuled. There were no other forms of bacilli found in the discharge.

2. Examination of the pus taken from the mastoid during operation showed the same form.

3. Examination of nasal discharge and material from mastoid cavity to-day, March 4th, did not show gonococci. The wound is nearly healed, and the patient has a better color, feels well, and has gained in weight probably 10 or 15 pounds.

## THREE CASES OF PYLORIC OBSTRUCTION.\*

BY GEORGE A. BINGHAM, M.B., TORONTO;  
Professor Clinical Surgery, Trinity Medical College.

CASE I.—F. P., aged 39. Family history negative. Patient states that for two years he has had repeated attacks of biliary colic, accompanied by jaundice. Has been free from these attacks during the last four months, but suffers from constant epigastric pain. He is steadily losing flesh, and suffers from what he believes to be dyspepsia, vomiting being of daily occurrence. The ejection of the food occurs about half an hour after meals and is unaccompanied by nausea. The vomited material consists of partially digested food and mucous unstained by blood. On examination some thickening is found about the pylorus, and the mass is quite tender to the touch. As medical means have been exhausted with no result, the patient demands operation.

A test breakfast shows the presence of hydrochloric acid.

*Diagnosis*—uncertain.

*Operation.*—The abdomen was opened above the umbilicus in the usual way, and the anatomical landmarks within were found to be entirely obliterated by adhesions. The gall-bladder was at first not to be found, but by patiently breaking down adhesions, the gall-bladder was finally found to be the centre of the mass, which consisted of the pylorus, duodenum, transverse colon, the liver, and some coils of jejunum, all firmly adherent to one another. The duodenum was drawn firmly downward against the greater curvatures of the stomach in such a manner as to kink the pylorus and produce a valve-like closure of that opening. The stomach was enlarged but the pylorus was not contracted; nor was there any evidence of gastric ulcer. The walls of the gall-bladder and bile ducts were thickened and the adhesions were found to be most firm at this point. The condition appeared to have been primarily one of cholecystitis and cholangitis, this followed by perigastritis with adhesions.

The patient made an uninterrupted recovery, gained rapidly in weight, and is now quite well two years after operation.

CASE II.—Miss M., aged 25. Family history negative.

Previous illness—Necrosis of tibia near knee joint, about 15 years ago.

Present illness began February, 1902, with symptoms of anemia and necrosis of one of the bones of the foot. The sinus was curetted and iron preparations given for the anemia, with slight improvement for a time. In April the action of her heart became very rapid on the slightest exertion, so she was kept in bed for six weeks, improving very slowly under iron

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\*Read at meeting of Toronto Clinical Society.

and digitalis. From this time till the end of August there was very little difference in her condition, never any rise in temperature; pulse from 80 to 100 and often irregular; some shortness of breath almost every day. She never complained of any pain in the stomach, but if she ate more than a little food at a time it caused a heavy feeling in the stomach, and nearly always caused vomiting. During September and October this became gradually worse, so that she was unable to take anything but a little milk or a raw egg. Though she often felt hungry, whenever she took solid food it caused vomiting. About the 20th of October she began to complain of pain in the stomach. There had always been considerable tenderness on pressure. The pain became steadily worse, extending over nearly the whole of the right side of the abdomen. The vomiting also grew worse until it was impossible for her to take any nourishment, even the smallest amount being vomited at once; at no time was any blood vomited. She left for the hospital November 12th. On examination (November 15th) the patient is seen to be emaciated, feeble and anemic. She cannot walk without assistance—ill-defined tenderness over right abdomen, with its maximum in the neighborhood of the pylorus. Gastric feeding was impossible, as absolutely nothing was retained. Examination of the stomach contents showed free hydrochloric acid. In consultation with Dr. Fotheringham, a diagnosis of pyloric obstruction from perigastritis with adhesions was made. On opening the abdomen, November 24th, the adhesions were found binding the duodenum down to the pyloric end of the stomach, entirely closing the pylorus. After the parts were freed, an indurated mass was felt in the posterior wall of the stomach, one inch from the pylorus, evidently corresponding to the site of gastric ulcer, which had healed. The pylorus was not contracted, and though the stomach was somewhat dilated, a favorable prognosis was looked for. The convalescence was uneventful, the patient never vomiting after recovering from the anesthetic. She was discharged December 6th, and now enjoys excellent health. Weight on leaving hospital December 6th, 107 pounds; weight on January 28th, 1903, 157 pounds.

CASE III.—M. G., aged 64, has complained of the usual symptoms of dyspepsia and pyloric obstruction for about four months. Reports having vomited blood only once, viz., on the day before admittance to hospital. Is at present much emaciated and apparently in a starving condition. An ill-defined tender mass is found in region of the pylorus. Free hydrochloric acid reported after examination of test breakfast.

*Diagnosis*—Pyloric obstruction, probably malignant. Operation was made and an irregular mass as large as a hen's egg was found obstructing the pylorus, with involvement of the

glands in the vicinity. There was marked dilatation of the stomach. Pylorotomy was practically impossible owing to the extent of the lesion, therefore anterior gastro-enterostomy was done, the opening being made quite close to the greater curvature, to prevent intra-gastric pouching, as suggested by Mayo. The site of the operation was enveloped in a fold of the gastro-colic omentum, which was stitched over it. On the third day liquids were given by the mouth and the bowels moved naturally. Everything remained quite satisfactory until the sixth day, when patient developed lobar pneumonia and died.

(There is still a fourth class of cases of pyloric obstruction, where the lesion is due to gastropptosis, the weight of the prolapsed organ obliterating the pyloric outlet. In the surgical treatment of this class I have had no experience.)

I have selected these notes of these three cases from my case book because they illustrate the two great classes of pyloric obstruction, viz.: benign and malignant.

In cases I and II the cause of the obstruction is peritoneal adhesions outside the organ, the cause of these adhesions being, in Case I, a cholecystitis; in Case II, a gastric ulcer. My second object is to elicit discussion as to the best operation in a given case.

In malignant obstruction the choice lies between pylorotomy and gastro-enterostomy. The former is the ideal operation and should always be preferred when possible, taking into account the extent of the lesion and the general condition of the patient. Unfortunately, these cases are not referred to the surgeon in the early stages, as a rule, and we must therefore content ourselves with the palliative measure of gastro-enterostomy. In cases of benign obstruction, the following questions must determine the operation:

- (1) Is the pyloric orifice contracted or uncontracted?
- (2) Is the stomach markedly dilated or not markedly dilated?
- (3) If the organ is dilated, is the muscular wall atrophied or normal?

When the pyloric orifice is not contracted, ordinarily all that is necessary is to break down the adhesions, when the function of the organ will be normally resumed. Even in these cases, however, we sometimes find, from long-continued obstruction of the outlet by the inflammatory adhesion, that the organ is markedly dilated and its muscular wall atrophied. If such complications be present, gastro-enterostomy should certainly be done, otherwise the distress of the patient will not be relieved.

In case the pylorus is contracted and the organ otherwise fairly close to normal, pyloroplasty (Heineke-Mikulicz) is our ideal operation. But when the contraction is complicated by marked dilatation and atrophy of the walls, drainage by gastro-enterostomy is undoubtedly indicated.

## Selected Articles.

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### CONGENITAL DISLOCATION OF THE HIP-JOINT AND CLUB FOOT.

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A CLINIC BY PROF. DR. ADOLF LORENZ.

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GENTLEMEN:—I consider it a great honor to appear before you and I wish to thank you very much for your kind invitation. I cannot better prove my gratitude for the honor bestowed upon me than to demonstrate to you, both theoretically and practically, one of my bloodless methods. The most important of these methods, to my mind, is the treatment of congenital dislocation of the hip, a method which I have termed the functional, weight-bearing one. I will be as brief as possible in explaining its principles.

The first step of the operation is to place the head of the femur in the acetabulum. The possibility of this abduction is limited by the age of the patient. In very young children there will, of course, never be any difficulty in pulling down the head of the bone to its proper position. In older children and in adults it is no longer possible to do this. The age limit for this procedure, in cases of bilateral dislocation, is said to be the seventh or eighth year. After this age limit it is necessary, before attempting the reduction, to institute a rather lengthy preparatory treatment, consisting of extension and tenotomy. The age limit in cases of unilateral dislocation is about the tenth year. The oldest case in which reduction was performed was a patient of twenty-three.

To accomplish the reduction, all the soft parts, especially the long muscles of the thigh, must be stretched so as to overcome their resistance. The abductors offer the greater resistance. In former times I used to incise them, but I found that at one time I would cut too much and at another not enough. Besides this, I found it unwise and inexpedient to have two wound cavities communicating with each other. Therefore, I resorted to subcutaneous myorrhesis, that is, to subcutaneous severing of the muscles by overstretching them and by massaging them with the sharp edge of my hand. The anterior group of muscles come next in point of resistance. The posterior muscles offer the least resistance, and this is easily overcome by simply straightening the knee with the leg in extreme abduction. After it becomes possible by this manipulation to pull down the



head of the femur so as to bring it opposite the acetabulum, then the preparatory steps of the treatment are completed.

Now begins the real reduction, that is, the placing the head into the acetabulum. This can be done by traction, and by bringing pressure to bear down on the trochanter. I, for my part, prefer reduction by way of forced abduction, which is kept up with a wooden pillow beneath the trochanter to act as a fulcrum, until the head can be felt to slip over the posterior border of the acetabulum. If this acetabulum were of normal shape and size all would now be accomplished, and the leg could be brought down to its normal position without any further detail. But, unfortunately, in all these cases the acetabulum is so shallow that the head would immediately slip out if the leg were brought into even an approximately normal position. In order to retain the head in its place it is necessary to put the leg in a right angle abduction. In cases of great instability of the replaced head of the femur in this position of extreme abduction, a slight over-extension is to be added. In order to still further ensure the fixation of the head in the acetabulum, it is expedient to stretch and enlarge the anterior part of the capsule by free rotary movement of the thigh.

As may be imagined, after the new position of the leg has been attained, the flexors of the kneejoint become too short and we consequently find the knee rigidly flexed. This shortness of the muscles is also overcome by careful but forced stretching of the leg, bending the knee and extending it until it is possible to have complete extension. In order to retain the desired position of the thigh and leg, I apply a plaster of Paris bandage, which I will apply in your presence so that you can see all the details better than they can be described.

In cases of unilateral dislocation, I use appliances which will permit the patient to walk as soon as the pain and uncomfortable feeling of the extreme position have disappeared. In cases of bilateral dislocation voluntary motion is practically impossible, although I have seen children walk with the aid of a cane or stick when both legs were in this extreme abduction. But the child can ride and sit astride on a little chair, pushing itself along with its feet. The child not being confined to bed all passive movements are allowed. I will further explain the various steps of the operation as I go along with our cases.

CASE I.—This little girl is only three years old and has no other trouble than this dislocation of her left hip. She is well-formed and healthy. The deformity is not very great. Watch her walk. She limps but very little. The leg is about one and a half inches shorter than the other. You see that an attempt at abduction of this leg is unsuccessful. The abduction is limited. If I do a flexion and abduction I can feel the head of

the femur very distinctly just behind the acetabulum. The dislocation is not very great and we will not have any difficulty in effecting a reduction.

It is not necessary to begin the reduction by forcibly extending the leg because the head is not very much dislocated from the centre of the acetabulum. It will suffice to make the reduction by forced abduction. By making this forced abduction the adductor muscles are made very tense, and it will be necessary to cut or tear them subcutaneously. I have given up the cutting of these muscles and I now tear them by using my hand in place of a knife. I really tear the muscles subcutaneously. You see the ridge formed by the tense adductor muscles has now disappeared completely. The muscles have been torn subcutaneously. Now, on attempting extension of the leg in this abducted position, I find that the flexors of the knee offer considerable resistance to extension. By means of forced flexion and extension of the leg I gradually overcome the resistance of these muscles. In former times I used a screw to effect this extension. For adult cases it is advisable to use it, but in children as young as this one it is wholly superfluous.

After these preparatory measures are completed I drive the head into its normal position by forced abduction, placing a block or wooden pillow under the head of the great trochanter to act as a fulcrum. This can be done without hurting the bones. You can perhaps hear the little snap as the head slides into the acetabulum over its posterior ridge. The sound can be heard very plainly in the immediate vicinity of the patient, but perhaps not at any great distance. I will grasp the head of the femur between my fingers and redislocate and replace the bone so that you can follow the reduction to better advantage. There is no doubt that the head is now in its proper position, because the head can be felt under the femoral muscles and the front of the thigh no longer shows the hollow in Scarpa's triangle. The flexion of the knee, because of the shortened flexor muscles, is still further evidence of reduction. Now the bone is in place and all the resistance of the soft parts has been overcome and we are ready to apply the plaster of Paris bandage.

A stockinet bandage is first put on, or, as I prefer, a pair of knitted drawers. Under this I run a strip of gauze about five or six inches in width, which is allowed to protrude above and below. By pulling on the ends of this strip, passing it too and fro under the bandage, the skin under the cast can be kept clean. The strip is replaced after each cleansing by a fresh strip. The leg is held in extreme right angle abduction while the cast is being applied. As I prefer to apply a very heavy and firm cast, I put on over the stockinet bandage or the drawers a very abundant supply of cotton, and over this

the plaster of Paris bandage. The bandage is applied in the usual manner, by beginning over the right iliac crest and passing across the abdomen, down the thigh and across the knee. After taking several long turns I pass the bandage around the leg, around the abdomen, and again longitudinally until I have made a very heavy cast which completely embraces the abdomen, thigh and the knee of the affected leg. Then after the cast is applied I cut off that portion which extends below the knee so that the leg is freely movable, and also a large portion of the cast over the abdomen. There is now left only a narrow strip over the right hip, which serves as a bridge and which, because of its thickness, is quite firm. The genitalia are not included in the cast. Our cast now envelops the thigh, the left side of the abdomen, and extends across to the right as a very narrow bridge.

Now arises the question. How long should the cast be kept in place? I would always advise that the time be rather too long than too short. The bones and soft parts should be given plenty of time to adapt themselves to the changed conditions, so that there will not be a recurrence of the dislocation when the cast is removed. The cast should remain in place for at least six months or even eight. In the meanwhile the child can walk by putting a high shoe on this foot. Walking should be encouraged, for by throwing the weight of the body on the head of the femur, which is now in its right place, the acetabulum will gradually be deepened so that the head of the femur will retain its position after you remove the cast and this extreme abducted position is corrected.

It is often believed that these patients suffer pain, but that is not the case. The pain is caused by the tension of the soft parts, and after you have overcome this tension by stretching or by tearing, then there is no more tension and hence no more pain. So that these children are quite comfortable and can enjoy life just as much now as they could before the operation, in fact more, because they have more freedom of the leg than when it was dislocated.

Now, I want to call your attention very particularly to a condition which I think is, as a rule, under-rated, and which to my mind is a very important factor in pressing the head of the femur into its proper position and keeping it there for the future. This factor which I am alluding to is shrinking of the soft parts whose points of insertion become approximated by extreme abduction. It is evident that this process of shrinking takes up considerable time, in my experience from four to six months. After this shrinkage is once established with the leg in this extreme position, this contraction will exercise sufficient force to hold the bone in its place. The X-ray

pictures and specimens prove that under favorable conditions the progressive development of the pelvic bone will still further add to the security of the new position of the head. It seems to me that in a certain number of cases even a bony wall is formed around the head of the femur so that the acetabulum, which was originally flat and very shallow, now becomes enlarged and gives the head a suitable socket.

These considerations will justify my routine of leaving the first cast undisturbed for six months at least, sometimes even longer. Of course, I take all necessary precautions to keep the skin clean under the cast. My principal treatment in the future, after the cast has been removed, is to keep the head of the femur pressed against the acetabulum as much as possible. I do not try to correct the position of the leg in any way. I permit only so much reduction of the extreme abduction as is absolutely necessary for letting the child walk with spread legs during the day. At night the primary extreme abduction is reinstated. I accomplish this with a cushion which is placed between the legs and fastened there. I might add that the ease with which the legs can be reduced from the slightly diminished abduction into the primary extreme abduction is a characteristic prognostic symptom. If any difficulty is met with in performing this manoeuvre, it can safely be assumed that the head shows a tendency to slip out of the acetabulum and to glide under the superior anterior spine of the ilium.

CASE II.—The next child on which I will operate is already five years old and has, so far as I know, a double dislocation. I am sure that we will have some difficulty in reducing the dislocation, because it is a matter of experience with me that in all cases of bilateral dislocation reduction is rendered impossible at a much earlier age than in cases of unilateral dislocation.

The prominences of the great trochanter are visible on both sides and the head of the femur can be felt very distinctly. There is considerable shortening of the legs. The highest point of the trochanter is now four centimeters above Nelaton's line. The degree of abduction is diminished considerably. You can see the prominent line formed by the adductor muscles when the leg is abducted. The soft parts are very resistant. Although the child is only five years old, I do not believe that the reduction will be effected very rapidly.

I will begin by making a little extension of the adducted leg, and then forced rotation of the leg. Next I will attempt to overcome the contraction of all the soft parts, beginning with the adductors. The wooden pillow is placed under the trochanter and I institute forced abduction with massage of the adductor muscles until I have torn these muscles subcutaneously.

After the resistance of the adductor muscles has been overcome, then begins the reposition. Extension is made with the thigh in extreme rectangular flexion and then by continued abduction the head is finally forced into its place. The posterior border of the acetabulum is very low, but the upper edge is a little higher and quite sharp. If the bone is slipped over this portion of the rim then you get the snap announcing the reposition.

The head is driven into the acetabulum still farther by stretching the anterior wall of the joint capsule. Now, as in the previous case, the flexors of the knee are too short, and it is impossible to extend the knee because of the contraction of these muscles. This resistance is overcome by stretching. After the reposition has once been effected it is easy to dislocate and replace the bone.

In this case we will apply a double cast, which will remain in place for at least six months. In the meantime all passive motion is allowed. She may sit or push herself on her chair, or she may creep and even stand. When the cast is removed you should not try to correct this extreme position immediately, because you might drive the head out of its socket. It is quite sufficient to diminish to a minimum the degree of abduction, so that the child can walk with its legs spread. The necessary gymnastics do not consist in pulling down the legs, but on the contrary, every effort is made to push them up. The child will continually try to get its legs down into place, and in the proper course of time it will succeed in doing so.

It is important that the movements of flexion should always be carried out in the frontal and not in the sagittal plane, because the latter movements do not comply with the security of the position of the head. In cases of great looseness of the heads you can add to the security of their position by over-extension, that is, by driving both femurs behind the frontal plane. Many mistakes have been made by hurrying the correction of this position and I wish to emphasize that the gradual correction of this extreme abduction into the normal parallelism of the legs is often a matter of years. I rather like to see children retain a slight degree of abduction of the legs for some time afterward.

As to the results of the bloodless operation, I want to say this: We have to distinguish between the anatomical and functional results. The anatomical result is always a poor one if extensive deformities of the femoral head or the acetabular cavity existed before the operation. But, and this is a point of great importance, a poor anatomical result is perfectly compatible with a satisfactory functional result. Sometimes the head of the femur is not retained in the acetabulum after the bandage is removed, because of a very defective acetabulum,

Then the head passes under the anterior superior spine of the ilium where it is furnished with a firm, bony support, without being in the acetabulum, so that the up and down movements of the thigh are prevented.

Formerly I attempted to correct such a faulty anatomical result, but I do so no more. I am now satisfied with the functional amelioration which I obtain. If the anatomical condition of the head of the femur and the acetabulum are only tolerably good, we may be sure that this method will give satisfactory results, both anatomically and functionally. I have quite a number of such cases on my records in which it is very difficult to recognize the former pathologic condition.

I want to tell you that I have used this bloodless method of reduction in nearly a thousand cases, with the most favorable results in the great majority of cases, and it affords me great pleasure to learn that the same results have been achieved by my method in all parts of the world. It is particularly gratifying to me that so many surgeons in this country have pursued this method with good results, as America is really the birth-place of orthopedic surgery. I consider it a sufficient remuneration for my efforts that a method has been developed which gives such good results in a deformity which up to a short time ago was considered incurable. And further, that this method has helped us to dispense with the bloody operation, which was always such a menace to the life of the patient.

CASE III.—This child is younger than the first and there are no difficulties at all in such a case. I will operate later on a case of nine and another of eleven, so that you can see a few cases of what I consider difficult reduction. Extension is not necessary in this case. The muscle is torn easily and the head immediately slips into its proper place. Of course you must always be careful not to break a bone. The force you use must be measured, otherwise the bone will surely break. The plaster cast is applied in the same way as before, with the leg in extreme abduction. This cast is removed in about six months and then the child is to be encouraged to walk as much as possible, so that the leg will gradually correct itself without any manipulation on your part.

I wish that I could have the pleasure of demonstrating these cases to you when the cast is finally removed, but I have had the opportunity of presenting such cases, which were cured in every respect, at the International Congresses at Rome, Moscow, Berlin and Hamburg, and many of them in my home, Vienna. I can assure that often the examining physician was unable to say which side was operated on, the result being absolutely perfect.

CASE IV.—This little girl was operated upon three years ago

for the same purpose, but without any result. I might expect that the result would have been *nil*, because the adductor muscles were allowed to remain intact. Notice the prominent ridge which they still form at the point of their insertion. They must either be cut or torn subcutaneously if you wish to succeed in putting the head in its proper place. You can feel a deep depression or sulcus here, which shows us that the head of the femur is not in its place. I do not believe that reduction was ever perfected in this case.

We will begin the reduction by tearing these muscles. Of course, you could cut them with the knife, but you are liable to cut too much, or at another time you do not cut enough. If you tear them by force massage with the hand you have the assurance that you are doing just what is necessary. The leg is held in this position of extreme abduction and my hand is my knife. Now, you see that this prominence of the adductor muscles has disappeared entirely. The contracture of the knee has also been overcome, and we will try to get the head of the bone into place by careful manipulation. There, you could hear the snap as the head slipped into the acetabulum.

Now you can see that it is impossible to straighten the knee because the muscles on the under side of the leg are not long enough. This traction must be overcome by stretching, which is accomplished without any great effort. I am quite sure that this child will be totally cured. In this position of extreme abduction the head cannot slip out of its socket, but as soon as you attempt to adduct the leg you will find that at a certain point dislocation will again occur. In this case the head slips out when the leg is extended about half way, so that it is a matter of great necessity that the leg be kept in this extreme position if we wish to keep the head in place.

In order to favor the retention of the bone it is also necessary to stretch the anterior wall of the capsule of the joint as much as possible. This makes a deeper joint cavity. Where we at first saw the depression we now see an elevation. That is the head of the femur which now occupies its normal position, and to be certain that the head is retained in its right place it is advisable to make a little further extension so that the leg is behind the frontal axis. Now all is ready for the application of the plaster of Paris bandage.

CASE V.—The shortening of the leg in this case is considerable. The upper border of the great trochanter is on a level with the superior anterior spine of the ilium, a shortening of about four centimeters. It will be advisable to begin with extension so as to overcome the resistance of the long muscles. Now, you can see that a difficult reposition has not only its bad but also its good sides. The more difficult the reposition the

better is the outcome of the case. The adductor muscles are cut as in the previous cases, and the head is replaced in the acetabulum, after which the flexors of the knee are stretched in the usual way. We will see how far we can reduce the abduction without causing a redislocation of the head of the bone. You can adduct completely in this case, but I would not advise you to leave the leg in that position no matter how favorable it may seem. I once had a case just like this and in order to make it easier for the child to walk I concluded that I would apply the plaster cast with the leg in complete adduction. When I removed the cast six months afterward I found the head dislocated and in its original position. Therefore I would always advise that the cast be applied with the leg in extreme abduction.

CASE VI.—This is another case of bilateral dislocation in a child of seven, but I would not touch this case, even in Vienna, because I am certain that it is impossible to effect the reduction. The heads of the femurs are too high up and it is absolutely impossible to overcome the shortening without first instituting a preparatory treatment. I would have to cut all the flexors of the knee joint, the spinal muscles, adductors and abductors and in addition carry out the extension treatment. Some months later you could perhaps try to effect a reduction, but even then the result would be questionable.

CASE VII.—The head in this case rests on the os ilium and it is quite freely movable. You can move it up and down and forward and backward. There is only a quarter of an inch of shortening and this we will reduce by forced extension. When we extend the leg the head of the bone may be opposite the acetabulum, but it is not in the acetabulum. We massage the group of adductor muscles until the prominence has disappeared. Then we reduce the dislocation, stretch the flexors of the knee and stretch also the anterior wall of the joint capsule.

This position of extreme abduction does not, as one would naturally suppose, tear the blood vessels. They are sufficiently elastic to give a little. The acetabulum here is very shallow and the head slips out very easily, but if the cast is carefully applied it makes sufficient pressure on the bone so that it will in the course of the next six months make for itself a good, deep bed. We must never lose sight of the fact that the cleanliness of the skin is a matter of supreme importance. Measures must be taken to keep the skin under the cast perfectly clean. You see I first put on this stockinet bandage, and between this and the skin I lay the piece of gauze by means of which the skin is kept as I have already indicated.

CASE VIII.—This little girl has the disadvantage of being



nine years of age, and it will be a matter of great difficulty to effect reduction in this case. Very forcible extension and manipulation is necessary to overcome the extreme resistance of all these muscles. The method is the same as in the other cases, but it will take more time to effect reposition and our efforts will be greater. I will ask you to watch carefully the manipulation as I must give my closest attention, and cannot explain the steps of the operation as I go along. There, you could hear the head going into place. We now overcome the resistance and shortening of the flexors of the knee, stretch the anterior wall of the joint capsule and apply the plaster cast with the leg in rectangular flexion and strongly abducted. The cast will not be removed for at least eight months.

CASE IX.—This little patient is already eleven years old and is about the age limit in this work. I do not know whether I shall succeed here. The tenth year is really the age limit and she is eleven, but we will try to effect reduction. There is also considerable atrophy of all the muscles of the affected limb, showing that there are some trophic changes.

I placed the wooden pillow under the head of the trochanter to give us a greater leverage. Of course, there is some danger of breaking the neck of the femur, but that is true in every case of this kind. This is very hard work because of the firmness of all the parts and it must be done with the utmost care. We stretch the leg and then bend it backward so as to elongate the anterior muscles of the thigh. Next we flex the leg on the abdomen as far as possible so as to overcome the resistance of the muscles on the posterior aspect. Abduction is carried to the extreme point so as to loosen up all the soft parts. This requires a great deal of manipulation. Now it is in! The acetabulum in this case is so shallow as to be almost flat and a great deal of stretching of the capsule is necessary.

In this operation in such old children there is very great danger of tearing the femoral artery, which would mean an exarticulation of the hip joint. I have never been unfortunate enough to tear the artery, nor do I know of any one else having done so, but you can readily see that it is liable to happen. When I get a case so well along in years I am always afraid that this might happen.

Now we have stretched the capsule sufficiently and you can see now that all the soft parts are stretched enough to let the head of the bone move freely in all directions. You can also see the lengthening and shortening of the femur and leg when the bone is in and when it is out. I place my hand on the trochanter, and you see that when the bone falls out of the acetabulum my hand drops, and when it is replaced in the

acetabulum, my hand rises. I think we will have a good result in this case after all, but I would advise that the cast remain in place for at least seven or eight months.

#### CASE OF CLUB FOOT.

Next to the congenital dislocation of the hip joint the most prominent deformity is congenital club foot, and as we have a case of this kind here for treatment, I will avail myself of the opportunity to demonstrate my bloodless method of reducing the deformity. The treatment of this deformity in the new-born is almost uniformly a bloodless one, and a variety of appliances are used with a rather variable result. So far as children over five years of age are concerned, we find that in different countries different methods of treatment are carried out. In Germany the bloodless method is the method most in vogue, and I am very happy to state that this is at least partially due to my efforts and to my demonstrations before many German surgical meetings.

I demonstrated what I call my bloodless modelling method, but still quite a few surgeons do not seem thoroughly convinced of the efficacy of this method and resort to cutting operations, which consist mainly in wedge-shaped resections of the bone followed by the application of a plaster of Paris bandage. To make the wedge-shaped resection means an unnecessary and therefore most deplorable mutilation of the foot. For some reason most surgeons prefer to treat the deformity by a cutting operation in the later years of the infant's existence rather than to perform a bloodless operation immediately after birth. Evidently the methods hitherto used are faulty and do not correct the deformity. Therefore it seems to me necessary that the bloodless reduction must be one that thoroughly corrects the deformity in the new-born so that it will no longer be necessary to resort to cutting operations later on.

Such a method is my modelling redressment of the club foot, and it is equally applicable in the new-born and in the older child. This patient before you is already sixteen years of age and reduction is manifestly more difficult than in a child. I first overcome the resistance of the soft parts, that is, the skin, subcutaneous tissues, the tendons, fasciæ and ligaments. It is important to overcome not only the resistance of the soft parts, but such resistance must be completely annihilated. The soft parts are stretched and in this way their elasticity will be brought into play. This elasticity will, of course, counteract the correction of the deformity and as soon as we let go of the foot it will return to its faulty position because of the elasticity of the soft parts. If we should try to retain the foot in the corrected position by means of some appliance or a cast or

splint, we will have a decubitus on those points which are most exposed to the pressure.

The principle of the remodelling redressment is to keep on with the act of correction until the elasticity of the soft parts is completely destroyed so that the foot will no longer rebound into its original position. The foot must become as pliable as a piece of cloth. In a young child one can almost tie the foot into a knot without any tendency of the foot to return to its faulty position. Then I can place the foot in any position desired and keep it there.

As to the special technique,—I want to say that it is radically wrong to try to redress the deformity altogether. In fact, you must analyze the deformity and divide it into its separate component parts, and then you overcome or correct the deformity in accordance to the regular order of its component parts. First comes the technique of the faulty abduction, then the straightening out of the extreme flexion over the instep. Then the equinus position is to be corrected and then we work against the supination of the foot. After this gradual correction is accomplished the complete reduction of the deformity *in toto* is possible. And now comes the time to apply the cast when there is no longer any danger of inhibiting or interfering with the circulation of the blood.

It must be borne in mind, however, that because of this rather forcible treatment slight disturbances of the circulation may occur so that a swelling of the limb results. This necessitates the following precautions: Any cast applied must be fenestrated so that it is possible to keep the condition of the foot under constant control. We must make sure that the circulation in the toes is perfect before we dismiss the child with its cast. The cast is kept on its foot for several months and it is to be renewed after its removal until the foot is in a perfect valgus position, when it is no longer restrained by a dressing.

Then we start in with gymnastic exercises and massage, the object being to develop and strengthen the pronators so that the valgus position will be maintained by the normal tonicity of the muscles. By this method any club foot, even in adults, can be successfully reduced. I have never tried tendon transplantation. The cast is applied with the same precautions as in the hip joint cases.—*The Clinical Review.*

## EMPHYEMA.\*

BY CHARLES GILMORE KERLEY, M.D.

The author began his paper with the statement that empyema is the result of infection of the pleura with pathogenic organisms. A large majority of the cases show that pneumococcus is in the pure culture; the streptococcus and the staphylococcus, alone or in combination with the pneumococcus, are seen less frequently. Tuberculosis is rarely a cause of empyema. The disease is rarely primary, being secondary to pneumonia in fully ninety-five per cent. of cases. The symptomatology varies, depending on the nature and severity of the primary disease. He cautioned against confusing empyema with malaria, typhoid fever, unresolved pneumonia, and tuberculosis. The average case of empyema following pneumonia he described as follows:—

A child has pneumonia; it runs the usual course of fever, respiration, pulse and prostration; after a time, from six to twelve days possibly, an improvement in the symptoms is noticed; the pulse and respiration become slower and the child brighter; the temperature range for twenty-four hours is lower; during the height of the fever it was perhaps from 104 degrees to 105 degrees F.; now it ranges from 100 to 102 degrees, occasionally touching at 99 degrees. Behaving in this way for a few days, it is soon noticed that it is lower in the morning than in the evening, although the evening temperature might not be high, perhaps not over 102 degrees, occasionally reaching 103 degrees. The pulse and respiration both remain accelerated and the child coughs. These symptoms may continue for weeks if the true nature of the case is not made out.

Forty-three cases comprise the number seen by the author, in patients from the various walks of life. Some developed under his own observation, and others were first seen after a long illness. In all of the cases there were three symptoms in common, cough, fever (higher in the evening), and accelerated respiration.

Under physical signs, inspection of the chest was referred to as being valuable, in that there is a difference of mobility of the two sides; the diseased side rests, the sound side is active. An increase in the measurement of the diseased side is in itself of no diagnostic value. He cited cases in which the sound side was the larger. This is apt to be the case when there is a small amount of fluid in the pleuro-cavity, or when absorption has already begun.

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\* Abstract of paper read before the Clinical Society of the New York Polyclinic Medical School and Hospital, October 6th, 1902.

Displacement of the apex beat of the heart upward and to the right is one of the most reliable signs of fluid in the left pleural cavity. Under auscultation it is claimed that fluid always produces a deviation from the normal respiratory sounds, but not always the same changes will be observed. There may be bronchial breathing and bronchial voice when the chest is full of fluid, or greatly diminished and weakened breathing and weakened voice sounds when the amount of fluid is small.

Percussion is considered one of the most valuable aids in diagnosing fluid in the pleural cavity. If there is a moderate amount of fluid, there will invariably be dullness, and if the amount is considerable, there will invariably be flatness. Serum and pus show the same physical signs. There is but one way to differentiate between serum and pus, and this is in the use of the exploring needle, which should always be used to prove the diagnosis. There is no danger in the use of a sterile needle and a properly prepared skin.

As regards treatment, in a recent case in a child under two years of age, incision under local anesthesia is all that is ordinarily required. In older children, or in a prolonged case in a young child, the removal of a portion of a rib under gas anesthesia is best. Irrigation of the pleural cavity is not necessary. The dressing should be changed once a day and the tube shortened as the lung expands.

The author concluded as follows :—

The disease in every one of the forty-three cases was secondary, and in forty it was secondary to pneumonia. Every child coughed, every one had fever, practically constant, higher in the evening, but rarely going above 103 degrees F.; every child had accelerated respiration, the chest in each case showing flatness on percussion, and marked changes from the normal in auscultation. Children in whom the disease had existed longer than a week showed marked emaciation.

# Progress of Medical Science.

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## MEDICINE.

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IN CHARGE OF W. H. B. AIKINS, T. M. McMAHON, H. J. HAMILTON,  
AND INGERSOLL OLMSTED.

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### Painful Adipositas or Dercum's Disease.

Dercum, an American physician, was the first to describe (in 1888) painful adipositas, a disease which has since that time been the subject of many treatises. G. Ballet relates a very important case. The patient was a woman, 68 years old, who could give no account of her past history on account of her mental condition. Six years ago she suffered from acute pains in the arms and lower limbs. After some time the painful parts began to swell rapidly. The swelling still continues. The arms and legs look as if covered with a muff of fat, while the hands and feet are almost normal and show only a little superficial edema. On palpating the skin, one observes globules of fat, isolated and circumscribed. Elsewhere the fat is diffused. The patient now complains of pain only when the swollen parts are pressed. She cannot make any great movement, as in walking. The heart is normal, with the exception of a systolic bruit. The lightest work tires her. Her mental faculties are decidedly impaired. She is irritable, gloomy, melancholic; cries frequently.

In this patient we miss some symptoms observed in other cases of painful adipositas: epistaxis, hematemesis, metrorrhagia, arthropathy, vaso-motor disturbances, premature senility. The diagnosis is made by exclusion. It is not a case of ordinary obesity, because the latter is not limited to certain regions of the body and is not accompanied by pain. Myxedema may be excluded, because in it the face is swollen and œdematous and the thyroid treatment banishes the cerebral symptoms. Trophic œdema may also be excluded, because it does not present the contrast in the size of the legs and feet; it does not give the feeling of softness characteristic of fatty tissue, and it is unilateral. Painful adipositas is observed generally in women and adults. Its etiology is obscure. It has been attributed to alcoholism, syphilis, traumatism. The constancy of the pain indicates a nerve disturbance, and possibly a polyneuritis. This nerve disturbance would explain the vaso-motor symptoms, the scleroderma, the arthropathies. The nerve change has been attributed to a thyroid intoxication, because Dercum found a calcification and a distension of the

alveoli of the thyroid with a colloid substance. The results of the thyroid treatment are not however constant.—Translated from *Giornale Internazionale delle Scienze Mediche*, by HARLEY SMITH.

### Aneurism of the Hepatic Artery.

In literature are reported eight cases of aneurism of the hepatic artery. The first was published by Kaufmann in 1868, but it is incomplete clinically and anatomically. The second was by Weinlechner, and was in a young man with osteomyelitis of the femur, who died from rupture of an aneurism of the hepatic artery. The third was by Chiari. It was in a man 33 years old, who a few days before dying had profuse gastrorrhagia and enterorrhagia. Autopsy revealed aneurism of the cystic artery, which had ruptured into the gall bladder. The latter contained calculi. The fourth case, published by Caton, was in a man of 40, who had suffered for 15 months from attacks of pain in the right hypochondriac region and from jaundice. He had vomiting (without blood), and enterorrhagia. At the autopsy there was found aneurism of the hepatic artery, ruptured into the hepatic duct. The fifth case, reported by Sacks, was a man of 60, who for six years had repeated gastrorrhagia. At the autopsy there were discovered oesophageal varices and aneurism of the hepatic artery ruptured into the hepatic vein. The sixth case was by Withe, and was in a young man of 20, who after a pneumonic infection had jaundice and fecal acholia, and died after an illness of 34 days. At the autopsy there was found an aneurism of the hepatic artery, as large as a mandarin, which included the hepatic duct. The seventh case was reported by Bernard in 1897, and was in a man of 46, who had attacks of pain in the abdomen, chills, jaundice. At the autopsy there was found an aneurism of the hepatic artery, large as an orange, ruptured into the peritoneal cavity. The last case was reported also in 1897, by Hausson. It was in a man of 19, who after an acute osteomyelitis suffered frequently during convalescence from bloody vomiting, with indefinite symptoms of gastric or duodenal ulcer. He died after a severe hemorrhage. The autopsy revealed hepatic aneurism.

Of the two cases seen by Sommer in the hospital of Graz, one was in a man of 28, the other in a woman of 65. In the former there was copious enterorrhagia, which caused death from exhaustion. At the autopsy there was found aneurism of the hepatic artery, perforated into the ductus choledochus. In the second case there was a copious gastrorrhagia, followed by profound coma and death. The autopsy revealed aneurism of the gastro-duodenal artery, with perforation into the duodenum.

The diagnosis of aneurism of the hepatic artery is somewhat difficult. According to Murchinson and Frerichs, the pathognomonic symptoms are repeated gastro-enterorrhagia, jaundice, strong colicky pains in the right hypochondriac or epigastric regions. The jaundice is intermittent and is accompanied often by attacks of pain. The chief causes of aneurism of the hepatic artery are injuries, and the acute infective diseases, as pneumonia, typhoid, osteomyelitis.—Translated from *Giornale Internazionale delle Scienze Mediche*, by HARLEY SMITH.

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## OPHTHALMOLOGY AND OTOTOLOGY.

IN CHARGE OF J. T. DUNCAN AND J. O. ORR.

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### On the Necessity for the Use of Color Names in a Test for Color Blindness.

F. W. Edridge-Green (*Ophthalmic Record*) says that the first requirement of a test for color blindness is that color names be used and that the person to be examined should employ and understand the use of color names, red, yellow, green and blue. I can say in the most emphatic manner that no test which ignores color names can be efficient. I predicted that if color names were ignored in the Board of Trade tests, normal sighted persons would be rejected, and this prediction was fulfilled. Over 38 per cent. one year, and 42 per cent. another year, were found to be normal sighted and to have been rejected wrongly. An engine driver or a sailor has to name a colored light when he sees it, not to match it. He has to say to himself, "this is a red light, therefore there is danger," and this is practically the same as if he had made the observation out aloud. Even the method of matching colors should, in order to be efficient, be one of mentally naming them. In my classification test I use colored materials of different kinds as similarity. . . . The color blind may be divided into two distinct classes which are independent of each other, but which may be associated. The first class includes those who are not able to see certain rays of the spectrum; their spectrum is shortened at one or both ends. If a man have a shortening of the red end of the spectrum, he will not be able to see a red light at a distance, though he might be able to pick out all the green wools in the classification test. A man of this kind, when shown the red light of my lantern test, declares that there is no light visible, at once demonstrating his incapacity. The second class of the color blind make mistakes not because they can not perceive a certain color, but because they are not able to recog-



nize the difference between the colors which is evident to normal sighted persons. Both these classes are represented by analogous conditions in the perception of sounds. The first class of the color blind is represented by those who are unable to hear very high or very low notes, that is to say these notes are non-existent to them. The second class is represented by those who possess what is commonly called a defective musical ear. Normal sighted persons see six definite colors (points of difference) in the spectrum. The second class of the color blind see five, four, three, two or one color, according to the degree of the defect, and they confuse the colors of the normal sighted, which are included in one of their own. If the normal sighted be designated hexachromic, those who see five colors may be called pentachromic, those who see four tetrachromic, those who see three trichromic, those who see two dichromic, and the totally blind monochromic. The degree of the defect will be recognized by the names given to the different colors. The pentachromic will miscall orange. The tetrachromic will, in addition, makes mistakes with regard to blue. It is not necessary to reject either of these two varieties, because I have never succeeded in making them confuse the colors red, yellow, green and violet. The trichromic are always in difficulty over yellow and miscall it red, green or red-green, and for practical purposes must be excluded as color blind. The dichromic confuse red, orange, yellow, and yellow-green on the one hand, and blue-green, blue and violet on the other.

#### A Case of Retinal Hemorrhage in a Patient of Seventy-three. Treatment by Faradic Current. Complete Recovery.

Hasket Derby (*Boston Medical and Surgical Journal*, January 15th, 1903), says:—

In 1898 Professor von Reuss, of Vienna, published in the *Graefe Archive* an article on the use of the Faradic current in certain affections of the eye. It was entitled, "New Experiences in the Electric-Treatment of Inflammatory Affections of the Eye." Using sometimes the hand of the operator, but more generally a small flat copper disc or conductor, held on the head by a strap and resting on a layer of wet cotton applied to the eye, he employed a comparatively feeble current daily for periods varying from ten minutes to half an hour. This form of treatment was used in cases of scleritis, iritis, iridocyclitis, consecutive vitreous opacities and intraocular hemorrhages. In many instances it appeared to do good, its analgesic action in iritis being found to be particularly frequent and satisfactory.

In closing his account of the application of the interrupted current to the treatment of intraocular hemorrhage, Von Reuss says:

"It consequently appears that fresh bleeding into the anterior

chamber and into the vitreous is favorably influenced by the Faradic treatment, but it is well not to forget that fresh effusions of blood, for instance after operations, often spontaneously and quickly disappear. Electricity can scarcely influence hemorrhages in and under the retina."

In spite of this discouraging statement it occurred to me to try this treatment in a case of extensive retinal hemorrhage that came under my care during the past winter. It was the first case of the kind I had ever submitted to a prolonged course of treatment. For therapeutics there had seemed little place in this affection, particularly when occurring in advanced years, and betokening a probably atheromatous condition of the cerebral arteries. I had for many years advised such patients to leave the recovery to nature, and assured them that the injury might, to a certain extent, be repaired. Unless a fresh giving way of the vessels occurred, a portion of the lost vision might ultimately return. I had generally, for the sake of doing something, advised a course of iodide of potash, and warned the family physician of what was to be apprehended. After that I dismissed the case from my mind. In the comparatively infrequent event of my seeing the patient again, months or years afterwards, I had rarely found much improvement, especially when the hemorrhage involved the macular region. The eye was permanently disabled.

Mrs. Blank, aged seventy-three, had been under my observation since 1884. October 9th, 1901, she came in, complaining that there was failure of vision in the right eye, this having lasted since the previous July. On dilating the right pupil, numerous retinal hemorrhages came into view. They were scattered over the entire fundus. The largest hemorrhage was in the macular region, and was quite extensive.

The application of the Faradic current was commenced October 17th, and used, ten minutes at a time, three times a week, up to May 26th. A single absence from the city of ten days, occurring in the early spring, formed the only interruption. Small doses of iodide of potash were also administered during all this time. The peripheric hemorrhages began to absorb much more quickly than the macular, being substantially gone before the large one in this situation had shown any signs of yielding. The first improvement was, therefore, in lateral vision, but central before long followed suit. December 20th vision had risen to nearly five-tenths; January 7th to six-tenths, and on February 7th the macular region was nearly free. Slight vitreous haziness long persisted, but finally cleared up. May 26th vision was nearly seven-tenths, all the letters on the line being correctly made out, though with some effort. As this was her original vision, and nearly equalled that of

the other eye, treatment was now suspended. My last ophthalmoscopic examination was made September 2nd, and was conducted in the country; the light available was not very good, but as far as I could see there was not a single spot of hemorrhage in the fundus, a very slight grayish discoloration alone marking the site of the more extensive blood patches. About October 15th the patient visited me at my office here, and I found vision nearly eight-tenths, slightly more acute than I had ever found it before.

This is but a single case. The recovery may have been due to other causes than the use of the current. It is possible that it might have occurred spontaneously. But it is surely an unusual instance of a *restitutio ad integrum* in a person of over seventy, of very full habit and in an aggravated case. The treatment is so simple and so easily applied that I trust other members of the profession will follow it up and report their results.

J. T. D.

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## OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, JAMES W. F. ROSS, ALBERT A. MACDONALD,  
K. MELWRAITH, AND HELEN MACMURCHY.

### A New Obstetrical Instrument.

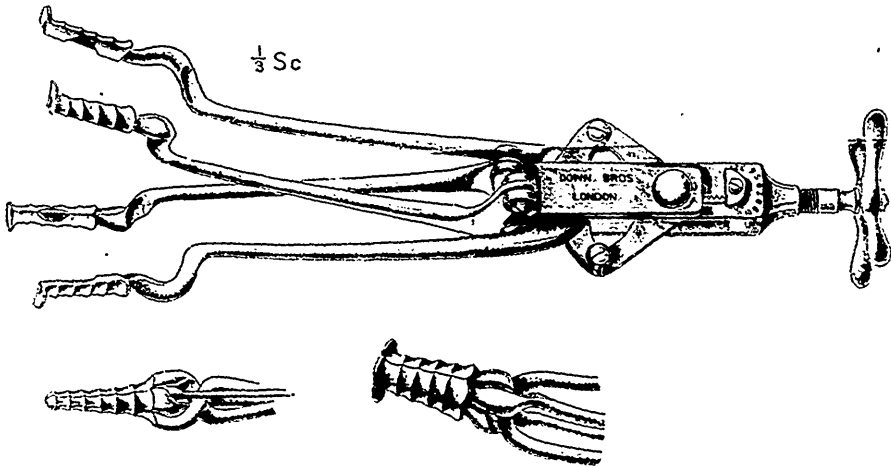
Professor Bossi, of Genoa, has invented a new obstetrical instrument which may be described as a cervical dilator, intended for use in certain obstetrical cases where rapid dilation of the cervix uteri and immediate delivery are indicated.

Among the first to use the instrument was Professor G. Leopold, director of the Obstetrical and Gynecological Institute at Dresden, who has published reports of seventeen cases, in which it was used. Twelve of these were cases of puerperal eclampsia, ten of them being multiparæ and two primiparæ. Dilatation of the os uteri was completed in from twenty to thirty minutes, and in nearly all of the cases uterine contraction began during the use of the instrument. Laceration of the cervix did not occur in any of the cases, and there was no hemorrhage. Of the twelve children seven were born alive, forceps being used; four of the others had died before or during labor. The remaining five cases reported by Leopold were: one of severe uterine spasm, one of pyrexia complicating labor, one of advanced phthisis complicating labor, and two of contracted pelvis. All these patients recovered.

Professor A. R. Simpson, of Edinburgh, exhibited the Bossi dilator to the Edinburgh Obstetrical Society in May, 1902, and

at their meeting in November, 1902, reported a case in which he had used it.

The patient was a primipara, and was admitted into the Edinburgh Royal Maternity Hospital in an unconscious condition, after having had a series of convulsions. Her feet and ankles had been swollen for several days, and she had suffered from headache. The urine, drawn off by catheter, contained twenty-eight grains of albumin to the ounce. Another convulsion occurred shortly after admission, the breathing became stertorous and pulse rapid. Chloroform was administered and Bossi's dilator was introduced at first without the sheaths, occasional douches of lysol being given. The os was fully dilated in about twenty minutes, no laceration occurring and practically no hemorrhage. The membranes ruptured before



dilation was quite complete. Axis-traction forceps were used and the labor was over in thirty-five minutes after dilatation had been completed. The child, a female, weighed six and a half pounds. During the next three days the patient had sixteen convulsions, but the albumin rapidly diminished and disappeared from the urine altogether by the ninth day.

Dr. William R. Frost also reported a case of eclampsia at the same meeting. Dr. Frost's patient was in the eighth month of her eighth pregnancy, and had had a convulsion before the medical attendant was summoned. She was in a grave condition and labor pains had not begun. Bossi's dilator was introduced without the sheaths and dilatation was accomplished up to three and a half centimetres, when the instrument was withdrawn and reintroduced with the shields *in situ*. Dilatation

was not difficult up to eight centimetres, but resistance then became so great that the instrument was withdrawn when the index registered nine and a half centimetres, because laceration was feared if further force was used. Thirty-five minutes were occupied in dilatation, and the labor was completed by forceps in forty-five minutes more. The child was alive and the mother eventually made a good recovery. Convulsions occurred for eighteen hours after delivery and the urine was found to contain three grammes of albumin per litre, some blood and granular and blood casts, the urea being 1.2 per cent. This patient had an attack of jaundice during the puerperium. Both Dr. Wright's patient and Prof. Simpson's patient were treated with enemata of chloral and potassium bromide.

Leopold thinks that this instrument is a valuable one for use in suitable cases, and that it will often prevent the necessity for Cesarean section in cases of eclampsia.

The foregoing illustration shows the instrument as manufactured by Messrs. Down Brothers, London, England.

H. M.

## Editorials.

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### FRIGHT AND CHLOROFORM DEATHS.

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An important leader in the *British Medical Journal* of February 21st last calls attention, under the above heading, to a lecture recently delivered at the New York Polyclinic, by Dr. J. A. Bodine, upon this subject. It appears that Dr. Bodine considers that most deaths which take place during the administration of chloroform, are due, not to poisoning by the drug, but to fright. He quotes an interesting case in support of this view: "The patient, a very nervous individual, became so frightened before the operation that the rhythm of his breathing was seriously disturbed; the anesthetist, in consequence of this, gave him some preliminary training in deep breathing before the administration of the chloroform; the cone was placed over his face, and he was told to breathe deeply; after a few gasps he ceased to breathe and could not be resuscitated. Not a single drop of chloroform had been administered." Dr. Bodine thinks that "if death from fright could be eliminated chloroform would be a much safer anesthetic."

His views thus coincide with those of Dr. R. D. Rudolf, of this city, who, in a pamphlet entitled "Observations on Blood Pressure," with special reference to chloroform (published in 1901, as a Toronto University study), wrote as follows: "When the blood pressure falls greatly from chloroform and remains low, life must be endangered, but in my experience animals do not die more easily from chloroform administered in the vertical than in the horizontal position, and it is decidedly harder to kill a dog with chloroform when the pressure is very low from hemorrhage than when this is not the case. . . . If then it is harder to kill a dog by chloroform when the pressure is low than when it is not so, why should it be that all anesthetists are agreed upon the danger of giving anesthetics when the patient is sitting up? The answer I believe lies in the fact that most deaths, which occur in practice during the administration of chloroform, are *not* cases of

poisoning from the drug, but *are due to syncope resulting either from the pain of an operation commenced too soon, or from fear.*"

Dr. Rudolf quotes Sir J. Y. Simpson, Brodie, Cooper, Home, Travers, Snow and others, all of whom recognize this form of death during chloroform anesthesia, and remarks that "the distinction between deaths from chloroform and deaths simply occurring during the administration of chloroform is even more important to-day than it was in Simpson's time. Nowadays so many patients have a dread of chloroform, that one would expect cases of syncope to occur occasionally when they are going under the anesthetic and are still conscious and afraid."

With these views before us, the inadvisability of allowing any reports of accidents occurring during anesthesia to get into the lay press is evident. Such reports can do no good and may lead to deaths, by producing a dangerous state of nervous dread in those about to undergo anesthesia.

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### SIR JAMES GRANT'S JUBILEE. ' 1

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We desire to congratulate Sir James Grant on the recent celebration of his jubilee in the medical profession. He entertained his friends at a dinner and smoking concert in St Andrew's Hall, February 4th. Sir Frederick Borden, in proposing the health of Sir James, spoke very highly of the work he had done for the medical profession of Canada. Sir James in returning thanks indulged in many interesting reminiscences of his experience during his fifty years of almost continuous professional work.

Sir James was born in Scotland, but came out to Canada when a young lad with his father, a physician, who settled in Glengarry County. He was educated in Queen's and McGill Universities, and passed his examination for M.D. in the latter in 1853. Since that time he has practiced, and we hope will continue to practice for some time to come, in the city of Ottawa. He has always been a broad-minded and public-spirited man. For our profession he has done much, especially in connection with the Canadian Medical Association. He has also done much work for Canada in connection with matters non-medical.

He was an intimate friend of Sir John Macdonald, who induced Sir James to enter the arena of Canadian politics. Here he was eminently successful, and was one of Sir John's most active lieutenants. During recent years he has taken an active interest in the question of the proper treatment of victims of tuberculosis. He received the honor of Knighthood in 1891. We are pleased to be able to say that he is now in excellent health. Long may he remain so!

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### TRINITY MEDICAL COLLEGE.

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There have been many rumors during the last few months as to certain changes which are likely to take place in the relations existing between Trinity Medical College and Trinity University. It is probable that the Medical School will shortly become the Medical Faculty of the University. It is also proposed to erect a new and modern medical building for the new Faculty. These proposals do not necessarily mean that federation of Trinity with Toronto will not take place, but they indicate that the prospects for such federation are not so bright as they were some time ago. The recent improvement in the financial conditions of Trinity, brought about through the skill, tact and energy of Provost Macklem, seems to have made that University more hopeful as to its future, and more independent in its negotiations. We are told by some that unless Toronto yields to Trinity's stipulations regarding the respective relations of Trinity and University Colleges to the central University, there will be no Federation. We understand that the Provost is preparing a definite statement of Trinity's position which, when published, will be read with much interest by many who appear to have extremely vague ideas about these matters now. In any case we should suppose it wise on the part of the Medical College to enter into the proposed closer relations with the University. In connection with the proposal to erect a new medical building, it might be well for Trinity and its friends to remember that the present success of the Medical Faculty of Toronto University is largely due to the Science teaching in the primary branches. To erect new buildings and provide equipments equal to those of Toronto would now cost pro-



bably about seven hundred thousand dollars, and if Toronto is going to keep abreast of the times much additional expenditure will be required in the near future. We believe, however, that the Provost and many others interested in Trinity quite appreciate the importance of this aspect of the subject, and are quite willing to federate on certain conditions, the particulars as to which we shall learn before long.

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### THE MUSKOKA COTTAGE SANATORIUM.

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We have received the Medical Report of the Muskoka Cottage Sanatorium for its fifth year—ending September 30, 1902.

The physician in charge, Dr. J. H. Elliott, states that the results have far surpassed those of any previous year. There has again been an increase in the average length of stay, and it is hoped this will continue in the future.

We extract the following from Dr. Elliot's report :—

In my last report I stated that we had found our tents unsatisfactory for occupation by patients during the wet months of spring and fall, and during the heavy snowfalls of winter ; to replace them we had built as an experiment three canvas shelters, with board floor and shingled roof, each for two patients. These, now known as "shacks," have proven most satisfactory except in the matter of size. At the close of the present year two others have been built, somewhat larger than the first, and are now occupied. These have augmented our facilities for outdoor life for our patients. I have seen no such structures in any of the sanatoria visited, but have no doubt that now their efficacy is becoming known they will be adopted elsewhere. A number of our patients since leaving have had them built at home, and are living in them, maintaining fully the improvement made while under treatment here.

May I draw your attention to the results in the tabulated statement, showing that out of 102 patients treated 28 were discharged apparently cured, and 45 with disease arrested. Of these 45 I have every reason to believe that at least 22 would have progressed to apparent cure had they remained under treatment a sufficient length of time, *i.e.*, a possibility of 50 per cent. of apparent cures in those accepted for treatment.

You will also notice that of 84 patients with bacilli in the sputum on admission, 31, or 37 per cent., became free under treatment.

Even more interesting and gratifying are the results shown in those patients who remained under treatment over three months. 80 appear in this class; of these 28, or 35 per cent., were apparently cured, and 40 or 50 per cent. had the disease arrested, with 4 or 5 per cent. much improved, *i.e.*, of patients remaining under treatment from three to twenty-three months, 85 per cent. were either cured or had the disease arrested, while but 10 per cent. failed to improve.

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### TREATMENT OF INEBRIATES.

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We would remind our readers of the proposed bill for the treatment of inebriates the Ontario Government is asked to adopt this session of the Legislature, and to which we called attention last month. The provisions of this bill have the endorsement of the medical profession, as expressed by the Canada Medical Association, the Ontario Medical Association and the Toronto Medical Society; but so far as we know, no committees have been appointed to bring the influence of the profession to bear upon our Legislature, unless it is understood that the Public Health Committee of the Ontario Medical Association is expected to act in that capacity. It is not too late for this committee and the Toronto Medical Society to take action in the matter, if this has not been done already. The proposed bill is understood to have the approval of the Government, and we know of no reason why it was not adopted years ago. We trust each member of the profession will realize his responsibility in the matter and bring his influence to bear --and at once--upon his representative in the Legislature. The profession has practically the matter in their own hands. The members of the profession can influence the Legislature (through their representatives), and the Legislature can influence the Government. *Verbum sap.*

## MEDICAL ITEMS.

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The Fourteenth International Medical Congress will be held this year in Madrid, from April 23 to 30.

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We understand that certain physicians of Montreal, after an extended trial of anti-streptococcus serum in severe cases of scarlet fever, have abandoned its use.

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The Secretary of the Canadian Medical Protective Association has issued a third circular letter to the medical profession asking physicians to become members. The fee for membership is \$2.50. Send your name and fee to Dr. F. W. McKinnon, Ottawa.

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The executors of the estate of the late Hart A. Massey have contributed, on behalf of the estate, a subscription of \$5,000 to the fund for the erection of a Convocation Hall for the University of Toronto. The subscriptions now amount to about \$30,000. The full amount required is \$50,000.

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At the annual meeting of the British Columbia graduates of McGill University, held February 14th, Dr. D. H. Harrison, the oldest graduate in that province (1864), was elected to the presidency. Dr. McGregor, Vancouver, founder of the society, was re-elected secretary; Dr. Tunstall, Vancouver, treasurer, and Dr. G. H. Manchester, New Westminster, one of the vice-presidents.

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The annual meeting of the Board of Governors of the Victorian Order of Nurses was held March 5th at Government House, His Excellency the Governor-General presiding. The reports showed the order to be flourishing all over the Dominion, and that \$50,000 was raised last year. Her Excellency has now under way a scheme for raising an endowment fund, the interest of which shall go to maintain the central work.

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A new Therapeutical Society has recently been established in England, with Sir William Thistleton-Dyer, K.C.M.G., F.R.S., as president. Sir William is the Director of Kew Gardens in succession to the late Sir William Hooker, K.C.B. It is purposed to have a central bureau, where explorers and others can bring the results of their researches among foreign races, civilized or otherwise, on matters of therapeutical interest. The meetings are to be held in the rooms of the Apothecaries' Company.

A deputation, headed by Dr. Robert Ferguson and Dr. H. A. McCallum, of London, Ont., recently waited on the Ontario Cabinet at Toronto, presenting a request that an institute of hygiene be established in London in connection with the Western University. The Government has replied that they can not at present accede to their application.

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#### **An International Congress on Tuberculosis at St. Louis.**

It is announced that a World's Congress on Tuberculosis will be held in St. Louis on July 18-23, 1904. The work of organization is being carried on as rapidly as possible by the committees appointed by the American Congress on Tuberculosis, which is now a permanent body and is, we understand, incorporated under the laws of Georgia. An advisory committee, composed of the heads of the medical corps of the army and navy, and of many presidents of health boards and other sanitarians in the U.S. and Canada, has been appointed. The secretary of the organization is Dr. George Brown, of Atlanta, Ga.

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#### **Canadian Medical Association.**

The thirty-sixth annual meeting of the Canadian Medical Association will be held in the city of London, Ontario, on the 25th, 26th, 27th, and possibly the 28th of August, under the presidency of Dr. Walter H. Moorhouse, of that city. Dr. Matthew D. Mann, of Buffalo, has been asked to deliver the Address in Gynecology, and Dr. Alexander Hugh Ferguson of Chicago, the Address in Surgery. Recently the president appointed Dr. R. W. Powell, Dr. T. G. Roddick, M.P., and Dr. E. P. Lachapelle, a special committee in regard to the establishment of a proposed Dominion Health Bureau. This committee recently waited on Sir Wilfrid Laurier at Ottawa, with the result that the Premier has promised the proposal consideration. Dr. Moorhouse has also delegated Dr. C. F. Martin, Montreal, to the International Medical Congress at Madrid. Already arrangements are well in hand for a splendid meeting at London. Further announcements will appear in the Canadian medical press from month to month.

GEORGE ELLIOTT,  
*General Secretary.*

## Personals.

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Dr. Hugh G. Roberts (Trin. '85) has removed from New Germany to Galt.

Dr. R. B. Nevitt, of Toronto, left for a trip to the Southern States, March 7th.

Dr. Goldwin Howland has recently passed the examination for M.R.C.P., London.

Dr. Rudolph W. D. Parker was married February 4th to Miss Burrows, of Kingston.

Dr. John Standish (Tor. '70), of Wallaceburg, has sold his practice to Dr. A. Turner, of Southwold.

Dr. George McDonagh, after spending a few weeks in Jamaica, is now on his return journey to Toronto.

Dr. Wm. Gunn, of Clinton, is President of the Huron County Alumni Association of the University of Toronto.

Dr. Charles J. Hastings, of Toronto, returned to his home, February 24th, after spending a fortnight in Baltimore.

Dr. S. H. McCoy, of St. Catharines, has passed the examinations for the double qualifications of M.R.C.S. Eng. and L.R.C.P. Lond.

Dr. J. A. Williams (Tor. '63) is one of the vice-presidents of the Oxford County Alumni Association of the University of Toronto.

Dr. C. M. Foster left Toronto February 15th and sailed from Boston for Jamaica, where he expects to remain for two or three months.

Dr. Robert T. Noble (Tor. '95), formerly of Brampton, has removed to Toronto, and is living on the corner of Jarvis and Gerrard Streets.

Dr. Robert Lorne Stewart (Tor. '84), who practiced for many years in Bolton, has removed to Toronto, corner of Church and Gloucester Streets.

Dr. Harold Parsons, of Toronto, has quite recovered from his attack of septicemia, through which he was confined to bed for about five weeks.

Sir William Turner has been appointed Principal of the University of Edinburgh, in which he was Professor of Anatomy from 1867 to 1903.

Dr. George Badgerow is still in London, being lately engaged at work at the Brampton Chest Hospital. He expects to return to Toronto in a few weeks.

Dr. Jas. F. W. Ross, of Toronto, recently paid two visits to New York. While there he had important conferences with Dr. Guitéras about the Pan-American Medical Congress.

Dr. George R. Watson (Vict. '88), who settled in Wellington, Ontario, after graduating, and afterwards spent a few years in Toronto, is now practicing in Barkly East, Cape Colony, South Africa.

Dr. Osborne Totten (Trin. '85) has been appointed physician to the Indians at Kettle Point and Stoney Point, and also associate coroner for Lambton, in the place of Dr. Scott, deceased.

Dr. J. E. Lehmann (Tor. '93), assistant surgeon to the German Hospital, London, England, after a visit of about two months to Canada and the United States, has returned to London.

Drs. A. Primrose and George Peters spent a few days in New York during the first week of March, and visited several medical colleges especially with a view of learning all about their equipments.

Dr. Samuel Harvey McCoy (Tor. '92), of St. Catharines, and Dr. Wm. F. Frizzell (Tor. '98), of Kemble, have passed the examinations for the double qualifications of L.R.C.P., Lond., and M.R.C.S., Eng.

*The Laryngoscope*, of which Dr. D. Gibb Wishart, of Toronto, is the Canadian collaborator, has been greatly increased in size. We congratulate the editorial staff on the marked success of their efforts to produce a good special medical journal.

Dr. A. J. G. MacDougall, who recently spent some time as one of the surgeons in charge of the Boer prisoners of war at Bermuda, and went with a portion of them to South Africa, has returned to Canada and commenced practice in Toronto.

Dr. L. L. Palmer, of Toronto, who is at present staying at the Welland, St. Catharines, is rapidly recovering from the effects of his attack of septicemia. He paid a flying visit to Toronto during the last week of February, when his friends found him remarkably improved in appearance. His general health is good, but there remains some weakness of the left arm, with impaired mobility of the wrist and finger joints. Massage and exercise are slowly but surely bringing back tone to the weak muscles and limbering the stiff joints.

Dr. George Steacy has been appointed treasurer of the United Counties of Stormont, Dundas and Glengarry.

Dr. Colin Campbell (Trin. '00), who, after serving his term as house surgeon to the Toronto General Hospital, acted as surgeon to the steamship *Empress of India*, is now on the house staff of the Royal Ophthalmic Hospital, London, England.

At the time of writing the condition of Dr. Gilbert Gordon, of Toronto, who is at Dr. Howard Kelly's Hospital, Baltimore, is very serious. His brother, Dr. Andrew Gordon, went to Old Point Comfort, March 9th, and found Dr. Gilbert so ill that he thought it advisable to bring him to Baltimore.

The following graduates in medicine were present at the first annual dinner of the University of Toronto Club of New York, January 30th: Drs. W. A. Goodall, A. H. Montgomery and A. R. Robinson. President Loudon, of the University, was the guest of the evening, and received a most enthusiastic welcome.

Dr. D. J. Cunningham, F.R.S., who has been for some years Professor of Anatomy in the University of Dublin, has been invited to succeed Sir William Turner as Professor of Anatomy in the University of Edinburgh. The Curators of Patronage had previously ascertained that Dr. Cunningham was willing to accept the appointment.

Our friend Dr. Donald Armour, who took both F.R.C.S. Eng. and M.R.C.P. Lond., is doing well in London, England. He is Senior Demonstrator of Anatomy, University College; Assistant to the surgeon in charge of the Ear, Throat and Nose Department University College Hospital; Senior Assistant Surgeon Belgrave Hospital for Children; Hon. Surgeon St. Marylebone General Dispensary. He lives at 89 Harley Street, W.

## Obituary.

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### HERMAN MYNTER, M.D.

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Dr. Herman Mynter, one of the most prominent surgeons of Buffalo, died of arterio-sclerosis, aged 57.

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### JOHN W. HODGKINSON, M.D.

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Dr. Hodgkinson, formerly a well-known physician in the eastern part of Toronto, died at 238 Farley Avenue, January 29th, aged 78.

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### GEORGE MOTT, M.C.P. & S.O.

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Dr. Mott, who, after receiving his license in 1869, practised for many years in Petrolea, died at Wallaceburg January 17th.

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### GEORGE STEWART, M.D.

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Dr. Stewart, of Port Rowan, died January 28th of apoplexy, aged 62. After graduating from Victoria in 1869 he practised for one year in Jossington, and then went to Port Rowan, where he practised until 1894, when he was appointed Collector of Customs.

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### WILLIAM E. B. DAVIS, M.D.

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One of the most distinguished sons of the "Sunny South" was Dr. W. E. B. Davis, of Birmingham, Alabama. For sixteen years he took a prominent part in various medical societies of the United States. In 1887 he commenced the important work of organizing the Southern Surgical and Gynecological Association, which held its first meeting in 1888. The pronounced success of that flourishing society was largely due to untiring efforts of Dr. Davis, who acted as Secretary until 1900, and was President in 1902. He was also a Past President of the American Association of Obstetricians and Gynecologists, and of the Tri-State Medical Association of Alabama, Georgia and Tennessee, and was an honorary member of the Medical



Society of the State of New York. He was well known in Toronto, having visited this city in 1894 to attend the meeting of the A. A. O. and G., and also in 1897, when he was one of the guests at the Lord Lister banquet in the Toronto Club. Dr. Ross, of Toronto, was much shocked when he received a telegram, February 24th, stating that Dr. Davis had been killed that day on a railway crossing in Birmingham. At the time of writing we know nothing further as to the details of the accident. How old was this man who had occupied such a prominent position in the medical world of North America? Less than forty. He would have completed his fortieth year in November next if Providence had spared his life. Dr. Davis had a singularly charming disposition. Modest and retiring, he yet had great force of character and great ability as an organizer, a public speaker, and a surgeon. The *Buffalo Medical Journal*, whose editor, Dr. Potter, was one of Dr. Davis' most intimate friends, tells us that Dr. Davis expected soon to publish a book on the surgery of the liver, gall-bladder and ducts. The surviving relatives are his widow, two young daughters and his brother, who was also his partner in practice.

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#### CAIRD RYERSON MACLEAN, M.D., M.R.C.S., ENG.

Dr. Maclean, of Meaford, died February 16th, of apoplexy aged 66. He was graduated from Queen's, Kingston, in 1859, and acted as an army surgeon during the American Civil War. After its conclusion he practised in Meaford, where he was highly esteemed, being for a time Mayor of the town. He was for many years surgeon to the 31st Battalion and had attained the rank of Surgeon Lieut.-Colonel.

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#### THOMAS W. REYNOLDS, M.D.\*

By JAMES RUSSELL, M.D.

Dr. Reynolds, who was assistant superintendent at the Asylum for the Insane, Hamilton, Province of Ontario, died at Baltimore on June 9th, last. He joined the medical staff of the asylum at Hamilton in 1885 as junior physician, and with the exception of a short interval at Mimico Asylum, he continued his official connection at Hamilton to the last.

He contracted a cold in the early part of 1902, accompanied with cough and hemorrhage from the lungs. He was advised

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\*Read at the Annual Meeting of the American Medico-Psychological Association, held at Montreal, Quebec, June 1902.

to go South for the winter, and accompanied by Mrs. Reynolds and his little daughter, he went to Southern Pines in North Carolina, in the hope that the more salubrious climate of that region would improve his health. His letters from there to members of the staff were always cheerful, and he fondly looked forward to the time when he would again resume his duties which he loved so well.

In the early part of June he left Southern Pines for home, but stopped off at Baltimore to consult Dr. Osler, who was a personal friend and college chum at McGill University, Montreal. The fatigue of the journey produced fatal exhaustion upon an already debilitated system which was the subject of tubercular disease. He was sent to the Johns Hopkins' Hospital by order of Dr. Osler, where he received the best skill and the greatest possible kindness, but in spite of all he gradually sank and died the following day.

His untimely death at the early age of 45 years, and in the midst of his usefulness, was greatly lamented by his numerous friends, and especially at the asylum, where he was greatly beloved by everyone. He was a man of lovable disposition and generous impulses, and was never known to be out of temper. He was especially fitted for asylum work—was punctual and methodical in everything, and ever at his post. If he erred at all it was in too great devotion to his work. Ever anxious to serve others he thought least about himself, and in that sense he died a martyr to his professional duties and the great charity which was his life's work.

He was the second son of the late Dr. Thomas Reynolds, of Brockville, and was born on June 6th, 1858. He was educated at the public schools of Brockville and McGill University, where he took his degree in 1881. He began the practice of his profession in Hamilton, and in 1885 was appointed to the medical staff of the Hamilton Asylum, from which position he rose to be assistant superintendent. In 1890 he married Miss Mary L. Logie, daughter of the late Judge Logie, of Hamilton. His widow and one daughter survive, and one brother, Judge Reynolds, of Brockville.

Dr. Reynolds belonged to the Anglican Church and was an active member of St. Thomas' church, Hamilton. He was also a prominent Mason; was past master of Barton lodge, and was a member of the Scottish Rite. He was also a member of the Independent Order of Oddfellows, of which his father was the first Grand Master in Ontario.

## Book Reviews.

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**Manton's Obstetrics.** A Manual of Obstetrics for Students and Practitioners. By W. P. MANTON, M.D., Adjunct-Professor of Obstetrics and Professor of Clinical Gynecology, Detroit College of Medicine. In one 12mo volume of 265 pages, with 82 illustrations. Cloth, \$1.00. Lea Brothers & Co., Publishers, Philadelphia and New York, 1903.

This, the fourth volume of Lea's Series of Medical Epitomes, presents a good summary of the essentials of modern obstetrics. For convenience in quizzing, a series of questions are given at the ends of the various chapters.

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**Constipation.** By G. SHERMAN BIGG, F.R.C.S.E.; late Surgeon-Captain Army Medical Staff; Sanitary Medical Officer, Thorncliffe Camp; Surgeon-in-Charge Native Followers' Hospital, and the Women's Hospital, Allahabad. London: Bailliere, Tindall & Cox, 8 Henrietta Street, Covent Garden, 1902. Price 2s 6d net.

It is quite unnecessary to point out the importance of the proper treatment of Constipation. We agree with the author in the statement that Constipation is the most frequent ailment to which mankind is subject, and affects all classes of men, women, and children, from the youngest to the oldest. Not only is it very common, but it is frequently difficult to cure. This excellent treatise will be found very useful for one who desires to learn as much as possible about a "complicated problem."

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**Progressive Medicine, Vol. IV, December, 1902.** A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 412 pages, 54 illustrations. Per volume, \$2.50, by express prepaid. Per annum, in four cloth-bound volumes, \$10.00. Lea Brothers & Co., Publishers, Philadelphia and New York.

The concluding volume of 1902 begins with a remarkably thorough consideration of the most recent advances in the diagnosis and the treatment of Diseases of the Digestive Tract, including the liver, pancreas and peritoneum, by Dr. Einhorn. His discussion of affections of the gall bladder and pancreas will be found of especial value to the general practitioner. The study of these subjects has recently received an enormous impetus, and many hitherto obscure clinical manifestations are now found to be connected with pathological conditions of these organs. Dr. Bloodgood's section on Anesthetics, Fractures, Dislocations, Amputations, Surgery of the Extremities and Orthopedics is a thorough discussion of all these important topics, accompanied by a large number of valuable illustrations, Dr. William T. Belfield writes upon Genito-Urinary Diseases.

giving especial attention to the much-discussed treatment of prostatic hypertrophy. Dr. John Rose Bradford, in the section on Diseases of the Kidneys, discusses very fully the many manifestations of renal diseases, their complications, and the most recent methods of treatment. The section on Physiology by Dr. Brubaker will prove of more than usual interest and value to the general practitioner. He describes fully the wonderful experiments and discoveries concerning life and vital reactions which have been made by Professors Loeb and Mathews. These have been so generally exploited in popular magazines, and have attracted such widespread interest that a scientific *resume* of their real value is a necessity to every medical man. Dr. Harrington's chapter on Hygiene relates the wonderful results attained by the practical applications of recent investigations into the cause and prevention of such diseases as yellow fever and malaria. The Therapeutic Referendum presents all the facts regarding the most recent remedies and methods of treatment. This feature alone would suffice to make the volume indispensable to the up-to-date physician.

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**Obstetrics. A Text-Book for Students and Practitioners.** By J. WILLIAMS: WILLIAMS, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital; Gynecologist to the Union Protestant Infirmary, Baltimore. With eight colored plates and six hundred and thirty illustrations in the Text. Cloth, price, \$6.00. New York and London; D. Appleton & Co., 1903.

Dr. Williams tells us that he has attempted in this book to set forth the scientific basis for and the practical application of the obstetrical art. We may say in a general way that his efforts have been highly successful. The plan of the work is very like that adopted by Jewett and Norris in the admirable text-books which they have edited. Apart from the chapters in Jewett's work, written by Williams, there is a somewhat striking similarity in the subject matter in the book by American authors and that written by the distinguished obstetrician of Baltimore. This may cause a slight feeling of disappointment in the minds of those who expect to find much that is new in Williams' book. The author expresses the hope that the book may prove serviceable as a laboratory guide to students. We have only to say in this regard that we do not know where students can find a better laboratory guide. It may be thought too voluminous for the average student, but it will be highly appreciated by the better class of students who desire to acquire the scientific basis upon which to found their knowledge of obstetrics. It will be found very useful for practitioners who desire a safe, reliable and complete book of reference for both the science and art of obstetrics. The illustrations are excellent and add much to the value of the book.

**Medical Ethics and Cognate Subjects.** By JAMES S. SPRAGUE, M.D. Chas. P. Sparling & Co., Publishers, Toronto, 1902.

This is a very interesting book, written by a Canadian "Country Doctor" who was graduated from Victoria University in 1869, and since then has practised in Sterling, County Hastings. The author dedicates it to his patron, Dr. W. B. Geikie, and also to "the venerable names of Hodder, Bowell, Aikins, Wright, Ogden, Richardson and Croft, my Masters when a student in the Medical Faculty of Toronto University; to Rolph, Fulton, Sangster, Canniff, Barrick, Berryman and King, my Masters at Victoria University." The author also states that he claims no distinct originality, although he includes twenty or more of his own articles, which have appeared in medical and other journals. The chief value of the book depends on the compilation of admirable excerpts on matters of interest to our profession, taken from the writings of distinguished physicians from the time of Hippocrates down to the present time. The book contains all sorts of aphorisms, many anecdotes, and all sorts of very readable items. The price is only one dollar and a half. All Canadian physicians should have a copy.

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#### Dr. Smiles.

Dr. Smiles, the author of "Self Help," who celebrated the completion of his ninetieth year the other day, was a doctor "by first intention." He was born at Haddington in 1812, and educated at Edinburgh, becoming in due course a licentiate of the Royal College of Surgeons of that city. He practised as a doctor in Haddingtonshire for six years, but his tastes lay in another direction. His opportunity came to him earlier than to most men. He was offered the editorship of the Leeds *Times*, and from the drudgery of editorship he rose to be Secretary of the Leeds and Thirks Railway, and afterward of the South-Eastern. He is best known, however, by his books. In addition to "Self Help" he has produced "Lives of George and Robert Stephenson"; "Lives of the Engineers"; "A Life of John Murray"; "Thomas Edward, Scotch Naturalist"; "Robert Dick, Geologist and Botanist"; and a series of works of a homiletic character—Duty, Thrift, Character, Conduct, etc. The publisher to whom Dr. Smiles first offered "Self Help," when the Crimean War was raging, would not look at it. "People won't read anything of this kind," he said. After the book had lain for years on his desk, Dr. Smiles published it at his own expense. It at once became popular. Twenty thousand copies were sold in the first year, and since then its circulation has gone beyond the quarter million mark.—*British Medical Journal*.

# Selections.

## SURGICAL HINTS.

In intestinal obstruction never give purgatives, for they are a source of distinct danger. If three or four copious high enemata do not produce the desired result, every minute of delay in performing an abdominal section becomes an additional risk.

Never pass a sound for the first time through a patient's urethra without having his head low, and take care to observe his countenance frequently. Patients once in a while will have an attack of syncope as a result of this procedure, which has been shown to be able to rapidly lower the blood pressure.

Primary syphilis of the fingers and hands, for obvious reasons, occurs more frequently in physicians than in any other class of people. Hence no physician is justified in failing to disinfect his hands with the utmost care after every examination of male or female genital regions or of mucous membranes. The worst way of diagnosing syphilis is by a culture experiment on the doctor himself.

The word catarrhal, as applied to appendicitis, may pathologically be correct enough, but it is a bad one to use in speaking with patients. It leads them to underestimate the possible gravity of even the mildest appearing case. It must be remembered that there is always danger until the attack is entirely over, and that a diagnosis of "simple catarrhal appendicitis," followed a few days later by need for an undertaker's services, is a poor advertisement for the doctor.

In aspirating for pleurisy with effusion, cough usually begins after a fairly large amount of fluid has been withdrawn. It may serve to some extent to break adhesions, and in moderation may be beneficial. But if the cough begins very soon, and interferes with the removal of a sufficient amount of fluid, measures must be taken to stop it. The needle may be withdrawn, and the operation repeated next day, after a moderate dose of opium has been given to quiet nervousness. Better still, leave the needle in place, shutting off the stop-cock, and tightly bandage the chest with a broad bandage, pulled more tightly as the fluid is removed. This strong support to the chest will usually stop the cough, and is a good routine measure to adopt in all cases of pleuritic effusion.—*International Journal of Surgery.*

### Transitory Circumscribed Edema.

M. Bayet (*La Tribune Médicale*) presented to the Belgian Society of Dermatology and Syphilography a man, aged sixty years, who had been attacked a year and a half previously by fugacious circumscribed edema, which appeared upon different parts of the body. It came first upon the fingers, then upon the hands, the forearm, the scrotum, penis and eyelids. The tongue was also involved, sometimes upon one and sometimes the other side. The lesions, the size of which ranged from ten to twenty centimetres (about four to eight inches), were very fugacious, and lasted from twelve to twenty-four hours. They then disappeared without leaving any trace. There was a cardiac murmur, with irregular action. The complexion was subicterode and the liver was somewhat enlarged. There was neither albumin nor sugar in the urine. Two days previously the abdomen had suddenly swollen. Percussion revealed the presence of an effusion in the lower part of the abdominal cavity. This ascites, so suddenly produced, seemed to bear a relationship to the same causes which had previously given rise to the circumscribed edema. In fact, sudden effusions into joints, the meninges, and pleura, swelling of the parotid gland, and even edema of the lungs have been observed in connection with circumscribed edema of the skin. The speaker was not cognizant of any case in which ascites made a part of the symptomatology of the disease.—*The Medical Bulletin*.

### Effect of Hypnotism Upon the Circulation.

By means of sphygmographic tracings, Dr. Bérillon (*Jour. de Méd. de Paris*, Dec. 27, 1902) has studied the effect of hypnotic suggestion and simple hypnotic sleep, without suggestion, upon the normal pulse and upon that of patients affected with functional circulatory disturbances. In a normal subject, slowing and acceleration of the pulse was obtained by suggestion; and in a hysterical subject affected with tachycardia, distinct diminution in the pulse-rate was induced by suggestion. Under the influence of simple hypnotic sleep, without suggestion, marked improvement was noted in the pulse and heart-action of a subject suffering from a functional cardiac affection. The effect of hypnotic sleep upon arterial tension was also striking; in those in whom the tension was above normal it was common to find an increase of more than 100 grams; while in subnormal tension the increase did not appear for some time, and it was necessary to prolong the sleep for several hours to obtain the best results. In cases of normal tension, the increase was even slower in appearing, and less marked. These effects could be produced only when the

hypnotic sleep was rendered as nearly as possible like natural sleep; this being accomplished by repeated suggestions to the patient that he would sleep as quietly and restfully as though in his own bed, etc. Hypnotic suggestion was also effectively used in a case of hemianesthesia accompanied with subnormal arterial tension upon the affected side. Under hypnotic suggestion anesthesia was transferred to the opposite side, and with it the abnormal pulse appeared also upon that side.—*Med. News.*

### Chronic Bright's Disease.

The following combination is recommended by Semmola as a drink in chronic Bright's disease:

℞ Sodii chloridi, ℥ iss.  
Sodii phos., ℥ ss.  
Sodii iodidi, gr. xv.  
Aquæ puræ, ℥ xxxvj.

M. Sig.: Use pure as a drink or mixed with milk.—*Journal of the American Medical Association.*

### Toothache.

When this condition arises from a diseased tooth in which there is a cavity, Mason recommends that a few drops of the following combination be placed upon a pellet of cotton and applied to the cavity:

℞ Linim. aconiti (B. P.).  
Chloroformi, of each, 3 drachms.  
Tinct. capsici, 1 drachm.  
Tinct. pyrethri,  
Olei caryophylli,  
Pulv. camphoræ, of each, ½ drachm.

—*Philadelphia Medical Journal.*

### Tumor Complicating Labor.

F. W. Kidd gives the history of a woman of 34, whom he saw when 4½ months pregnant and found she had a fibroma about the size of a hen's egg springing from the posterior wall of the cervix. As it encroached very little upon the cervical canal, it was deemed inadvisable to attempt any interference until the beginning of labor; when that time arrived, it was apparent that the tumor had so increased in size as to prevent the descent of the head, or the dilation of the cervix. Accordingly the tumor was enucleated through the vagina, and three days later a living child was spontaneously delivered. The mother was able to leave the hospital in four weeks, with the child doing well.—*Med. Press.*



## A REPORT OF TWO CASES OF SEPTICEMIA, SUCCESSFULLY TREATED WITH H<sub>2</sub> O<sub>2</sub> MEDICINAL.

BY E. J. MELVILLE, M.D., BAKERSFIELD, VT.

CASE 1.—Feb. 6, 1894, was called to see Homer B., aged 14, who had been ill with a swelling in right groin for three weeks. Had been treated with hot applications, etc., but during that time abscess continued to grow, and at the time that I first saw him fluctuation could easily be made out. Temperature 102.5° F. Pulse 120. Great emaciation. Constant vomiting. Daily chills followed by copious sweating, denoting pus absorption. Diagnosed appendicular abscess and advised operation. This was done same day under local anesthesia.

Much pus escaped, and several small portions of fecal matter, denoting an opening into the gut.

Temperature remained high, and sweats continued for three days following operation, indicating the presence of pus. I then began the use of Marchand's H<sub>2</sub> O<sub>2</sub> medicinal, (15 vol.) so as to destroy the pus and morbid element which were still there. I injected 4 oz. of H<sub>2</sub> O<sub>2</sub> with a glass syringe slowly, while patient was in the Trendelenberg position, and allowed it to remain about fifteen minutes. The boy was then lowered and laid upon his right side, when large quantities of pus, broken down tissue and gas flowed from wound. By gentle compression and massage of abdomen, much more was obtained. Large quantities of sterilized gauze were packed over the opening in right side.

The flushing out with H<sub>2</sub> O<sub>2</sub>, etc., was repeated every twelve hours.

The improvement was prompt. Temperature reached normal, and remained so after forty-eight hours.

Wound was now washed out with the H<sub>2</sub> O<sub>2</sub> daily for four weeks, after which time the abdominal wound and fecal fistula were entirely healed. Patient has since developed into a full-grown laboring man, and has had no hernia nor any outward symptoms of his severe illness.

CASE 2.—March 2, 1897, was called to see George T., a farmer, aged 38 years, who had been in the care of a Christian Scientist for four weeks for a large swelling in right side. The treatment consisted in endeavoring to persuade the man that he was not ill, and insisting that he take active exercise. Found patient in recumbent position with knees flexed upon abdomen, and suffering intense pain over right side of abdomen, which was filled with a soft fluctuating mass. Temperature 103.8° F. Pulse 130. Opened abdomen under local anesthesia and evacuated three quarts of foul smelling pus.

Used 4 oz. H<sub>2</sub> O<sub>2</sub> full strength, slightly warmed, after pus