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THE CANADA MEDICAL RECORD.

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Original Communications.

GYNÆCOLOGICAL REPORT—MONTHLY.

By E. H. TRENHOLME, M.D., B.C.L.,

Professor of Gynæcology Medical Faculty, University of Bishop's College.

DYSMENORRHŒA.

The fact that the majority of women suffer more or less from dysmenorrhœa makes it a subject of deep interest to the profession. In an able paper read before the Obstetrical Society of London, last year, Dr. John Williams points out that its most serious form is met with chiefly in the unmarried, which renders a complete investigation difficult. He divides dysmenorrhœa into two classes: primary and acquired. The latter are few, only about 1 to 40 of the former. Dr. W. thinks ovarian pain or inflammation rarely cause dysmenorrhœa, but rather consequences of it.

The doctor is not in favor of the mechanical theory of causation, as in his investigations he has found there was stricture of the canal, though the rarely round cervical ossæ were present. Imperfect development of the uterus was frequently found to exist, and accounts for the frequency of dysmenorrhœa among delicate ill-developed girls. The prospect of the paper favors constitutional rather than mechanical treatment.

The following are Dr. Williams' conclusions:

1. Dysmenorrhœa should be studied first under the least complex conditions—in single women.

2. Dysmenorrhœa in single women is rarely acquired; it is almost invariably primary, viz., it appears with the menstrual function.

3. Dysmenorrhœa in a few, but rare, cases spontaneously a few years after puberty.

4. Marriage, if sterile, aggravates the disorder in many cases; it is only very seldom that it relieves the pain.

5. Child-bearing cures a large number of cases, and it is not impossible that were all puerperal complications excluded it would cure every case.

6. The proportion of sterile to fertile women, subjects of primary dysmenorrhœa, is one to twelve.

7. Menstruation begins in women who become sufferers from primary dysmenorrhœa at about the estimated average age for the appearance of the function in London.

8. Menstruation is regular in about two-thirds of the cases; irregular in about one-third.

9. The menstrual fluid is profuse in about two-fifths of the cases, and scanty in about one-half. It contains clots or shreds in about three-fourths.

10. The changes which take place in the fluid in the course of dysmenorrhœa are various, and cannot at present be classified.

11. The uterus is imperfectly developed. It may be too short, or too small in volume, or it may be defective in both respects. The cervix may be conical, and the os small and round, but stricture of the canal in any part of its course is infinitely rare.

12. The changes in the uterus due to dysmenorrhœa are slight hypertrophy, erosion and eversion of the mucous membrane of the cervix, and catarrh. The cavity increases but little in length, for after

years of suffering it measures rarely more than two and a half inches in length. In the early stages the tissues of the uterus are in some cases soft; in the more advanced, hard.

13. The hypertrophy of the uterus is probably the result of periodically increased muscular action.

14. Ovaritis and perimetritis are possible consequences of dysmenorrhœa.

15. The menstrual pain is the result of spasm of the uterus, excited by the separation and expulsion of shreds of dreidna and clots, in an organ whose sensitiveness in the performance of its functions is enhanced by inappreciable conditions of tissue dependent on imperfect development, often associated with others, such as anæmia.

A NEW METHOD OF REMOVING NASAL POLYPUS.

By WILLIAM RALPH BELL, C. M., M.D., New Edinburgh, Ont.

Not having seen any account or ever having heard that this method has been used by any person but myself, and believing that it originated with me, I take the liberty of bringing the mode of treatment before the notice of your readers, which I have practised with the very best results in several cases. It obviates any trouble from hemorrhage, which is frequently the case when the forceps or hook are used; it is painless and very simple. I get my patient to blow strongly through the affected nostril, closing the other with his finger. The polypus will be brought down so that it can be easily seen through the external nares; then with my hypodermic syringe charged with a solution of tannic acid in water (of the strength of twenty grains to the fluid drachm), I pierce the polypus with the needle, and inject ten, fifteen or twenty minims of solution, according to size of tumor. In a few days the polypus shrivels and dries up (tanned); it comes away without any trouble or pain and looks like a clot of dried blood, my patients usually removing it by blowing the nose or by their fingers. In only one case, that of an old lady, had I occasion to remove it myself, and in her case I think she was afraid to do so, for when I seized it with dressing forceps I required to make no traction to bring it away.

New Edinburgh, Ont.,
February 19, 1884.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Jan. 11th, 1884.

T. A. RODGER, M.D., PRESIDENT, IN THE CHAIR.

Aneurism of Aorta–Rupture into left Bronchus.—Dr. OSLER showed the specimen, which was taken from a man aged about 50, who was admitted to hospital with shortness of breath, due apparently to bronchitis and emphysema. Attention was not particularly drawn to his condition. After a residence of three or four days in hospital, profuse hæmorrhage took place from the lungs and proved rapidly fatal.

The autopsy revealed the large aneurism of the ascending arch here shown. It projected beneath the sternum, the manubrium of which was eroded. Firm laminæ of fibrin occupied four-fifths of the sac. From the posterior wall of the transverse part of the arch two smaller sacs projected, the size of large walnuts; one of these had perforated the left bronchus and induced the fatal hæmorrhage. The heart was not hypertrophied. Aortic valves healthy. Interior of aorta atheromatous.

Aortic, Mitral and Tricuspid Valve Disease.—The heart showed extreme button-hole contraction of the mitral orifice with great thickening and induration of the mitral segments, adhesion of the aortic semilunar curtains with sclerosis, and great narrowing of the orifice, and fusion and thickening of the tricuspid valves, so that the orifice barely admitted the thumb. There was considerable hypertrophy of all the chambers, particularly the right ventricle. The patient, a woman, aged about 35, was brought to hospital with general anasarca and extreme dyspnœa, and died in 48 hours. No satisfactory history could be obtained, as she was a stranger, but she had had several previous attacks of dropsy.

Non-valvular Dilatation and Hypertrophy of the Heart.—Dr. Ross gave the following short history of the case: This man, aged 48, had been under his care in the hospital for the past two years on and off, suffering from anasarca and at times with fluid in the pleura. He had a soft blowing mitral regurgitant murmur from his first admission; later on hypertrophy became evident, digitalis always relieved him. Two months ago he returned to the hospital and went through the usual stages of

advanced mitral disease. He never had rheumatism or any of the usual causes of heart disease, excepting that he was very intemperate.

Autopsy by Dr. Osler.—A couple of quarts of serum in peritoneum, two or three pints in each pleura, and several ounces in the pericardium. Heart hypertrophied and dilated; thick yellow clots in right chambers. Weight of organ, 610 grammes. Valves normal; aortic segments competent; mitral segments a trifle thickened at edges; no vegetations. Mitral orifice over six inches in circumference; tricuspid orifice nearly seven. The chambers were much dilated, and there was moderate hypertrophy of the walls. Muscle of fair color. Apices of papillary muscles fibroid. Aorta smooth. Coronary arteries not atheromatous. Lungs showed moderate emphysema at anterior margins; general brown induration; a large infarct at base of right lung. No pleural adhesions. Cyanotic induration of spleen, which was double the normal size. Kidneys slightly enlarged, coarse and hard; three healing infarcts in the left. Catarrh of stomach and bowels. Liver undersized, a little granular in the surface, hard and firm, and in early stages of cirrhosis.

Dr. OSLER remarked that this was the fifth or sixth case of the so-called idiopathic hypertrophy and dilatation of the heart which he had dissected. The question of ætiology was interesting and not yet settled. Most of these cases are in large powerfully built men, accustomed to heavy muscular exertion, and Abbott, Myers, Leitz and others have regarded this as the chief factor. The condition of irritable heart described by Dacosta in young recruits may be supposed to be the initial stage of the process, although in the majority of instances the condition is transient. One point in connection with the ætiology must not be lost sight of, viz.: that in the great proportion of these cases the patients were hard drinkers, and how much the alcohol has had to do with the production of the disease is hard to say.

Dr. TRENHOLME asked if the condition of his liver would throw light on the primary cause. Dr. Osler, in reply, said he thought not, as it was not much diseased.

DR. KENNEDY said he knew of two somewhat similar cases. One was that of an athlete who has a mitral murmur, and whom he believes will develop, later on, symptoms like those just related by Dr. Ross. The second case was a young man who had sent for him, as he was suffering from weakness and sickness of the stomach. On examination, a soft mitral murmur was discovered. This young fellow, the day before, had gone for a very long snow-shoe tramp. Dr. Kennedy said we might expect to see similar cases more frequently, as snow-shoeing was becoming so fashionable.

Dr. DOUGLAS, V. C. ex Brigade Surgeon, had seen many cases of irritable heart in the army, but they never led to a postmortem, as they would always be invalided. He said that Dr. Myers attributed heart trouble in soldiers to the pressure of the hook of the tunic on the vessels of the neck, increasing the labor of the heart, and producing palpitation.

Dr. CAMPBELL said that cabmen, who at times have such heavy lifts, are prone to heart irritation. He knew of one well marked case. Has seen two or three cases in young men who, from over exertion at playing lacrosse, suffered from symptoms similar to those in Dr. Kennedy's cases. He (Dr. Campbell) had lately been examining a lot of young men about to enlist, and noticed that most of them came from occupations requiring very little muscle or heart work, as shoe and cigar makers and could understand that this class would on becoming soldiers be likely to suffer from heart trouble.

Dr. BULLER called attention to Dr. Richardson's experiments with men working with and without alcohol. Whilst abstaining they did a certain amount of work with ease; the same men, allowed alcohol and doing the same work, suffered from palpitation and shortness of breath.

Pneumo-enteritis of the Hog.—Dr. OSLER showed the colon from a case of this disease, known better by the names of hog cholera and pig-typhoid. A local outbreak in Hochelaga a few weeks ago furnished an opportunity of getting some interesting specimens. The disease is highly contagious, and the ravages in the United States probably exceed that of any other animal plague. The lesions are in the lungs and bowels—most commonly the latter, but the former may alone be involved. The specimen exhibited was a very typical example of the disease in the colon, the mucous membrane of which was converted into a thick greyish-yellow substance, owing to a sort of diphtheritic infiltration.

DR. ALLOWAY exhibited a *Fleshmole Placenta*, in the amniotic sac of which he found a small embryo (exhibited) mummified, which appeared to have been blighted at about the fifth or sixth

week. The mole itself represented a mass about the size of a normal placenta at the fifth month. It had undergone fatty degeneration; its amniotic sac was filled with a dark-colored blood-clot, and contained the above-mentioned embryo. The history of the case was as follows: The patient, a young woman in her third pregnancy, had menstruated last in January, 1883. In March (two months afterwards), she received a severe fright, and had a slight flow of blood. From this occurrence she had no more discharge until the expulsion of a mole on 13th December following. During the months of February, March and April she had all the early symptoms of pregnancy; had noticed considerable increase in size, which continued until about June or July. She remained stationary in this respect for a short time, and towards the latter part she noticed herself reducing in size and the vagina giving exit to a muddy-brownish discharge (non-offensive). Dr. Alloway alluded to the interesting way in which these moles occur, and gave Scanzoni's views as follows: "The ovum remains with the dead fœtus for a considerable time in the uterine cavity; the coagulum (utero decidual) undergoes certain changes, and so gives rise to the formation known as a *fleshmole*. The effused blood (utero-decidual) becomes decolorized by rupture of the blood corpuscles and absorption of their coloring matter. The fibrin, Scanzoni supposes, becomes cellular tissue, and in this way is established a communication between the ovum and the uterine wall, which renders further development possible. The chief seat of this carneous degeneration is the decidua-vera. The amnion undergoes little change, and may be found adhering to the inner surface of the chorion, containing within its cavity a quantity of bloody fluid, and in which will be found what remains of the embryo." Dr. Alloway said his specimen corresponded to the description of a mole as given by Scanzoni; that he was sure the patient had become pregnant in, or before, March (nine months ago), and that the embryo had been retained in the amniotic sac in its mummified condition during that period. Dr. A. was also of opinion that many such cases occurred, but the embryo, not having been looked for, escaped in the discharge, and was thought to have been absorbed.

Dr. GEO. ROSS said he had failed many times to find the embryo in an early abortion, and had no doubt but they are often dissolved in utero.

Dr. KENNEDY said that if there was any separation from the uterine wall then the embryo was rapidly dissolved. Had a case where the embryo was perfect; left it in the amniotic sac over night, but by the morning it was entirely dissolved. He (Dr. K.) did not believe that Dr. Alloway's embryo had been in the uterus very long, certainly not anything like what Dr. A. seem to think. She might possibly have had one or more miscarriages early, but from the size of this specimen did not believe it was more than five or six weeks old. The relatively large size of the placental mass was due to its continuing to grow after the death of the fœtus.

Dr. TRENHOLME agreed with Drs. Ross and Kennedy.

Dr. ALLOWAY, in reply, said he gave the Society the exact facts of the case, and wished the members to form their own opinion regarding the possibility of the embryo and membranous mass exhibited having been in the uterus for the length of time mentioned. In defence of the mass being what is known as a true mole, he gave Scanzoni's definition, which corresponded to his specimen. In reference to the black clot found in the amniotic sac, it must have been recent, otherwise it would have undergone the changes explained by Scanzoni and which take place in extravasations in other parts of the body.

Dr. ALLOWAY also exhibited a *small piece of decidua* (about one inch square), showing, on the inner side of it, a distinct lining of amnion. The history of the case from which he had removed the specimen with the dull curette was as follows:—Patient, a woman about 40 years of age, mother of 12 children, had been losing blood from the vagina for several days; had been taking medicine from a physician, and had had her vaginal passage plugged daily to arrest hemorrhage. She was found by Dr. A. in a dying condition; no pulse at wrist, surface completely blanched, and extremities cold. Could not obtain an answer to questions. Heart's action could be heard very faintly through chest walls. She had received the last rites of the church, and was, in fact, dying. Removed all the cloths and packing in vagina; felt a fringe-like substance high up above the internal os, but could not reach further with finger. Passed up curette and detached the piece of decidua, and withdrew it with forceps. Washed out parts with antiseptic solution. Patient could not swallow. Administered hypodermic of ether. Ordered

beef-tea, egg and brandy rectal injection every two hours; heat to extremities and body generally. Patient improved by the morning, and gradually recovered life, but remains bloodless as when first seen, three weeks ago. Dr. Alloway said he adduced the case to show the great danger of following out rigidly the expectant plan of treatment in such cases. Efforts had evidently been made to remove the secundines with the finger, leaving behind the small portion exhibited, which was causing the hemorrhage. Those who opposed the curette were physicians who had never used the instrument, and had not convinced themselves of its perfect harmlessness and great value.

Dr. TRENHOLME said that a small piece of alum pushed into the os was what he found most useful for flooding in abortions.

Dr. KENNEDY believed that interference was seldom needed; that where the ovum was not entirely separated, it was best to plug and give ergot. Had several times known flooding to have been produced by meddling.

Dr. RODGER remarked that the physician first in charge of Dr. Alloway's case could not have plugged her properly, else she would not have been so low; believed the alum egg to be the most useful plug in such cases.

Elephantiasis of the Labia Minora and Clitoris —Operation—Death from Pyæmia three weeks later.—Dr. GARDNER exhibited the specimen and gave the following particulars:—The patient, aged 45, came from the country with a history of syphilis for 13 or 14 years. Besides the above tumor, which was attached principally to the base of the clitoris, there was present stricture of the rectum and a recto-vaginal fistula. The orifice of the urethra was so large as to easily admit the finger into the bladder. Dr. G. amputated the tumor with a scalpel, dressing the wound with iodoform. The temperature rose next day and pyæmia developed; there was swelling and effusion into several of the joints, suppuration taking place in two of them. The pyæmia was caused probably by embolism of the veins of the part operated on, the fœtid ulcerations around supplying the septic matters. A post-mortem showed extensive ulceration of the rectum with a stricture only admitting a goose quill. A pus cavity was found in the left broad ligament, but there was no visceral suppuration. The tumor was about 4 or 5 inches long and nodulated.

Dr. KENNEDY remarked that the operation was undoubtedly called for, but the result was unfortunate.

Dr. ALLOWAY said he had a patient with a similar tumor which now measures 7 inches in length. It does not cause much trouble, being covered with good skin and kept wrapped in a napkin. It began when the lady was 10 years old and has been gradually increasing.

Progress of Science.

THE ANTIPYRETIC TREATMENT OF TYPHOID FEVER.

By G. C. SMYTHE, A.M., M.D.,
Professor of Principles and Practice of Medicine, Central College Physicians and Surgeons, Indianapolis, Ind.

Under the rules of your Society, limiting each paper to twenty-five minutes, it will be impossible to discuss the subject of typhoid fever in its entirety, consequently I shall confine my remarks exclusively to its treatment, or rather to one particular plan of treatment, the antipyretic, discussing the pathology and symptomatology of the disease, so far only as may be necessary to furnish a rational basis for the plan which I propose to advocate.

Death may result in this disease from a variety of causes depending upon the nature and extent of the structural lesions which take place in any given case. These lesions are very properly divided into *primary* and *secondary*, the former including the local hyperæmia which occurs in the mucous membrane of the small intestine, together with the infiltration, softening and sloughing of the solitary and agminated glands with the subsequent ulceration.

These with some changes of minor importance, which take place in the mesenteric glands, spleen, etc., are the specific lesions of typhoid fever, and owe their origin to the direct effects of the poison, and are as necessary to the existence of a typical case as are the eruptions in the exanthemata or the specific lesions which occur in any of the infectious diseases. Death may take place from these structural changes. The necrobiotic processes in Peyer's patches may open blood-vessels sufficiently large to cause death from hemorrhage, or perforation may take place followed by a fatal peritonitis.

Only a small percentage of the mortality of this disease, however, can be charged to the specific lesions. Tabulating all the statistics to which I have had access, I find that less than six per cent. of the total number of cases have hemorrhage; of these a little less than one-third die, or less than two per cent. of the whole. About one per cent. of the totality of cases has perforation of the bowel, and a small portion of these recover, so that the entire mortality of this disease, arising from the specific lesions, is not far from three per cent.

It is plain, then, that we must look to the group of secondary lesions or those caused by the general disease for the cause of the heavy mortality in typhoid fever. These structural changes do not belong exclusively to this disease, but may occur in any disease *characterized by persistent elevation of tempererature* to which they undoubtedly owe their origin. They consist of congestions, inflammations and degenerations of important organs, and may include any organ or tissue in the body.

Death may result from the sudden arrest of function of some important organ or organs, as the heart, brain, or lungs, without the structural changes just mentioned, but be caused by the effect of elevation of temperature sufficient *to produce paralysis of these organs.*

Then we may have a fatal result occurring from three different sources in this disease.

1st. From the effect of the primary or specific lesions, ulcerations, hemorrhage and perforation.

2nd. Directly from the effects of hyperpyrexia producing paralysis of heart, lungs or brain.

3rd. Indirectly, by the pathological changes in important organs caused by the persistent elevation of temperature.

It is now a well established fact that the characteristic symptoms of typhoid fever such as low muttering delirium, picking at imaginary objects, sliding down in bed, subsultus tendinum, sordes, etc., are not the direct result of the specific poison of the disease, but rather the effect of the long continued elevation of temperature during which the structure and functions of important organs are effected by the heat, and the circulation *is poisoned by the detritus of rapidly oxydized tissue,* which accumulates more rapidly than it can be eliminated; this group of symptoms, known as the *typhoid condition,* occurs in all diseases which are characterized by persistent elevation of temperature, such as typhus, yellow, and scarlet fevers, small-pox, measles, and even malarial fevers, when they become continued; under any and all circumstances these symptoms owe their origin to continued hyperpyrexia.

The mortality of typhoid fever varies greatly in different epidemics and in different countries. It is exceedingly difficult to arrive at a satisfactory conclusion in regard to the exact death-rate. In the French Army from 1875 to 1880 inclusive, in 26,000 cases the death-rate was over 36 per cent. German statistics under the expectant plan of treatment which was used prior to 1862 gave a mortality of about 28 per cent.; the English and American death-rate is somewhat lower, but it will be safe to state, without wading through long columns of dry figures, that the percentage of deaths tabulated from the statistics of the entire civilized world would be somewhere between 25 and 30 per cent. Less than five per cent. of these deaths are shown to be caused by the specific lesions of the fever, and the remaining 20 or 25 per cent. of deaths are due to the secondary lesions, and are caused by the long continued pyretic condition present in the disease and *can and ought to be prevented by antipyretic treatment.*

The etiology of typhoid fever is imperfectly understood, but modern investigation, however, has a tendency to establish the truth of what has been discussed for ages as the germ theory, and the probabilities are that the causes of all the infectious diseases will be ultimately traced to low living vegetable organisms.

We possess no specifics for the disease in the same sense that quinia is a specific for malarial diseases or that salicylic acid and its salts are specifics for acute articular rheumatism; so we are compelled to adopt a symptomatic treatment, to combat unpleasant and dangerous symptoms and see that the patient does not die from complications, inter-current diseases or sequelæ.

These objects are best subserved by the cooling treatment. The temperature in this disease controls the situation. The danger is proportionate to its height and persistency, and although the hyperpyretic condition is never free from danger, however brief its duration (for death may take place in a few hours from paralysis of heart or brain), it is to its *persistency* that the danger in this disease owes its origin. A temperature of 103° or 104°, which is persistent for a period of three or four weeks will work more pathological

mischief than a temperature of 106° or 107°, which remits promptly, as in malarial and relapsing fevers.

Statistics show that with a purely expectant treatment, where the temperature did not reach 104°, in typhoid fever, the mortality was about 9 per cent.; where it passed 104°, but did not reach 105°, the mortality was about 29 per cent—when it passed 105° but did not reach 106° the death-rate exceeded 50 per cent.; and where it passed 107° recovery was rare. In all febrile diseases one of two factors is present and in a majority of cases both; they are, 1st, excessive heat production, and 2nd, faulty heat elimination. Antipyretic treatment consists in the administration of medicine to prevent this excessive production;—and the energetic application of cold water and other means to hasten its elimination by abstraction.

In order to accomplish the best possible results by this plan of treatment it must be *begun early and persisted in until the danger is passed.* This is a four weeks' fever. During the first week there is a gradual but persistent elevation of temperature, at the close of which, in a vast majority of cases, the maximum is reached; the temperature then is persistent with slight diurnal variations until the latter part of the third week or beginning of the fourth when the disease begins to decline, and the temperature is characterized by daily remissions of several degrees. If this period is reached without any serious complication or intercurrent disease arising from excessive heat, the patient ought to recover unless death takes place from the specific lesions of the disease, the manner of which has been already discussed.

In the application of cold water as a therapeutical agent, we are using a means of great power, and one that must be used with care or harm may follow. An agent that will lower the temperature in febrile conditions four or five degrees in ten or fifteen minutes, accomplishing this by actual abstraction of heat is not intended for the amusement of the patient and his friends, while nature cures the disease.

In applying all thermo-therapeutical remedies, we should be guided largely, if not solely, by the revelation of the clinical thermometer. This instrument was introduced into clinical medicine by Dr. Antonius de Haen, of Vienna, in 1754, but did not attract the attention it merited. Dr. James Currie of Liverpool again brought it into notice in 1797, but the profession, always slow to indorse great improvements and new discoveries, failed to recognize its importance until nearly three quarters of a century later. I regard the revival of clinical thermometry with its daily application at the bedside of more importance to the sick than any improvement of the 19th century.

Heat may be abstracted by affusion, immersion, the cold pack, sponging, or the use of Kibbee's cot. Affusion is the most effective, but is most unpleasant to the patient. This is Dr. Currie's method, as described in his work, published in England in 1797. He claimed that typhus fever could be aborted by this means, and that scarlet fever and small-pox were rendered mild and tractable affections. His method consisted in dashing upon the naked body of the patient five or six gallons of cold water, the temperature of which was, in some cases which he reports with full particulars, as low as 44° Fahr. This process was always followed by a rapid reduction of temperature sometimes reaching the normal. I have used the cold affusion in malarial and scarlet fevers with the same happy effect described by Dr. Currie. I have treated one case only of typhoid fever in this way of which I shall speak more fully presently.

I am convinced, however, after a somewhat extended trial of these different methods of abstraction, that what is known as the graduated bath of Von Ziemssen is most suitable for a majority of cases, and this is especially so for children and old people, because the shock of this bath is much less to the patient, and, if properly applied, the abstraction is none the less perfect. Fifteen or twenty gallons of water, a Knowlton's portable rubber bath-tub, a clinical and an ordinary thermometer, are all the implements necessary to administer these baths. The same water can be used if necessary for several immersions. The patient should be immersed at full length in the water, the temperature of which should be about ten degrees lower than that of his body, and after remaining two or three minutes, cold water should be added gradually until the temperature of the fluid in the tub is reduced to 70° or even 65° in obstinate cases. From fifteen to twenty minutes will be required to reduce the temperature of the patient to one hundred or below; while plunging him into cold water of 60°, according to the method of Liebermeister, will accomplish the reduction in ten or twelve minutes, but is much more unpleasant to the patient. The effect of a bath is to lower the pulse and respiration corres-

pondingly with the temperature, but its effect is only temporary. In two or three hours, less in severe and obstinate cases, the temperature will be as high as before and the bath must be repeated and the process *used must be continued as long and as often as the temperature approaches a dangerous point.*

This treatment should be inaugurated and superintended by the physician in person. If the baths are administered by inexperienced nurses more harm may be done than good accomplished, for the baths stimulate the heat-producing functions of the body, and unless the abstraction is thorough the good effect will in this way be counteracted. The nurses must be instructed thoroughly in the discharge of their duties. They must be taught how to take observations of the temperature with the clinical thermometer; in bad cases it should be used hourly and the result recorded for the information of the medical attendant. They must be taught how temper the bath and cool it down, which must be done by rapidly drawing off the water as it is warmed by the abstraction of the heat from the patient's body, and adding cold water. I have seen the temperature of the water in the bath-tub rise five or six degrees in less than that many minutes, so rapid is the abstraction. Nurses of ordinary intelligence will soon master the situation.

As soon as the diagnosis is well established, or before, if hyperpyrexia is an element of danger (for this treatment is appropriate for all diseases characterized by high temperature), this treatment should be begun. As soon as the temperature of the patient in the axilla reaches 103° F. a full length bath should be administered and repeated as often as the temperature reaches that point. It may require a dozen or more baths per day in obstinate cases during the first few days of the fever. This treatment, even thus early in any given case, has to a certain extent a prognostic value; for if, during the first week, we have a patient with an extremely high temperature which is controlled with difficulty we may confidently expect a severe case during the second and third weeks. Although these baths in most cases are agreeable to the patient they sometimes become irksome and distasteful long before the necessity for them ceases; fortunately we possess an article in that much abused drug, Sulph. Quinia, which *supplements the action of the water and obviates the necessity for such frequent repetition of it.* If given at the proper time and in sufficient quantity it not only produces a full and complete *remission*, but prolongs it until the following day is well advanced, even in the early stages of this disease, and renders the bath unnecessary during the latter period of the case. So far as our present knowledge extends the sulph. quinia is by far the most valuable article in the materia medica for lowering temperature in hyperpyretic conditions, yet it has no power to cut short the disease, at least in doses which can safely be used. But in order to accomplish a good result it must be administered with an unsparing hand and *at the proper time of day*, for little or no good will be accomplished by giving it in small portions scattered throughout the twenty-four hours. It is folly to give it in any quantity *in the morning* in order to prevent *the evening exacerbation*, for it cannot be done in this disease. The patient will suffer all the inconveniences of the remedy with no corresponding benefit. But, on the contrary, if it is given in one full dose of from 25 grs. to 50 grs. *in the early evening* it will strike the morning remission with the full force of the remedy, and the consequence will be that the temperature *will approach the normal closely*, and in the latter stages of the disease fall below with a cessation of all the dangerous symptoms which may have been present. This remission will continue from twelve to forty-eight hours, according to the obstinacy of the particular case or the period of disease at which it is administered, allowing time for the vital organs to cool off, thus preventing the congestions, inflammations and degenerations of tissue which is undoubtedly the cause of the heavy mortality of this disease. Quinia given in this way does not produce the unpleasant effects so often seen to follow the administration of small doses continued for several days. It is the *tonic* and not the *sedative* dose which produces the unpleasant cinchonism. No harm has ever been known to result from its use in this way. Liebermeister has administered it over ten thousand times by this method, giving as much as forty-five grains at a single dose. Jurgensen gives seventy-seven grains as his maximum dose, and I have administered as much as seventy-two grains at a single portion. I have now administered this remedy in antipyretic doses about fifteen hundred times with no unpleasant effects, save a transient cinchonism, and when given in the evening the patient usually sleeps through this.

The changes produced in the appearance of a patient by this treatment are certainly remarkable. The disease is temporarily deprived of all those symptoms which we are accustomed to see in typhoid fever; and when the treatment is begun sufficiently early they fail to make their appearance. The low muttering delirium is gone, the hot dry skin, which we are accustomed to see is bathed in a profuse perspiration; the frequent and feeble pulse of 120 or 130 drops to 75 or 80 per minute, is full and soft; the tongue moistens with each remission, meteorism fails to appear, or rapidly subsides under the influence of the bath or the quinia. The latter seldom fails to move the bowels several times each day subsequent to its administration, and large quantities of fecal matter and flatus, which ought to be, are expelled, and the unabsorbed portion of the quinia thoroughly disinfects these discharges and contributes something towards preventing the spread of the disease.

Patients treated upon this plan *retain their consciousness* throughout the disease. They take an interest in surrounding events. They can describe all their subjective symptoms. They soon recognise the unpleasant effects of high temperature from their own sensations. They ask frequently for a repetition of the bath before the physician deems it advisable to use it. They beg for the administration of the quinia every day instead of each alternate day.

It will readily be seen what an immense advantage in the struggle for life a patient in this condition will have over his fellow whose intellect is muddled and rendered obtuse by the typhoid condition, and how much easier it is for the physician to detect and counteract the dangers of secondary lesions and intercurrent affections which are so fatal in this disease.

The application of the cold water simply abstracts the heat and does not interfere with the rapid oxidation of the tissues which produces the hyperpyrexia; the remission is of course much shorter than that produced by the quinia, which acts chemically and to a certain extent prevents oxidation, if only by its mere presence. Its power for good may be abused, and if continued too long become an element of danger. It lowers temperature by arresting molecular changes in the blood and tissues of the body, thus seriously interfering with the processes of nutrition and assimilation. The profound impression which it makes should not be continued too long nor repeated too often, for if continued from day to day it is not altogether free from danger. The full benefit to be derived from it is obtained by the remission which it produces—allowing the organism to cool off and thus preventing serious organic lesions; consequently it is not advisable to administer this medicine, as a rule, oftener than each alternate day, and frequently during the latter part of this disease it will not be required oftener than each third or fourth day with an occasional bath in the afternoon.

It is best to begin the administration of quinia with a 25 or 30 gr. dose. If this does not produce a satisfactory remission it should be increased until the maximum is reached for the particular case under treatment. This quantity, whatever it proves to be, can be materially reduced in the latter stages of the disease.

When this treatment is begun early, no other treatment is usually required. I am in a habit of presaging it with two or three cathartic doses of calomel; this is an efficient cathartic and clears the alimentary canal thoroughly of any accumulations of feculent matter—is a parasiticide and prevents the absorption of any further infections material from that source, and is supposed to exert a favorable influence upon the subsequent course of the disease. It should not be administered *after* the typhoid condition is thoroughly developed for reasons which are sufficiently obvious without any explanation. Occasionally a case will occur where the baths and quinia do not produce satisfactory remissions. In these cases the administration of the quinia should be preceded by digitalis or veratria for a period of twenty-four or thirty-six hours. I have met but two cases of this kind out of sixty-three, in both of which a full dose of 45 grs. quinia following the digitalis was entirely satisfactory. Neither digitalis nor veratria should be given in the latter stages of this disease, for whatever may be said of the action of digitalis as a heart tonic in other diseases, it is certainly not a safe remedy in the latter weeks of typhoid fever.

To Dr. James Currie, of Liverpool, is due the credit of first using cold water scientifically for the abstraction of heat in hyperpyretic conditions, To him is due the invention of the curved axillary thermometer, one of which has been preserved in the British Museum. His method was adopted largely throughout the British Isles and on the Continent, in the English army and navy. His

works were translated into French and German, and an edition was published in this country in Philadelphia. (Currie was a citizen of the colony of Virginia when the Revolutionary War broke out, but being loyal to the Crown he returned to England.) His rules for abstracting heat by water have been improved but little. Quinine had not been extracted from the bark in his day, yet he used the latter freely. The suddenness with which Currie's plan of treatment was abandoned after his death, which occurred in 1805, is one of the unexplained mysteries of medicine.

We are indebted to the Germans for reviving and establishing this plan of treatment on a sound philosophical basis. It is the most rational as well as the most successful treatment that has ever been adopted in this fever, as is clearly shown by statistics. At Basle, Switzerland, Liebermeister reduced the death rate from 28 per cent. to 8 per cent. At Kiel under antipyretic treatment a little more vigorously and systematically applied the mortality fell to 3.1 per cent.

The analysis of the statistics of the German Army are valuable and convincing. From 1820 to 1844 the death rate was a little over 25 per cent. From 1868 to 1874, under partial and imperfect antipyretic treatment, the rate per cent. of deaths was reduced to 15. From 1874 to 1880 the treatment was more general, and the death rate was reduced to 8 per cent. In the Second Army Corps the cold water treatment was more thoroughly tested. When this treatment was begun by Dr. Abel, who is a strenuous upholder of this plan, the mortality rated at 20 per cent., which, however, soon fell to less than 5 per cent. Still more striking is the confirmation afforded by the five principal hospitals of this corps which were under the immediate and personal supervision of Dr. Abel. In 1860 the mortality had been 25 per cent., by 1877 it was lowered to 7 per cent., and during the five years following the immediate coming of Dr. Abel it fell to 14 deaths in 764 cases, or 1.8 per cent.; these figures are taken from an article in the *Review Scientifique* from among many others all from official sources and all pointing to the same conclusion.

During an extensive epidemic which has recently prevailed in France this plan of treatment has been tried successfully in some localities, although the French, since the Franco-Prussian war, do not take kindly to German methods. In Paris the hospital physicians disagreed in regard to its utility upon theoretical grounds, and it was not used systematically, and consequently gives no statistics of value. In the city of Lyons it was vigorously used, with a reduction of the mortality rate to 2 per cent.

Our most favorable reports come, however, from private practice. Neither water-works nor bath-rooms are necessary to secure the best results from this plan of treatment. Indeed, the latter cannot be used, for patients cannot be transported from the sick chamber to the bath-room, even though it might be in an adjoining apartment. I have treated upon this plan sixty-three cases with two deaths. Dr. J. R. Featherstone, of Indianapolis, has treated fifty-seven cases with one death. Dr. W. H. Vanzant, of Carbon, Ind., has treated twenty-six cases with no deaths. Dr. S. E. Earp, of Indianapolis, has treated eleven cases with no deaths. This gives a total of (157) one hundred and fifty-seven cases with three deaths only, or a rate per cent. of mortality of 1.9.

The highest temperature reached by any of these cases was 107.75° It occurred during the death agony after severe and repeated hemorrhages in a patient whose temperature previous to that time had not exceeded 104.5°. One patient recovered whose temperature about the middle of the second week touched 107.5°, another whose temperature reached 107° recovered. The temperature of sixteen of my cases went to 106° and beyond, some ranging as high as 107.5°—all of these recovered, a result hardly to be expected from any other plan of treatment.

Hemorrhage of the bowels occurred in nine cases, or a little less than six (5.7) per cent. It has been claimed that hemorrhages are more frequent under this plan of treatment. Exactly the converse is true. The inflammation is less in the ulcerated mucous membrane, the bowel is not stretched and distended, and its capillaries torn by tympanitis. This is one of the complications which belongs more properly to the latter stages of the disease. More patients live to the period of the disease at which it occurs, which accounts for the apparent increase in the number of cases suffering from this accident.

Of these one hundred and fifty-seven cases, eight relapsed, five and two-tenths per cent. of the whole. It is also claimed by the opponents of this plan that more relapses occur than when the expectant or do-nothing plan of treatment is

adopted. It would be strange, indeed, if this were not true, twenty additional lives are saved out of each hundred treated by this method as compared with the expectant treatment. So the relapses ought to be one-fifth greater, having that much more material out of which relapses are liable to occur, while the 20 per cent. of dead under the expectant treatment can furnish none.

Sixteen of Dr. Vanzant's cases were treated by affusion and ten by immersion. Three of the former relapsed. His largest dose of quinia was fifty grs.

Drs. Featherstone's and Earp's cases were treated by sponging, the cold pack, and an occasional bath. The largest dose of quinia administered by the former was sixty grs., the latter fifty grs. All the cases which I have treated since 1878 have been immersed, with the exception of my last case, which was treated by affusion. I find that the water and quinia supplement the action of each other. The intermission produced by the quinia after the use of the bath is much more satisfactory and prolonged, while the quinia renders the necessity for the bath much less frequent.

The case which I treated by affusion was a healthy male adult, aged 19. He was the last one of eight cases which made their appearance in a club of Asbury students. The attack promised to be unusally severe, the temperature ascending to 105° Far. on the afternoon of the fourth day. At 3 p.m. he was stripped and placed in a large tub in the erect position and about five gallons of water, the temperature of which was 75°, poured slowly over his body. Fifteen minutes afterwards his temperature was 99°. At 7 p.m. his temperature had risen to 105.5°, when the affusion was repeated with a similar result. Forty grains of quinia were administered at the same time. The patient perspired profusely through the night, slept well, and on the following morning at 8 a.m. temperature normal, pulse 76, respiration 20. This condition continued for about thirty-six hours, when the temperature gradually rose, but never exceeded 102 5° during the remainder of the disease. After this period of the disease had passed, 15 grs. of quinia produced a perfect remission, and no more water was used, but the duration of the fever was twenty-six days. Affusion should be used only during *the first few days* of the fever.

Patients treated upon this plan have few or no sequelæ, and are able to resume their occupations in a few days after convalescence is established.

Few conditions arise which contra-indicate its use: of course that perfect degree of rest necessary in hemorrhage and perforation forbids its employment in cases where these complications arise.

Greencastle, Ind., September. 1883.

ALOPECIA PREMATURA.

The *Edinburgh Medical Journal* reproduces from the *Berliner klinische Wochenshrift* (No. 16,1882), the following note: O. Lassar has continued his observations on the nature of premature baldness, and has further convinced himself of the communicability of at least the form associated with dandruff. When the hairs which fall off in such cases are collected, rubbed up with vaseline, and the ointment so made is rubbed among the fur of rabbits or white mice, baldness rapidly makes itself visible on the parts so treated. That this is not due to the vaseline was shown by anointing other animals with the vaseline alone, which produced no effect whatever. He considers that the disease is spread by hairdressers, who employ combs and brushes to their customers, one after another, without any regular cleansing to these articles after each time they are used. During frequent visits to the hairdresser's it can scarcely fail that brushes are used which have been shortly before dressing the hair of one affected with so common a complaint as scaly baldness. Females, he thinks, are less often affected with this form of baldness, because the hairdresser more frequently attends to them at their own homes, and there uses *their* combs and brushes. In order do prevent, as far as possible, the commencement of alopecia prematura, the hair should be cut and tressed at home and with one's own implements, and these thoroughly clean. When it has begun, the following mode of treatment is suggested: The scalp is to be daily well soaped with tar or fluid glycerine potash soap, which is to be rubbed in for fifteen minutes firmly. The head is then to be drenched with, first, warm water, and then gradually colder water. A two per cent. corrosive sublimate lotion is next to be pretty freely applied. The head is then to be dried, and the roots of the hair are to have a one half per cent. solution of naphthol in spirit rubbed into them. Finally, a pomade of one and a half to two per cent. of carbolic or salicylic oil is be used to the head. This treatment has now in many cases brought the disease not only to a stand, but the hair has been to a to considerable extent restored.

A CLINICAL LECTURE ON ANATOMICAL LESIONS OF THE FEMALE PERINEUM.

Delivered at the Long Island College Hospital,

By A. J. C. SKENE, M.D.,

Professor of Gynæcology; Visiting Physician to the Hospital.

GENTLEMEN: I desire to call your attention to the subject of lacerations of the female perineum, and the results which may occur if appropriate treatment be neglected for the restoration of its function.

The various degrees of this laceration are clearly stated in our modern text-books, consisting, as they do, of three degrees, viz.:

1. Superficial rupture of the fourchette and perineum, not involving the sphincters.

2. The rupture extending to the sphincter ani.

3. Rupture through the sphincter ani, which may involve the recto-vaginal septum.

There are some lesions, however, the final results of which have not been discussed in our literature at the present day, and to which I would specially direct your attention, while discussing the subject of perineal lacerations, in those cases who may present themselves at our clinic to-day.

The first to which I shall direct your attention is the separation of the perineal muscles at their junction in the median line, without an accompanying laceration of the vaginal mucous membrane or the integument of the perineum. The appearance of the parts, viewed externally, gives no evidence of the lesion, the distance from the posterior commissure to the anus being perfectly normal. On separating the labia, however, or on introducing the speculum, the posterior vaginal wall also appears to be uninjured, but, upon examination by the touch, the deeper structures of the perineal body are observed to be absent. In passing the finger into the vagina and making pressure backward and downward, the mucous membrane of the lower portion of the vagina can be brought directly in contact with the integument below.

A similar condition of things I have quite frequently observed in patients upon whom the operation of perineorrhaphy had been performed, with the result of obtaining union of the integument and mucous membrane without restoring the perineal body.

In this condition of separation of the deeper structures of the perineum, the effect is precisely the same as in those cases where the mucous membrane and integument have also been lacerated, as they ordinarily are. The sustaining and supporting power of the perineum is entirely lost. The integument and mucous membrane are relaxed, and hence permit eversion of the vaginal walls, and subsequently prolapsus of the uterus and bladder. In one case which I have seen—a lady of over sixty years of age—it appeared that a portion, at least, of the sphincter-ani muscle had been ruptured, at any rate, the patient had very imperfect control of the rectum, and still, on superficial examination, the perineum appeared to be complete, so far as skin and mucous membrane were concerned. I am inclined to think that what has been described by Matthews Duncan and others as functional imperfection of the perineum has really been this subcutaneous laceration of the central structures of the perineum.

Regarding the cause of this condition, I am inclined to believe that it is the same as that in ordinary lacerations—namely, parturition.

I accept this view of the causation because in all the cases I have seen there has been a precedent parturition. In these cases it would seem that the elasticity of the muscular structures was less than that of the integument and mucous membrane, so that, while the former gave way when put upon the stretch, the latter came out uninjured.

Regarding the treatment of this condition, I am not quite satisfied that anything of value can be done for it. If the case is recent and the perineal muscles have not become atrophied, then I believe it would be good practice to divide the integument and mucous membrane, and, if need be, removing the superabundant portions of these latter bring the deeper parts together—if possible, with sutures as in the ordinary operation for restoring the perineum. The second condition is more rare than the one just described, and consists in atrophy of the perineal muscles, including the levator-ani muscle.

A typical case of this affection came under my observation in 1879. She was forty-four years of age, married, and had had several children. She had prolapsus of the vaginal walls, and a slight prolapsus of the uterus. These conditions were quite apparent on superficial examination; but a more careful study of the case revealed the following: The distance from the posterior commissure of the vulva to the anus was normal; but, upon grasping the perineum, with the index finger in the vagina and the thumb upon the outer surface, no intervening muscular tissue could be detected. The posterior vaginal wall could be brought in direct contact with the integument. On the most careful digital examination by the vagina, I failed to detect any evidence of muscular tissue. Running from the centre below to the left sacro-iliac junction, the rectum could be distinctly felt firmly contracted, feeling through the vaginal wall like a cord the thickness of the finger.

This was demonstrated by passing a catheter into the rectum, showing that there was firm contraction of its muscular walls, and yet its dilatability remained normal, as evidenced by the fact that the bowels moved easily and freely. Although there was a marked prolapsus of the posterior vaginal wall there was not the slightest rectocele, when the patient assumed the erect position, the anus and perineum bulged downward; this was also ap-

parent when the patient was in Sims's position, with the knees drawn up. The anus projected downward until it came nearly on a line with the lower portion of the nates. In fact, the descent of the remains of the perineum and anus presented an appearance not unlike that which is observed during labor, when the fœtal head begins to push these parts downward. It was clearly evident to me that all the muscles which form the floor of the pelvis had become entirely atrophied. This view was confirmed by the fact that all my efforts to restore the tonicity of the parts failed, and the only relief afforded was by the use of a perineal pad. In seeking for the cause of this condition I have been unable to find any thing definite. It is just possible that this patient suffered a subcutaneous separation of the perineal muscles during one of her confinements, and that long disuse of the muscles after this separation caused fatty degeneration. This is a rational explanation of the atrophy of the perineal muscles but not of that of the levator ani.

Perhaps the levator-ani muscle was congenitally defective, or, again, it may be that the separation of the other perineal muscles imposed an unusual strain on the levator ani, which caused it to become atrophied. All this, however, is speculation in relation to the genesis of these peculiar affections of the female perineum. The point of most importance at present is to know that such injuries to the perineum do occur.

In regard to the treatment of those cases, it is clearly evident to my mind that the only possible way of repairing the damage is to operate as soon after the injury as involution will allow. Because the longer the separated muscles are functionally inactive, the more certainly will they under go degeneration and become permanently useless.

There is still another important fact connected with injuries to the perineum to which I have already called attention—namely, the atrophy of the muscles which takes place in laceration of long standing.

In such cases perineorrhaphy, as ordinarily done, gives very poor results. Good union of skin and mucous membrane may be obtained, so that the operation may appear to be a success, but the wasted muscles can no longer perform their function and the operation is practically a failure. Integument, mucous membrane, adipose and areolar tissue do not constitute a perineum capable of supporting the pelvic viscera.

Case I.—Laceration of the perineum in the first degree. Patient under ether.

The patient now before you came into the hospital last night suffering from simple laceration of the perineum of the first degree, involving the sphincter vaginæ and part of the perineal body. This condition is very deceptive, looking as though there was more perineum than there really is. The amount of the perineal body is, however, readily shown by passing a sound into the rectum and measuring the perineum above; you can here distinctly estimate the extent of the laceration.

I will now show you the several steps in the operation, the first being to vivify the tissues. This we do with the scissors, with which you can make the parts to be united perfectly smooth. But to do so you must have the central portion put upon the stretch by the aid of your assistants.

By adopting this means you can trim your surfaces and edges perfectly straight.

You will observe that my first suture I insert at the anal portion of the laceration, passing each subsequent suture upward until I have now applied three sutures. The fourth suture I specially call your attention to, and its manner of insertion. I first enter it through the integument upon one side then carefully carry it through the lateral half of the body of the perineum, and then sweep the needle round through the central portion until I reach the extreme limit of the vivified tissues high up in the vagina. By this means I completely close the upper portion of the wound and leave no room for the vaginal secretions to enter. You have also noticed that during all this time my assistant has carefully sponged away all blood oozing from the parts, to let me see what I was doing, and also to insure, as far as practicable, a union by first intention by leaving the parts clean. I have also inserted a fifth suture, simply passing through the segumentary borders of the wound in order to still further guard against secretions entering the wound.

The ligatures having now all been tightened the patient will be placed in the ward, and the bowels kept gently open, in order to prevent any strain upon the parts until they unite. The laceration is not a great one, and only calls for surgical treatment to prevent a prolapsus of the vaginal walls which was being developed. This is the simplest form of laceration, and hence the operation for its restoration is easy and simple. The time required to operate was only twenty minutes, and yet you observed that no undue haste was made. (Patient presented to the class two weeks after, and the result proved to be good.)

Case II.—This case is one of Dr. Stewart's, and I will therefore request him to give you a brief history of her case.

History as given by Dr. Stewart.—This patient was confined in the hospital, and sustained a laceration of the perineum extending into the rectum. I performed the immediate operation, putting in five or six sutures. The operation promised very well, but at the end of four or five days there commenced a purulent discharge; injections were carefully used, and all the procedures in such cases were gone through with, but without arresting the discharge entirely. We recognized that we had at least partial union when we removed the stitches. This woman is brought here to-day to show how, even under most unfavorable circumstances, we may get union by primary operation for restoration of the perineum.

In this case there really is more perineum than is apparent. In fact, we find a tolerably good perineum, which result is quite remarkable under

the circumstances, to say the least of it. The doctor has obtained as good a result as was seen in the case which I showed you—the one that was operated upon years after the injury. I have, however, perhaps a little more perineum in my case. I do not believe that either of us obtained perfect union of the ends of the sphincter muscles, but we secured the next best thing—union through the medium of considerable scar tissue, so that the sphincter can perform its function by contracting toward the perineum as the fixed point. So you see that the anus is drawn forward because of this fixed point of scar tissue; she, however, has perfect control of the rectum. This is proved by the testimony of the patient and the fact that, as I introduce my finger into the anus, the muscle contracts toward the fixed point firmly enough for all practical purposes, and the patient will be able to get along well enough.

These cases are called perfect results; they are, perhaps, good enough, and we are glad to get them, but yet they are not the most perfect results attainable. This case gives us the opportunity to call attention to the importance of the primary operation, as it is called, in laceration of the perineum. There has been some discussion about that of late years, some claiming that, if you simply bring the parts together without sutures, you may secure union, and that you are not more likely to obtain it if you introduce sutures; for this reason some have advocated this mode of treatment. Others, again, and I think that the great majority of gynæcologists of the present day, favor the primary operation. By that I mean the immediate operation, which is performed as soon as you have removed the placenta, and the uterus has contracted. Do not leave your case and go home, and then return the next day to perform the operation, because then the parts are not in a condition to unite by first intention; if you disturb them by manipulation, you then, also, utterly spoil the possibility of union without sutures. If you are careful to remove all bloodclots and bring the parts together, and bandaging the limbs to secure perfect rest, you may get union if there is not much subsequent hæmorrhage. Union has frequently occurred under those circumstances. So, if you propose to trust to nature, you had better adopt this plan; but do not change your mind and use sutures the following day, because that would almost insure failure.

I am a great advocate for the primary operation, and in all cases of any importance I believe that it is always well to introduce sutures, if you do it properly, putting in your stitches just tight enough to keep the parts in apposition.

I remember a case which made a profound impression upon me. I was sent for by a medical gentleman in the case of a primipara, and, on examination, I found a breech presention, with the os partially dilated. I suggested that he might wait a while. The patient had a masculine pelvis, and I thought it would be advisable to secure perfect dilatation before attempting delivery. I heard no more of the case until the following morning at about the same hour, when her physician again sent for me. I then found, upon examination, the os fully dilated, the labia œdematous, and the nates of the child presenting at the vulva, and extremely dark in color. The physician told me that the os dilated soon after I left on the day previous, the breech at once settling down in the pelvis, where it remained. We proceeded at once to remove the child, and succeeded in extracting the feet and bringing down one arm, and, while I was bringing down the other arm, the doctor wispered to me that they were very anxious for the life of the child. At this moment the little fellow moved one of his feet, much to my surprise. I then extracted rapidly, and succeeded in obtaining a living child. I, however, tore the perineum through to the rectum, the parts being in that extremely œdematous condition they had lost their elasticity.

This patient began the process of parturition late in life, and this long-continued pressure (in all three days) rendered the parts so œdematous that they gave way, and I made the biggest perineal laceration I have ever made in my life. I immediately brought the parts together with sutures, though I had very little hopes of their union in such a condition, as they were so enormously swollen. However, we brought them together, and I heard no more of the patient for twenty-four hours, when I was again sent for by her physician, he informing me that he had failed to pass the catheter. I separated the labia, and found a dark, sloughing mass, which rendered it quite difficult to tell where the meatus was. I however, made gentle pressure at the point where I supposed it should be, and, without further difficulty, passed the catheter and evacuated the bladder. The doctor pased the catheter once or twice afterward, when all at once the patient urinated of her own accord, he thinking it was all right; but, upon a careful examination, it was discovered she had a vesicle fistula.

I saw her a week after, when the labia and thighs were covered with an ill-conditioned-looking diphtheritic exudate. It was a horrible condition to be in, the lochial discharge flowing over these surfaces, and the urine dribbling away. She, however, recovered from this, and you will hardly believe me when I tell you that the vesicle fistula closed of its own accord—a thing which does sometimes occur. When we removed the stitches from the perineum, it was found that she had a perfectly good perineum and a good sphincter; I have never yet seen a better.

The case made a profound impression upon me, for, if we can get union occasionally in such cases, we can have good hope for success in simpler ones. I would say, always perform the primary operation when the condition of the patient will permit, for, if you do not get union, you can operate subsequently. If you get just a little union, it is some

gain. There is really every argument in support of the immediate operation. You have everything to gain and nothing to lose.

The child in this case was a splendid-looking little fellow after the ecchymosis disappeared; but, after all our trouble in the case, he did not survive.

His bowels positively refused to act. Upon an examination being made, it was discovered that the colon was nothing but an impervious cord.

CASE III.—You doubtless remember the patient whose perineum I endeavored to restore a week since; she had suffered long from marked constipation. I at that time stated that I should order the bowels to be moved freely each day after the used operation, and adopting the new order of treatment, to which I call your attention—viz., to keep the bowels free in place of confining them, as we used to do after restoring the perineum. The day following the operation a full dose of Rochelle salts was administered, and the following morning it was repeated; when it was time for this to have acted, an enema of ox-gall with soap and water was given. On the following day castor-oil was given, followed by another enema of ox-gall with oil; this, however, failed to secure the results anticipated, and was therefore abandoned, and the following prescription substituted: One ounce of senna leaves put into a quart of water and boiled down to a pint, then adding an ounce of Rochelle salts; two ounces of this preparation was given to the patient every thirty minutes; in all, five doses were given, which secured copious and easy evacuations; and this morning it was repeated with a like effect.

I mention this case to show you how extremely difficult it is at times to move the bowels in women who are habitually constipated. This patient's bowels were moved usually but once in too or three weeks. This seems incredible, and for a long time I used to doubt this when told so by the patient, if she retained a fair degree of health; I, however, fully believe it now, having seen many patients like this one. I am indebted to Dr. Palmer for the prescription last used in this case. I was telling him of my difficulty in some of these obstinate cases, and he informed me he had encountered the like difficulty, and had found that this preparation answered admirably. I therefore adopted it in this case, and effected the most satisfactory results. The movement of the bowels has done no harm, so far as we know, to the perineum, although the laceration involved the sphincter ani. I always feel a sense of safety when the bowels move without causing any bleeding, for, if the newly-formed tissues were separated, it would occasion more or less hæmorrhage. What the final result may be here I do not know. I, however, feel quite confident of securing a good result.

This case fully illustrates how we may be disappointed in the action of our cathartics, although the patient here had taken sufficient to move a whole company of soldiers, but upon her it produced no effect.

Hæmorrhage in these operations is often a source of difficulty and delay to the operator, but, worse than that, it is sometimes the cause of failure. In the vast majority of surgical operations, all that is required of the surgeon is to arrest the hæmorrhage in order to secure a good result; but, in the operations in question, if styptics have to be used, the operation fails. Cases differ so very much in regard to hæmorrhage that I have given much thought as to the predisposing causes of this bleeding tendency, so marked in some patients. The hæmorrhagic diathesis in its most typical form is generally found in men, but a less marked hæmorrhagic tendency is common to many women, who are very unpleasant subjects to operate upon. During the past few years it has been my misfortune to meet quite a number of cases in which the bleeding tendency was noticeable. The cause of this in most of them, I think, was due to impaired general health, due to exhausting conditions of life rather than to any congenital imperfection of the blood itself. Another very important element I found to be mechanical interruption of the circulation, the pelvic organs becoming congested from retardation of the portal circulation, induced by hepatic disorders, sedentary habits, tight lacing, and so forth. The products of former pelvic inflammations, such as pelvic cellulitis, also tend to maintain a hyperæmic state of the pelvic organs; this we often find long after all evidence of active inflammation has subsided.

The condition, also, of the uterus and perineum is often favorable for bleeding; the well-defined vascularity which exists in conditions such as imperfect involution insures hæmorrhage in all operations undertaken during such unfavorable states. The possible hæmorrhage from such causes can be avoided by the proper selection and preparation of your cases before operating. This fact is well known to all gynæcologists, but I mention it now because others less familiar with the diseases of woman are liable to neglect this very important matter. I know this to be true from having patients sent into hospitals for operations which they are not at all prepared to undergo. It also happens occasionally that I am called to operate in private practice at a time when I can only suggest a course of preparatory treatment.

The rule which should be followed in this matter is to secure the best possible state of the general health of the patient, and to reduce all hyperæmic states of pelvic organs as far as possible. This is generally possible to a great extent, because the object of plastic operations is to restore the organs to their original form and structure, differing in this regard from many other operations in surgery which have for their object the removal of diseased parts.

In carrying out this plan of treatment, however, there is one difficulty encountered in pratice: when the patients are ill and suffering, they will gladly accept an operation which promises them relief, but, when they are relieved from pain and have

gained in health, they hesitate about undergoing any surgical treatment which is designed to keep them from suffering in the future. This, however, does not persuade the surgeon from doing otherwise than that which is best. There are cases—fortunately very few—who have the hæmorrhagic diathesis sufficiently marked to debar them from operations, and it is doubtful if any preparatory treatment will change this constitutional peculiarity. Such subjects should be let alone: to operate in these cases is dangerous, and almost always ends in failure. I have had three such cases in the past five years; two of them were operated upon before discovering their peculiarity, the results being depletion of the patients without any benefit from the operation, and the development of extreme caution on the part of the operator in selecting cases in future. The third case was diagnosticated earlier, and I declined to operate.

These few remarks regarding the predisposition to hæmorrhage, and the best means of overcoming the same, bring me to the point of my subject, and to which I desire to call your special attention—viz., the management of bleeding in plastic operations upon the perineum and cervix uteri.

In restoring the perineum, the mucous membrane only should be removed; if the deeper structures are wounded, the hæmorrhage will be much greater. All scar tissue must also be removed; but, if care is taken to separate it from the normal tissue large vessels may be avoided. By observing these rules, troublesome hæmorrhage from the lower portion of the denuded surfaces will be avoided. Occasionally, in deep lacerations, a small artery on each side may require to be ligated; the chief arterial bleeding, however, comes from the upper portion, the small vessels coming apparently from above downward in the areolar tissue, between the rectum and vagina. These sometimes bleed quite freely, and they are not arrested by tightening the sutures which control the hæmorrhage at points lower down. Such vessels I control by passing a needle through the vaginal mucous membrane above the denuded surfaces, and thus carry a ligature under the bleeding vessels, tying it over the free surface, and by this means controlling the bleeding on the principle of acupressure.

These sutures can be left in position until the perineum has completely healed; they can then be removed with the aid of the speculum. Occasionally it becomes necessary to ligate some of these vessels which bleed persistently and can not be controlled in the way I have previously described; it is then well to ligate them with a fine catgut ligature, the ends being cut off short and inclosed in the wound.

In spite, however, of all precautions, you will occasionally have secondary hæmorrhage after this operation. I have met with four such cases in my practice; in one of them it occurred on the seventh day after the operation. In all of them the bleeding took place from the upper or vaginal portion of the wound, the blood flowing and widely distending the vagina before appearing externally.

In my first case I was obliged to remove the sutures, empty the vagina of blood-clots, and ligate the bleeding vessels. This resulted in spoiling my operation, although I re-introduced the sutures; union in this case did not take place. This hæmorrhage occurred on the second day.

In my three subsequent cases I secured much better results. Introducing a Sims's speculum on the *anterior* side of the vagina, I removed the clots and blood by sponging; and then throwing light into the vagina by means of a concave reflector, I was able to see that the blood welled up from the upper portion of the wound. In place of pulling the edges of the wound apart and searching for the bleeding vessels, I passed a curved needle and ligature down and around the place where the bleeding came from, and was able, by tightening my ligature moderately, to control the bleeding entirely, these cases subsequently doing well, the result of the operation being good.

This is a practical point well worth remembering, as it will enable you to meet this accident and treat it successfully should it occur to you.

CASE IV.—This patient now before you is one who some time since presented herself suffering from a laceration of the perineum, and upon whom I operated before you at that time. The patient comes here to-day for me to remove a suture. I remembered, after she had left the hospital, that I had left in the suture which I had applied to arrest hæmorrhage. In place of picking up the artery, I passed a needle down through the vaginal wall, bringing it out below and then ligating. I removed all my sutures afterward, but forgot this one, which I had put in to arrest the hæmorrhage; it was doing no harm, and did not interfere with the healing of the wound at all, because it was away above. This is a typical case, demonstrating the principle of which I have just spoken, showing that you can arrest the bleeding in these cases without ligating the bleeding vessel in the womb.

This suture has been in the tissues since the 15th of February; the portion which has been in the tissues is just as clean as a silver wire, but that portion in the vagina has become discolored and soiled by the menstrual flow. Now this, with many other cases, has satisfied me that you can prepare the silk ligature and make it aseptic. I have in my possession a piece of silk ligature which I left in the cervix uteri for more than a year.

The woman became pregnant. Soon after, I restored the cervix, and she came to me six weeks after her confinement, and I then found one of my sutures; the length of time which it had remained in the tissues was one year, two months, and twenty days; this was several years ago, and the suture is good yet. This shows that you can submit the silk to any test, and it will do less damage than the silver wire. Had I used the silver wire in that case and allowed it to remain, the

patient would probably have returned to me long before.

CASE V.—This woman has borne three children, the youngest being between three and four months old, and weighing at the time of birth fifteen pounds.

Now, here you will observe, as a result of this enormous distension of the parts necessary to give birth to such a child, a laceration of the perineum has occurred. There is really very little laceration apparent now; it, however, extended originally to the sphincter-ani muscle, for I here see, a little to one side, a scar which extends down to that point; and I think that some of the fibers of the muscle have been lacerated, as there is a want of elasticity at this portion, and I also find a hæmorrhoidal condition at the termination of the rectum.

This gives us an illustration of a laceration of the perineum which has in part been repaired by natural or primary union, and very nicely too. There is not much scar tissue; the union has been prompt and good, so far as it went. We obtain this result sometimes in lacerations—*i. e.*, union without the aid of sutures.

We are liable to be deceived about the extent of the laceration at the time it occurs. The parts being hypertrophied, and sometimes swollen, just after labor, the laceration appears enormous, giving a feeling to the touch as if the perineum were lacerated entirely through into the rectum; and yet, upon a careful examination, you may find it to be a laceration in the second degree only.

Now when the union takes place promptly, as it did in this case, you get a good perineum; but, when you get a union by granulation, which gives a large amount of scar tissue, it is apt to cause trouble, as these scars are often extremely painful. The little bit of scar tissue which you get when the union is prompt is harmless; but when you get a mass of scar tissue as thick as your finger, with nerve fibres caught up in this tissue, it gives rise to the most severe pain and suffering, and impedes locomotion.

I had a case of this kind last winter. The patient had a difficult labor, forceps being used in the delivery, and there was a marked laceration of the perineum; some effort had been made to restore it, but it was a long time healing, and then only partial union was secured through a large mass of intervening scar tissue. When she had risen from her bed and attempted to walk she was seized with violent pains in the region of the perineum; this occurred on every subsequent attempt to walk, and finally she gave up the idea of walking. Some time after, she came under the treatment of a good practitioner, and I was called in consultation, the case having previously been diagnosticated as separation of the symphisis pubis. I examined her carefully, but could find no satisfactory evidence of separation of the symphisis at that time, but yet it was impossible for her to walk. I found a large quantity of scar tissue in the perineum, a large mass in the centre so exquisitely tender that if you touched it the patient suffered agony. I immediately advised the removal of this scar tissue, and the operation was afterwards performed, resulting in the restoration of a good perineum without any tenderness; and she is now walking around, and is perfectly comfortable.

While she was under the anæsthetic, I was enabled to satisfy myself beyond doubt that there was no separation of the symphisis pubis, and I do not believe there ever had been, as the result of the removal of the scar tissue tended to prove, her difficulty of locomotion and this severe pain upon each attempt to walk being due to sensitive scar tissue.

You see, then, that in laceration of the perineum the continuity may be restored by intervening scar tissue, and yet the result may be very unsatisfactory. When such painful and tender scars are found, the only treatment is to remove the nerve-tissues, bring the parts together with sutures, and obtain mediate union of the normal tissues.—*N. Y. Medical Journal.*

GONORRHŒA EASILY CURED.

Founding an opinion on the recent text-books and treatises on this disease, one would imagine there had been little, if any, progress in its treatment. The young practitioner, without practical experience, who undertakes the management of gonorrhœal cases by the plan of treatment generally recommended in these works with nauseating mixtures and conglomerate injections, will certainly be discouraged, and find his cases dragging along, or quit him, to become rounders. In cases of acute gonorrhœa I have, for eight or ten years, used carbonate of lithia to alkalinize the urine, and find the five grain compressed tablets, one taken three times daily, very convenient, fulfilling every indication better than any other salt. I now rarely find it necessary to give any other remedy internally.

Should the case fail to respond to the following injection, and not show marked improvement in two or three days, two sandalwood oil capsules may be given, three times daily, for three or four days. The injection I have used in cases of acute and sub-acute gonorrhœa for more than a year, with the most gratifying results, especially to the patients, who have recovered in from two to seven days, and paid me from one to three visits, is the following:

℞ Resorcin,..... ʒ j
Acid. Boracic,..... gr. xx
Zinci acetatis,..... gr. ¼-½
Aquæ destillat..... f. ʒ iv. M.

Of this solution two teaspoonfuls are injected three times daily. The germicides, resorcine and boracic acid are so slightly astringent that it requires the additional zinc salt to restore capillary tonicity. This injection is quite or nearly painless.

In the treatment of the latter stage of sub-acute and chronic gonorrhœa, without stricture or granu-

loma as a complicating factor, I have had the happiest results follow the use of the following injection;

Hydrargyri chloridi corrosivi,.... gr. ¼-ss
Zinci chloridi,..... gr. ss-j
Aquai destillat..... ... f ℥ viij M.

Sig.—A tablespoonful to be injected well down into the urethra, three times daily.

Corrosive sublimate injections are by no means a recent addition to the list. The rationale of their use, however, is recent. As in the injection for acute cases, the germicidal constituent must be so sparingly used (otherwise it produces great pain and reactive inflammation) that I find it very advisable to combine a more astringent salt; and the chloride of zinc is the one I have selected, for obvious reasons. Without doubt, a mild injection of corrosive sublimate and chloride of zinc is destined to be *the* injection for sub-acute and chronic gonorrhœa.— *Z. T. Dellenbaugh, M.D. The College and Clinical Record.*

THE TREATMENT OF CHRONIC BRONCHITIS.

By T. J. Yount, M.D., Lafayette, Ind.

"Winter cough" has been known for untold centuries. Nebuchadnezzar no doubt had this disease, for the physicians after dosing him with villainous decoctions, nauseous infusions, and diabolical extracts, turned him out to grass. They did not find a single specific or panacea in all the medical literature of their forefathers for chronic bronchitis. The chronic bronchitic then, as now, was a victim to be pitied.

During the winter and spring months he sits in the house, in a snug corner, near a roaring fire, huddling together his skin and bones lest they get separated and lost. He sits there in his corner with his cuspidor handy, morose, dejected and irritable to those around him. His face is pinched, and his color yellow, he eats little and sleeps less, worried and worn out with cough. In the summer, like a ground-hog, he comes from his hole, wrapped up in a thick ulster with fur collar, and cap drawn down over his ears, and his feet encased in large arctic overshoes. He walks slowly and swears rapidly at his ill-luck in having such a disease. He likes to tell how he feels, and gives all the blame for his illness to the weather and his liver.

The chronic bronchitic, like the white corpuscle, is of a very migratory character, migrating from one physician to another and travelling from one end of the earth to the other. It is seldom that you see a patient that has not been treated by at least half a dozen physicians, and he rarely tarries long with any one, but seeks new fields and medicines. In the treatment of this disease we must support our patient, ease cough and pain, promote digestion and appetite, and render substantial aid during an acute attack.

Suppose, now, you are called to see a patient during an acute attack, where there is a swollen condition of the bronchial mucous membrane, with scanty secretion, harassing cough, urgent dypsnœa, and great pain. He sits upright, face livid, pulse weak and rapid, and the respiration shallow and frequent. He begs in Heaven's name for a moment's relief—for just five minutes' rest and sleep. You have all seen him.

Relieve this sufferer now and he is your life-long friend and patron. You must act, and act promptly, or all is lost. You are like the man in Texas, who, when he wanted a revolver, wanted it *awful* bad. Just so with you; you want to help the patient, and you want to help him very bad. Suppose you give him a dose of morphine, that will surely ease him, but the probabilities are that it would be permanent, and you could no doubt next day read his obituary notice. Opiates act first on the hemispheres, by dulling their sensibility; this dulling of sensibility extends to the medulla oblongata, which becomes paralysed and your patient dies, simply because the carbonic acid in the blood fails to irritate this centre of respiration and have it call on the expiratory muscles to assist in throwing off this accumulated carbonic acid poison. If it is, therefore, not safe to give opiates or chloral, what will you give? We must rely on respiratory stimulants, good ones that will not fail us. There are three well-known stimulants that are considered perfectly reliable and potent, viz: ammonia, strychnia and belladonna. Of the preparations of ammonia, I prefer the aromatic spirits, or the carbonate. In very serious cases, twenty drops of aromatic spirits, or ten grains of the carbonate, with twenty drops Squibb's compound spirits of ether, given hourly or every half-hour, affords great relief. If the heart is feeble and rapid ten drops tincture digitalis should be aded once in two hours. If they are nervous and want rest, give bromide of ammonia in one-half or one drachm doses as often as is needed. Rokitanski first found that strychnia was a potent respiratory stimulant. T. Lauder Brunton, J. Milner Fothergill, and H. C. Wood have long recognized strychnia as a very reliable and rapid stimulant. Fothergill, in severe cases run gives as large as one-tenth grain doses of strychnia every four or five hours, and oftener if necessary. He says desperate cases demand desperate remedies. His favorite prescription for ordinary acute attacks is:

℞. Ammon. Carb.....gr. v-x.
Tr. nucis vom.....M x.
Tr. scillæ..... ℥ ss.
Infus. serpent...@..... ℥ j.
M. et. sig.—Take every three or four hours.

He adds ten minims tincture digitalis to this mixture if the right ventricle is weak. Belladonna is also a reliable stimulant. It is of special value where there is general want of tone, giving rise to profuse night and day sweats. You have all given

atropia for night-sweats of phthisis, and you have noticed that the patient, while benefited by the arrest of the sweats is also greatly benefited in his breathing, breathing less rapidly, taking deeper breaths and less dyspnœa in walking about. In some cases where it is absolutely impossible to get relief from severe pain in the side by other means than opiates, give atropia, and morphia combined.

I have often given persons suffering from a mild attack of chronic bronchitis the muriate of pilocarpine, in one-tenth to one-twenty-fourth grain doses every hour or two with great benefit. It has many advantages over ipecac and squills. It is pleasant to take and does not nauseate. It is very prompt in loosening the phlegm, distressed breathing, and annoying cough. It has a decidedly stimulating action on the skin, mucous membranes, heart, and kidneys. Fothergill's father always taught him "never to give squills until the skin is moist and the phlegm loose, and always to give ipecac as long as the skin was hot, and the phlegm tough." If such is a safe rule, and Fothergill says it is, then we ought to use pilocarpine in all acute stages of disease of the bronchial mucous membrane with great advantage. Inhalations and sprays may often be used with benfit. I heave derived the most benefit in my own case from sprays of benzoate of soda, ten to twenty grains to one ounce, followed by prolonged sprays of compound tincture of iodine, ten to thirty or forty drops to one ounce. These used in this manner three times a week generally result in a decided arrest of the profuse secretions and start up a healthy action. Sprays of nitrate of silver, carbolic acid, tannic acid, potassæ chlorate, and zinc sulphate can be used either in sprays or inhalations, with benefit where the secretion is too profuse. The application of irritating liniments and solutions often scatter and relieve pains like magic. My favorite application is:

℞ Tr. iodini..... ..... ʒ ss.
Ætheris sulphurici..... ʒ ij.
Os. tiglii..... ʒ ij.
M. et sig.—Apply as directed.

Where the patient is suffering from an acute pain in the side and is feverish and nervous the application of an ointment composed of acidi salicylici ʒ ij.; morphia sulph., gr. j.; acid. oleici, ʒ j.; adeps ʒ ss. should be made.—Applied three or four times a day or oftener, until relief is afforded. By this application you avoid giving opium by the stomach, which, as a rule, destroys the appetite, impairs digestion, and renders the liver inactive by arresting the normal secretions and perverting their healthy action. In cases of chronic bronchitis, where the secretions are scanty and dry, full doses of iodide of ammonia, say of twenty grains, three times a day. By combining the iodide of ammonia with copaiba, cubebs, eucalyptol, or arsenic, you produce a decided effect upon the secretions, often arresting them and having a decided curative action. The liver should also be looked after in this climate, and its action should be assisted by an occasional doze of calomel, podophyllin, or elixir wahoo. Quinia in tonic doses, taken for weeks, is of decided benefit. Fellow's compound syrup of hypophosphites, containing, as it does, quinia, with potent nerve-tonics, is a valuable preparation.

Gardner's syrup of hydriodic acid, a non-irritant preparation, containing, it is claimed, ninety-nine per cent. of iodine, has a decided curative effect on this disease. I have used it on myself and many patients, and have experienced almost immediate benefit by the arrest of the profuse secretions and cough. The only objection to it is the strong and pronounced metallic taste which invariably follows its prolonged administration, causing loss of appetite and consequent debility.

It should be given in teaspoonful doses three times a day at the commencement, and gradually increased to two or three teaspoonfuls three times a day, well diluted in Burgundy wine, porter, or water. In my own case I have had the most prompt and decided benefit from Declat's syrup of nascent phenic acid. It is pleasant to take, and its action has in my hands been very pronounced. It should be given in larger doses than the directions on the bottle. I experienced no benefit until I had taken six drachms three or four times a day. Under the six-drachm doses in one ounce of whisky or a wine-glass-full of Hoff's malt, my light, harassing cough was relieved, the exhausting night-sweats ceased, the appetite improved, and sleep was rendered natural. In fact, under ten days' administration of the acid, more rapid and permanent improvement was made than ever before in any previous attacks. Its administration in such large doses should not be persisted in longer than two weeks at a time; then it should be suspended a week or ten days, and commenced and kept up as before, gradually lessening the dose as the disease disappears. I have often prescribed this syrup in obstinate coughs where relief was not obtained by the ordinary remedies, and have had good results.

To obtain good results you must give the syrup of the nascent phenic acid, and you must give it unsparingly. You will get no appreciable results from a half tablespoonful, and may be compelled to give it in two tablespoonful doses. In cases where there is great debility and no appetite, great advantage may be obtained from taking frequent egg nogs or milk-punches. These may often be preceded by a wineglassful of Hoff's fluid malt, etc. When there is great despondency and nervous prostration, decisive advantage may be had from ext. cannabis ind., gr. ½–j.: ext. hyoscyam., gr. ij.; quinia sulph., gr. ij.; taken three or four times a day. The sleeping-room and bed should be warm on arising and retiring, for the reason that the chill from getting into a cold bed and getting up in a cold room gives rise to severe and prolonged coughing. It is also a good idea to take a

good alcoholic night-cap before retiring, as it tends to produce sleep and quietude. Patients with chronic bronchitis should not take alcoholics before going out into the cold air, for the reason that alcohol dilates the capillaries in the skin and makes the patient more liable to take cold. If he wants a drink let him take it after coming into the house. He should wear flannel underclothes the year round, and during the cold and changeable weather should wear a chest-protector.

It is advisable that the patient should take a trip to some equable and mild climate, such as San Antonio, Los Angeles, Aiken, S. C., or New Mexico, during the cold and winter months. New Mexico is to be preferred above all as the sanitarium of the world for lung and bronchial disorders. Let him who doubts this statement go and see for himself, and he will return a healthier and better man.

The Creator in His all-wise and all-powerful mind saw that sufferers from chronic bronchitis needed a special habitat. He therefore gave unto the world and the sufferer the United States because it had New Mexico in it, that one State created for no other purpose than invalids.—*New York Medical Record.*

TREATMENT OF ECZEMA OF THE GENITALIA, PRURITUS, AND LEUCORRHEA.

In cases of eczema, in which glyceroles and unguents have failed, the following formula has been successful:

Chlorate of potassium,	30 grains;
Wine of opium,	50 grains;
Pure water,	1 quart.

Applied to the parts by linen compresses covered with oiled silk. If there is much inflammation, precede this with warm hipbaths and cataplasms sprinkled with powdered carbonate of lime. In obstinate pruritus, associated with leucorrhea, a tablespoonful of a mixture of equal parts of tincture of iodine and iodide of potassium, in a quart of warm tar water (tar-water holding the iodine in the solution) used daily, night and morning, removes the pruritus and ameliorates the leucorrhea. In fetid leucorrhea two or three tablespoonfuls (in a quart of warm water, morning and evening, as an injection) of the following formula will be found useful:

Chlorate of potassium,	13 parts;
Wine of opium,	10 parts;
Tar-water,	300 parts
Or,	
White vinegar (or wine),	300 parts;
Tinct. eucalyptus,	45 parts;
Acid, salicylic,	1 part;
Salicylate of sodium,	20 parts.

One to five teaspoonfuls in a quart of warm water, as an injection, two or three times a day.—*Obstetric Gazette.*

THE CAUSE OF CHOLERA.

In October last the German Scientific Expedition which was sent to Egypt to investigate the circumstances of the cholera outbreak there, made a report of their researches, which contains much information important to be known by physicians. They seem to prove beyond a doubt that cholera is connected with, or caused by, living germs introduced into the human organism.

Although the commission did not arrive on the spot until after the virulence of the epidemic had considerably abated the investigation, at once set on the foot under the able direction of Dr. Koch, yielded results so interesting that an application was made to the German Government, and acceded to, that the commission might be authorized to proceed to India, and continue the study of the disease in its Asiatic home. One fact appears, however, to be already clearly established, namely, that in every cholera corpse examined, a particular form of bacterium, resembling in size and form the bacillus of glanders, was found in the coatings of the intestines. In some cases the bacilli had penetrated into the utricular glands of the mucous membranes, and there set up considerable irritation: they also had settled in larger numbers on the villi of the intestines, and had often penetrated into their tissue. In severe cases which had terminated in bloody infiltration of the mucous membrane of the intestines, the bacilli were found in very large numbers, and they had not confined themselves to the invasion of the utricular glands, but had passed into the surrounding tissue, into the lower layers of the mucous membrane, and, in some cases, right into the muscular skin of the intestine. It is interesting to learn that similar bacilli were observed by Dr. Koch a year ago in a cholera-infected intestine received from India; but in that case the possibility of their having been a product of putrefaction was not excluded. As these bacilli were observed in Egypt in all the cholera cases investigated, and were not found in the intestines from several persons who died from other diseases, or even in one case where a man had died from another disease a few weeks after he had recovered from an attack of cholera, Dr. Koch feels warranted in saying that there can be no doubt that they stand in some relation to the operation of cholera. But he is careful to point out that it cannot yet be concluded that they are the cause of that disease, and that it could just as well be assumed that the operation of cholera causes such disturbance in the mucous membranes of the intestines, as that among the many bacteria always parasitic in the intestines one form of bacilli is thus enabled to penetrate into the tissue of the mucous membrane. In order to determine this point, it seems necessary to isolate and cultivate the bacilli, and ascertain whether they are capable of reproducing the disease in a fresh subject. But, in connection with this branch of the investigation, there is a difficulty that has not yet been surmounted, in that no animal has

yet been found which is susceptible to the choleraic poison. Dr. Koch and his colleagues have experimented upon mice and monkeys, dogs and poultry but hitherto without results, although it was almost certain that some, at least, of the matter injected, was capable of setting up the disease in a human subject. Another point of interest that requires to be cleared up is the observation that in some places the epidemic dies out long before all the people have taken the infection, although infectious matter still remains scattered over the district. This is thought to indicate that conditions arise under which the infectious matter loses some of its virulence.—*Popular Sceince News.*

A CASE OF HÆMOPTYSIS.

Dr. Ross R. Bunting of Philadelphia sends to *Science News* the following note regarding an interesting case of hæmoptysis occurring in his practice:—

Hæmoptysis is not usually regarded of itself a dangerous manifestation: it is only as a symptom of commencing phthisis that it is of serious import. In very rare instances do we find an *immediately* fatal result; yet occasionally we meet with cases in which the hemorrhage is kept up for days and weeks. I was called some time since to see a young man (aged twenty-seven) with family history of phthisis, who was bleeding profusely from the lungs. This hemorrhage was succeeded by another in twenty-four hours; and for two weeks there occurred sometimes two hemorrhages in the day, amounting in all to twenty-one distinct hemorrhages. The most approved remedies—as ergot, gallic acid diluted sulphuric acid, and tinct, digitalis—were administered without effect, the hemorrhage still continuing. It was very evident, that if the flow was not checked, judging from the patient's condition he would soon die from exhaustion. A bladder filled with ice was kept constantly applied to the upper part of the chest. One-half grain of opium and two grains of acetate of lead were given every two and three hours. These remedies were kept up one week after the cessation of the hemorrhages, which lasted fourteen days.

What I would refer to particularly in this case is the successful employment of the *old-fashioned remedies*, acetate of lead and opium. I have employed them in various other cases of internal hemorrhages, and, for steady use of days or weeks, much prefer them to ergot or gallic acid.

TREATMENT OF WHOOPING-COUGH.

Dr. J. Coopreider of Taylorsville, Ind., writes us that he has used the *fluid extract of chestnut leaves* for whooping-cough, with great success. He says:—

The dose employed is from fifteen to sixty drops, according to age. If the child is large enough, I give it in hot water as an infusion, sweetened; to a small child, in simple syrup or elixir.

It not only relieves or lightens the paroxysms, but will actually cure in from four to five days.

I give four to six doses per day, according to the severity of the case.

If good fresh leaves can be procured, I make the infusion as a tea, say two drachms of the leaves to half a pint of boiling water, and give two ounces at a dose, sweetened with white sugar.

INGROWING NAILS.

The following practical hints from the *Journal of Cutaneous Diseases*, on the management of ingrowing nails, are well worthy the attention of such of our readers as have to deal with these troublesome ailments:—

When the nail threatens to grow into the skin, or has already injured it, the first indication is to put on a sock of moderate size and to remain quiet. Afterward the nail is to be scraped on the affected side till it is sufficiently thin; then it is to be seized with a delicate forceps, raising it in a sense inversely to its natural curvature. This having been done, a small lamina of lead of a few millimetres' thickness is to be inserted beneath the nail, and after folding it over the toe it is to be fastened there with a strip of plaster. In this manner, the granulations being no longer in contact with the margin of the nail, the pain ceases, and the sore heals more or less rapidly; during the whole of which time the apparatus should be frequently inspected, so that the limina of lead may not become displaced. Besides this, it is necessary to scrape the nail every two or three days, so as to keep it thin and flexible until the skin returns to its natural state, and can resist the pressure of the nail, and then the lead is removed. Hebra treats ingrowing nails, in the following manner: Cut some flakes of lint of the length of the lateral groove of the nail, or a little longer. The lint is to be placed on the nail, parallel to its groove; then, with a flat probe, introduce the lint, thread by thread, between the flesh and nail. Thus the parts are separated, with the little cushion of lint lying between. The sulcus is then to be filled with pledgets of lint, and, finally, long narrow strips of adhesive plaster are to be applied, always from about the inflamed sulcus downward, in such a manner that the latter is still farther removed from the margin of the nail. With such a dressing applied with sufficient care, there is no pain whatever; and the patient can in a short time put on his ordinary stocking, and walk without trouble. After twenty-four hours the strips of adhesive plaster are to be removed, being previously softened in a bath of tepid water. This dressing is to be repeated daily; and in from two to four weeks it will be found that the toe is entirely well.

RHAMNUS PURSHIANA.

The re-appearance of reports on this drug, which a few years ago excited such a considerable degree of professional attention, has characterized the periodical literature of the latter months of 1883. The cause of this renewed attention to this drug on the part of medical writers is more directly traceable to the interest which it has excited during the past year in Great Britain. The *British Medical Journal* has contained a number of very flattering reports on its efficacy, and the other journals have contained similar reports. The drug seems to have obtained a very strong foothold among our conservative brethren of the British Isles, and judging from the reports which have been given of its action in their hands, it is fulfilling the requirements of a tonic-laxative in that country.

The *Therapeutic Gazette*, for December, contains a symposiac on cascara sagrada, from which we select some facts which do not seem to have been very generally familiar. Dr. C. W. Tangeman, of the Medical College of Ohio, has subjected it to a series of physiological experiments, the results of which he contributes as follows:

1st. Cascara sagrada, when given in small doses (fifteen to twenty drops), acts like a vegetable bitter on the stomach; it increases the flow of gastric juice, stimulates the peptic glands to increased action, thereby bringing about healthy gastric digestion.

2nd. It acts on the sympathetic nervous system, sending an increased blood supply to the intestines.

3rd. It increases to a limited extent peristaltic action of the small bowels, but increases it very much in the colon, and especially in the rectum.

4th. It has a specific action on the rectum in the way of peristalsis, to cause this portion of the bowel to unload itself.

5th. It does not affect the passage of the food in the small intestines any more than a bitter tonic would.

6th. It is not a safe remedy in pregnancy or uterine disorders, especially when given in cathartic doses.

7th. It does not affect the larger glandular organs, liver, pancreas or spleen, even when given in cathartic doses.

8th. Hypodermically the remedy will never produce the permanent good results in chronic constipation that are obtained when it is given by the mouth.

9th. When employed subcutaneously it acts simply as an evacuant to the rectum.

10th. The same quantity given hypodermically that produces marked effects when administered by the mouth, will not have the same effect clinically or physiologically.

Dr. T. L. Wright, of Bellefontaine, O., discusses the peculiar applicability of cascara cordial, of which rhamnus purshiana is the base, in the treatment of the constipation of elderly persons. In this class of cases many of the symptoms which are usually associated by physical decay are directly traceable to constipation, and Dr. Wright has found that cascara cordial, through its tonic-laxative properties, removes this condition, greatly to the improvement of the person's spirits.

Dr. F. C. Herr, physician to the South-Western hospital of Philadelphia, after extolling the value of cascara cordial in dyspeptic disorders, speaks very highly of the preparation as a vehicle for the administration of the more unpalatable drugs. He regards the encroachments of homœopathy upon regular medicine as largely due to the persistent refusal of the old school of practitioners, so-called, to acceed to the demands of a sick public for palatable medicines. He has found in cascara cordial a vehicle which at once succeeds in disguising the taste of many disagreeable drugs, and at the same time meets the indication so commonly present for an easy and agreeable laxative. In discussing its applicability in the treatment of young children he has found in this cordial a preparation which is calculated to supplement to a very large degree the "carminative bottle," which has been in so much demand among young children. These baby-mixtures are too often unsafe and should be given with a spare hand, and if cascara cordial shall be found on future trial to verify Dr. Herr's claim for it, it will indeed prove to be a very valuable addition to the physician's armamentarium.

CORROSIVE SUBLIMATE IN GONORRHŒA.

Dr. Joseph McChesney, of Deming, New Mexico, contributes to the *Therapeutic Gazette*, for December, a report of a series of seven cases of gonorrhœa in which he employed by a way of treatment, only a solution of corrosive sublimate, one grain to six ounces of water. The results are already very surprising. In several of these cases this injection was resorted to after a long and unsuccessful course with the ordinary remedies in such cases, and the result was uniform success. He resorts to these injections, which he gives once every four hours, after the subsidence of the acute stage. He is very confident that, properly applied, this solution will effect a cure of the gonorrhœa within from eight to ten days after it has been resorted to.

VESICATION IN DIPHTHERIA.

D. W. F. Bartlett, of Buffalo, New York, communicates to the *Therapeutic Gazette*, for December, the results of his experience in the use of cantharidal blisters in diphtheria. His plan is to apply the blister immediately on the appearance of the exudate in the throat. The theory is that the materies morbi is eliminated through the blistered surface, while the counter-irritation thus caused relieves also the engorged pharyngeal surfaces. He regards the exudate in the thorat as

merely an announcement of the presence of the poison in the blood, and that from the nature of the epithelium or impinging of inspired air primarily upon those surfaces, the partial elimination of the morbid element is accomplished.

THE CANADA MEDICAL RECORD.

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MONTREAL GENERAL HOSPITAL.

We believe that the Medical Board of the Hospital propose recommending to the Governors certain changes in the Medical Staff of the Institution. Dr. Gardner and Dr. Major, two of the Out-door Physicians, will, if the advice of the Board is followed, become, respectively, Gynecologist and Laryngologist to the Hospital. It is also, we believe, suggested that the Out-door Staff in future be called Assistant Physicians instead of Out-door Physicians, and, like the In-staff, they be divided into Physicians and Surgeons. We question very much the wisdom of the latter changes. We much prefer the title of Assistant Physicians, and regret that it was not at first selected. Now, however, that we find men on the Out-staff who are the senior in years and superior in professional position to some of the In-door or Attending Physicians, the idea of their becoming the Assistants to these men is not calculated to make them feel pleasant.. They will have to submit, but we mistake their temper if they do not loudly protest. As regards the division of the Staff into Physicians and Surgeons we consider it absurd, and but another evidence of the craze which seems to have overtaken those who formulate the Medical dogmas on the Medical Board of the Hospital. Although the In-door Staff has had this division for several years, we do not yet possess a single Surgeon pure and simple in the City of Montreal—all of them are general practitioners. The existence of such a division in Hospital work when none such exists in practice, is the occasion of very frequent gross injustice to the rank and file of the profession. It is a question yet to be settled whether our City can support one Surgeon who alone practices surgery. We believe it will, others think differently; but there is no question it will not support six or eight. Why then attempt to make those who to the public are both Physicians and Surgeons, become simply Surgeons on Hospital work. We see no benefit, and predict that, if carried out, it will engender a feeling of distrust among the profession, which we would deeply regret to see established.

THE MATRICULATION EXAMINATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The large percentage of rejections at the matriculation examinations of the College of Physicians and Surgeons of the Province of Quebec has given rise to a great deal of dissatisfaction among the unfortunates. This was of course to be expected. The matter, however, seemed worthy of investigation, and those connected with the Boards who looked into the subject were struck with the fact that it was upon certain studies that the majority failed. Clearly this pointed to a defect in training, and a committee was named by the College to meet the Matriculation Board and the directors of the various educational institutions in the Province and investigate. About forty invitations were issued, and some dozen representatives responded—a few however, being deputed to represent other institutions than their own. These gentlemen met the following members of the committee of the College, viz., Drs. R. F. Howard, E. P. Lachapelle, F. Wayland Campbell and Lanctot, on the 24th January, in the rooms of the Medico-Chirurgical Society. An informal discussion took place, the meeting lasting about two hours. It will, we believe, be productive of a vast amount of good for, in our opinion, the discussion at the meeting proved that not a single institution in the Province outside of the Universities gave

an education capable of preparing pupils to pass the *entire* examination preliminary to entering medicine. Mr. Shewan, a gentleman for many years connected with the Montreal High School, largely engaged in preparing students for the examination, gave it as his opinion that the amount of Latin translation was too extensive for the time allowed, and that it would be better to curtail in translation and extend in parsing. This view was heartily endorsed by the representative of St. Francis College, Richmond. Altogether we consider that the result of the meeting proves the wisdom of the action taken by the College. We may add that there never has been any idea of rendering the examinations less stringent.

A GUIDE FOR THE MEDICAL EXAMINATION OF RECRUITS.

We have received from the Militia Departmen a copy of a small *brochure* bearing the above title, which has been prepared by Surgeon Major Neilson of "B" Battery 1st Regiment Canadian Artillery. Its appearance is opportune, as the Government are at this moment enlisting a force of three hundred men to serve for three years as an Infantry Corps. We have examined the little book with care, and must congratulate Dr. Neilson on the thoroughness with which he has prepared his work. A civil surgeon has but little idea of the many points which arise in considering the fitness of a recruit for military service. A study of this volume will enable those whose duty it will be to examine candidates for military service to secure for the Government a class of men, who will do credit to their corps and to the country. We hope the Government will place it in the hands of the Surgeon of every Volunteer Corps.

PHYSICAL EDUCATION.

To our friend Barnjum, Montreal is indebted for one of the most pleasing features of the recent very successful "carnival," in the shape of a rehearsal by his young ladies' and children's classes of their most interesting exercise. The pupils, numbering in all ninety-five, went through these in such manner as to delight the large audience present, many of whom congratulated Mr. Barnjum very heartily upon his work. The rehearsal included marching at the double, free gymnastics, Indian club swinging, dumb bells, bar bells and varied exercises.

We were glad to notice a large attendance of medical men, including many of our visiting brethren, all of whom expressed themselves delighted with the exhibition. Mr. Barnjum is unquestionably doing valuable work for the rising generation, and we trust our city *confrères* generally will avail themselves of his open invitation to call in upon him during working hours, and see what is being done in the direction of physical education in our midst.

PERSONAL.

Dr. Vineberg (M.D., McGill, 1878 and Gold Medallist), of Portage la Prarie, has been in Montreal several weeks on a visit.

Dr. Foley (C.M., M.D., Bishop's College, 1880) has returned to Montreal, and resumed practice. We are pleased to say that his health has much improved.

We regret to hear of the illness of Dr. Loverin (M.D., McGill, 1854) at his home in this city.

Dr. Richard MacDonnell (M.D., McGill, 1876) has been appointed Assistant Medical Officer to the Grand Trunk Railroad.

Dr. Stewart, professor of Materia Medica in McGill University has been elected an Attending Physician to the Montreal Dispensary in place of Dr. McConnell, resigned.

Dr. McConnell, Professor of Materia Medica in Bishop's College, has resigned his position as one of the Attending Physicians to the Montreal Dispensary, and been placed on the Consulting Staff.

Dr. Digby of Brantford, Ont. (M.D., McGill, 1863) visited Montreal during Carnival week, as also did Dr. Phillip of Brantford (M.D., McGill, 1863).

Dr. Rogers, having recovered his health, has returned to Ottawa and resumed practice.

Dr. Roddick of Montreal, when last heard from, was in Algiers.

Dr. Marsden of Quebec has been appointed a commissioner of the Marine Hospital, Quebec, in place of Dr. J. A. Sewell resigned.