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CASES OF UTERINE DISEASE.

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THE following observations relate to two different uterine affections. The first case is one of constriction of the mouth of the womb and of the canal of its neck, accompanied by dysmenorrhœa, for which mechanical dilatation was performed, followed by considerable relief to the symptoms. The last two cases are examples of granular disease of the mucous membrane of the os uteri. One of these patients had prolapsus uteri, leucorrhœa and the train of general symptoms usually accompanying that condition; she was entirely restored after a course of treatment consisting chiefly of astringent applications to the cervix, and continued for upward of three months. The principal symptom presented by the other patient was menorrhagia; the case is adduced chiefly to show the advantage derived from the early treatment of the disease.

CASE I.—*Dysmenorrhœa; Contraction of the Os Uteri; Artificial Dilatation, followed by Improvement.* The patient was an unmarried lady, æt. 32, remarkable for her intelligence, amiability and decision of character. Although she had always been more or less of an invalid, she was patient and cheerful, and never voluntarily made her sufferings the subject of conversation. She had been troubled with dysmenorrhœa ever since she began to menstruate. Her bowels had always been costive, and she suffered frequently from headache. About ten years ago she had an aggravation of her troubles, and fell into a state of invalidism which lasted for about four years. During that time she complained chiefly of frequent pain in the back and limbs, always aggravated at the menstrual periods, headache, nausea, sleeplessness, prostration of strength, inability to walk, and extreme sensitiveness to sound. She had a good appetite, rather gained than lost in flesh, and had no fever. The bowels were costive. She was carried down and up stairs, when she left her chamber; seldom walked,

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but drove almost daily in a carriage. She had no symptoms of chlorosis.

As is usual in chronic cases of this description the patient had undergone a great variety of treatment, both regular and irregular, the great object of attention being the uterine function; and in this connection I will state that the menstrual epochs occurred rather more frequently than normal, were generally accompanied with acute pain in the back, thighs and hypogastrium, and that in the intervals the patient had more or less of leucorrhœa. After undergoing general treatment by some of the most eminent physicians in this city, she came under the hands of a notorious empiric in New York, who treated her for occlusion or contraction of the os uteri by the introduction of silver tubes into the canal of the cervix. She was afterward under the care of an eminent Boston physician, who treated her for "ulceration" of the os uteri by the application of caustics. In the autumn of 1851 she went to a water-cure establishment, where she remained nearly a year. Here she was subjected to pretty rigid discipline. Besides the various baths, &c., she was made to take regular and progressive exercise, to observe early hours, and to eat plain but wholesome and abundant food. The effect of this discipline was remarkable; she returned home greatly improved in health, and able to take long walks.

The general good effects which discipline and deprivation of the luxuries and indulgences of home had produced, lasted for some years, although not to the full extent that was at first noticeable. Her catamenial difficulties remained about the same, and her strength became impaired, and she was induced to consult me in May, 1855. She was then complaining of debility, which prevented her from walking far. She was also liable to attacks of fainting, and had, once in two or three weeks, what she called "neuralgia," by which she meant severe pain in the head, limbs and back, lasting from twenty-four to forty-eight hours, and obliging her to keep the bed, often in a darkened room. The menses occurred about once in three and a half weeks, and during the first day were generally accompanied with much pain, the discharge being at that time scanty. It afterward became more free, and less painful. Occasionally it was accompanied with shreds. Its usual duration was about a week. In the intervals between the catamenial periods she was much troubled with leucorrhœa, particularly after walking, though she was seldom obliged to wear napkins; it was always transparent and glairy, like white of egg.

The patient was persuaded that she had uterine disease, with prolapsus of the womb, and also some spinal complaint.

The bowels were very costive, requiring a constant resort to enemata, mild purgatives and a laxative diet, though when she could obtain fresh fruit they were in tolerably good order. There was no emaciation, the pulse was not accelerated, the tongue was clean, the appetite good, the urine natural in quantity and appearance.

There was some tenderness of the abdomen in the region of the liver, in the epigastrium, and in the left iliac fossa.

On examination (May 12th, 1855), the cervix uteri was felt to be somewhat lower than common, smooth, hard, causing some pain when pushed up. The os uteri could not be felt. The vagina was of the natural temperature and moisture. By the rectum, the body of the uterus was in place, felt rather large, and was tender when pressed upon. The posterior wall of the rectum was tender to pressure. The rectum contained feces of a flattened shape. The speculum showed the cervix uteri to be normal in size and color. It was smooth, round, shining, and of a pale rose color, without ulceration or granulation. At first there was no appearance of an os to be found. After a careful search, a minute depression was seen, which admitted a probe with difficulty. The instrument entered with a jerk, as if overcoming some obstacle at the entrance. It then entered about three quarters of an inch, but could not be made to penetrate further.

She was ordered cold hip baths, for a few minutes, twice daily; three drops of nitro-muriatic acid twice daily, the same mixture to be rubbed externally over the hepatic region; pill of extract of colocynth; vaginal injections of cold water; exercise. A fine elastic bougie was introduced into the os uteri as far as possible, and allowed to remain for nearly an hour. This was repeated on several subsequent occasions.

The examination was followed by no pain or disturbance, although the introduction of the speculum caused some pain. The patient began to take regular exercise, and on the 17th walked half a mile three times; the same day she had an abundant, soft evacuation of natural color, which gave her great relief. On the 20th she began to menstruate, it being three weeks and three days from the commencement of the last epoch. The discharge was less abundant than usual, but also less painful. She was not confined to her chamber, and even walked out the same day. I examined her on the 20th, while she was still menstruating. The os did not appear more open than before. Blood was oozing slowly from it. There were no coagula.

On the 29th I began to dilate the os uteri by means of graduated sounds, made by Tiemann. Nos. 1 and 2 were introduced, and afterward a flexible bougie, of the same size, which was allowed to remain *in situ* for one hour. The next day the patient had a good deal of pain in the head, back and limbs, with a feeling of soreness and debility. There was more leucorrhœa. On the 31st and on June 4th the dilators were again introduced. On the 7th, No. 4 was passed in, and afterward a plug of solid elm bark, which was left. It was retained until the 9th, when it was expelled. A tent made of fibres of elm bark covered with wax was substituted. On the 14th (same interval as before) the menses again appeared, with, on the whole, less pain than usual. Dilators Nos. 5 and 6

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were introduced June 23d. Compressed sponge was substituted for the elm tent, and found to be much more manageable. On the 5th of July, the os uteri was widely open, and admitted the largest dilator with ease. She again began to menstruate on the 8th, the expected time, and suffered about as much as usual.

In the course of the summer the patient spent several weeks at Newport, where she bathed frequently in the sea. For the first time for several years there was an interval of exactly four weeks between her menstrual periods. The discharge was rather scanty, of a brownish color, and almost free from pain. Her general condition remained about the same; she had the same attacks of general pain as before. The bowels continued costive. She was examined Sept. 20th. There was no ulceration, abrasion or granulation about the cervix. The os appeared nearly closed, but admitted a No. 6 dilator with some difficulty. The dilatation was continued, by means of compressed sponge.

On the 16th October the patient menstruated for the first time since August 7th, the interval being nine weeks and two days. There was no apparent cause for this suspension. This time, the discharge was not preceded by pain, and she did not know she was unwell for some time after it began. During the whole period there was much less pain than usual; the discharge was very abundant, of the natural color, and fluid.

Dec. 15th.—No. 9 dilator was passed with ease. The last menstrual period ceased on the 11th; it occurred exactly four weeks after the preceding one, and was not accompanied by any pain. The discharge was sufficiently abundant, and seemed to flow more freely than usual. The patient had now had, on four different occasions since I began to treat her, an interval of four weeks between the catamenial periods, although other intervals were no longer than three and a half weeks. A perceptible improvement in her general condition had now taken place. She was stronger, took long walks, went into society, and had fewer attacks of "neuralgia," and these were of shorter duration.

The amendment in the general condition continued, though the menstruation was irregular, and often painful. The attacks which the patient called "neuralgia" also occurred, from time to time, lasting from one to three or four days, and obliging her to keep the bed or sofa most of the time. They always came on suddenly, and seemed to be caused by fatigue or excitement, though sometimes they could not be accounted for. The pain affected chiefly the joints, but was not accompanied by swelling, by fever, or by loss of appetite. From time to time examinations were made in order to be sure that the canal of the cervix was still dilated. She was put on a course of quinine, for several weeks, but without material benefit.

June 18th, 1856, the record says: "since last report (April 20th), the patient has suffered considerably less from menstruation than

before; the period has generally been five days. There has been some irregularity in the periods." On examination, the cervix uteri appeared healthy. The os was not more contracted than before. Felt through the rectum, its body did not appear to be large nor tender. There was plenty of room behind it for the finger. The rectum contained a considerable quantity of flattened fæces.

At this time I ceased all further treatment of the patient, but quite recently she applied to me again, and I transcribe the record from my note-book.

May 7th, 1858.—Since the last report this patient has been decidedly better in her general condition, and, in particular, her menstruation has been less painful. The intervals between the periods have been generally three weeks and three days. Although not strong, she walks a good deal, drives much more, and goes to places of amusement or into society in the evening. She took a sea voyage in February, 1857, passed a few months at the South, and returned by land, bearing the travelling by sea, river and land remarkably well. During the past winter she underwent a great deal of anxiety, fatigue and grief, in consequence of a domestic affliction, and at the same time she suffered more than usual from pain in the head, shoulders and limbs during menstruation. The discharge was also more scanty, while the leucorrhœa was increased, obliging her to resort daily to a vaginal injection of cold water, or alum water. The bowels have been much more regular, of late, which she ascribes to the use of a glass of molasses and water before breakfast, a hint which she got in New Orleans. Feeling that she had derived considerable benefit from the local treatment, she consulted me again, desiring to have an examination made, in order to ascertain whether the os uteri had not again become contracted.

I found the vagina extremely sensitive, especially toward the external parts, so that on expanding the blades of the speculum, the patient experienced severe pain. Different instruments were tried, but a glass speculum was the only one which would enter without much pain, and although this gave an admirable view of the parts, it was not convenient for the introduction of instruments into the uterus. There was some leucorrhœal secretion, of a creamy appearance, in the vagina and about the os uteri. The cervix was in its natural place, the os looking somewhat backward; it was quite smooth, and of a pink color, not larger than common. The os was circular, open, about a line in diameter, and admitted dilator No. 6 to the distance of about an inch. A piece of compressed sponge was inserted, and left. The operation was followed in a few hours by much pain and tenderness in the abdomen, with pain in the head and back. There was no chill, nor fever. The patient was confined to the bed or sofa for a few days, and since then has been in her usual health. No further examination has been made.

Although this patient's sufferings were not greater than those of some women whose condition of life obliges them to continue their daily avocations, while laboring under severe dysmenorrhœa, still she must be considered to have been a great invalid, and the contrast between her present state and that in which she was before she came under treatment, is quite striking. She was then obliged to keep her bed, or sofa, for a day, and sometimes for two or three days, at almost every menstrual period, from severe pain. She was often deprived of sleep at those times. She was unable to walk for any distance, and was obliged in a great measure to avoid society, and to lead the life of an invalid. At present, although by no means strong, and though compelled to be very careful in her regimen, she enjoys a very tolerable state of health.

How far is the improvement to be ascribed to the local treatment? This question, I apprehend, would be answered differently by different physicians. I should not expect Dr. Robert Lee to give any credit to the dilatation of the os uteri, while the disciples of Dr. J. H. Bennet might allow a large share of the cure to this operation. I confess, that to me, the benefit derived from the treatment seems due, in no small measure, to the use of the sponge tent. When we consider that the patient had always suffered from dysmenorrhœa, that the canal of the cervix was extremely small, and the os uteri so minute as to be with difficulty found (one physician, who examined the patient, said that *there was no os*), and that the dilatation of the canal was followed by relief to the dysmenorrhœa, by an increased flow of blood at the monthly periods, and occasionally by a prolongation of the interval between the periods to the normal extent, there seems to be reason for this inference. At the same time, it must be admitted, that although the os uteri was greatly contracted, the menstrual fluid was seen to make its way through it without apparent difficulty; and the relief from pain did not immediately follow the dilatation. I think, however, that the effect of the operation on the patient's mind had something to do with the improvement. She was persuaded that she had some uterine complaint, and that local treatment would relieve it. She was not of a sanguine temperament, but on that very account, though slow in arriving at conclusions, she was very firm in her convictions, and it seems probable that her belief in the efficacy of the treatment contributed much to her restoration.

It may be asked whether the constriction of the os uteri was not the result of the application of caustic to the cervix. I am inclined to think not; the dysmenorrhœa had existed long before local treatment was adopted; the caustics were applied by a gentleman of the highest eminence in this city, and moreover there was no appearance of any cicatrix, indicating that those agents had been employed to excess.

CASE II.—*Leucorrhœa, Prolapsus Uteri, Pain and Debility; Granular Condition of the Os; Treatment by caustic and astringent Applications; Recovery.*

This patient was a widow, aged about 25, blond, of delicate organization, calm temperament, and superior mental endowments. She had two children, the last being a posthumous one, and its mother had suffered much from ill health and from grief during her pregnancy. Before that period, she had been much troubled with leucorrhœa and debility; the former symptom then increased, but was tolerably well controlled by daily injections of cold water. At about the sixth month of pregnancy she had much swelling of the feet and ankles, followed by œdema of the labia, and she suffered much from bearing-down pain, so that she was mostly confined to the sofa. She found much relief from an elastic bandage worn around the lower part of the abdomen. By the beginning of the eighth month, these symptoms greatly diminished, and she was able to take exercise as usual. Her labor was easy, but she had a slow getting up. The lochia lasted longer than usual. Four weeks after parturition, the lochial discharge, which had never ceased, became profuse, of a red color, and appeared exactly like a regular monthly flow. It ceased in one week, as had been usually the case. She took the saccharine carbonate of iron and manganese, and used a cold hip bath daily. Her health improved, though it did not become strong. When her child was five months old, her milk, which had always been scanty, ceased entirely.

Soon after the child was weaned, she began to have much bearing-down pain, with a sensation as if the uterus were about to protrude through the external organs. In fact, the organ was so low in the vagina as to interfere with the use of the syringe. The bowels were very costive. She was unable to walk, had profuse leucorrhœa, and was in so wretched a state that she applied for medical advice.

Feb. 14, 1856.—The patient was examined in the morning, before she had risen from her bed. The cervix was found rather low in the vagina. It felt smooth, hard, not enlarged to any great extent, and was not tender. The os admitted the tip of the finger easily. The vagina was large, moist, and of natural temperature. The pelvis was capacious. The external organs felt hard, and somewhat swollen.

On introducing the speculum, a bright florid ulceration, or granular appearance, was seen surrounding the os uteri, and extending into the canal of the cervix. By its color it contrasted strongly with the surrounding parts. When lightly touched with a stick of nitrate of silver, it became of a snow-white color. No pain was felt from the application.

She was ordered a cold hip bath twice daily; vaginal injections of water; a suppository of lint soaked in a saturated solution of tannin at night; and a bandage with a perineal pad.

Notwithstanding an attack of tonsillitis, which lasted a week, the patient was much better as respects her local troubles. The leucorrhœa decidedly diminished, and she could walk with much less fatigue.

Feb. 22d, she was again examined. The uterus was high up, the edges of the os tincae were red, granulated, bleeding when touched with a probe, and somewhat tender, especially within the os. The upper lip was the seat of a large patch of this granular appearance, but the whole extent of surface was considerably less than at the last examination. Congress-water, and a tonic and laxative pill of sulphate of iron, aloes and tartrate of antimony, were ordered, the previous treatment being continued.

It would be tedious to enumerate all the details of the progress of the case, which are familiar to those who have had much experience in complaints of this nature. It is sufficient to say, that the nitrate of silver or the sulphate of copper was applied at intervals of about ten days. Occasionally the cervix was freely scarified. Vaginal injections of various astringent solutions, and hip baths, were regularly employed; a course of tonic medicine, consisting chiefly of different preparations of iron, was ordered, with a nutritious diet, to which ale and porter were added, and as much exercise was enjoined as could be taken without fatigue. Cod-liver oil was also proscribed at one time with apparent benefit.

Under this treatment the progress toward recovery was apparent, though not uninterrupted. The patient had occasional relapses. The backache, prostration of strength, leucorrhœa and feeling of bearing-down would from time to time return, and greatly discourage the patient; still, on looking back, it was seen that the general improvement was satisfactory. The local disease steadily declined. The granulated surface gradually diminished in size, and ceased to bleed when touched; the mouth of the uterus closed, so as no longer to admit the tip of the finger. By April, the patient had greatly improved in strength, appetite and spirits. The leucorrhœa was almost gone, and she could walk a mile with ease. April 26th, the cervix presented a nearly normal appearance. The place where the granulations had existed was occupied by a smooth surface, resembling a cicatrix. No abraded surface nor granulations were seen, though there were a few enlarged follicles. The leucorrhœa was slight. It was transparent and glairy, differing entirely from the white, creamy appearance it formerly presented.

By the end of May, a little more than three months after the commencement of the treatment, the patient was in the enjoyment of her usual health, which, as has been stated, was never robust. She was then recommended to travel, and sailed for Europe. She spent the summer chiefly in travelling on the Continent, and improved rapidly in every respect, until she attained a better state of health than she had had for many years before, when, unfortu-

nately, she was attacked with typhoid fever, of which she died in Paris, after a short illness, toward the end of September.

In this case, the patient may be said to have owed her recovery to her willingness to submit to treatment, and to her perseverance in following out the directions which were prescribed. Notwithstanding the frequent relapses in her progress, and the occasional despondency which these produced, she was determined to neglect no means which afforded the hope of recovery. Although her progress was slow, the case was short, compared with many of the same description. It seems probable that if the local treatment had been adopted before she became pregnant for the second time, she would have been more quickly cured, and much of her subsequent ill health prevented. The advantage of early treatment in these affections is well shown in the following case.

CASE III.—*Menorrhagia following Abortion; Granular Condition of the Cervix Uteri; Rapid Recovery after local Treatment.*

A married lady, aged 20 years, became pregnant five months after the birth of her first child, which she was still nursing. In May, 1856, she aborted, without known cause, at about the eighth week. She flowed profusely during and after this accident. Her regular catamenial period occurred June 22d, at which time there was an aggravation of the discharge. She was kept on the sofa, and on the 27th the hæmorrhage had so far diminished as to allow an examination by the speculum, which revealed a large and patulous os uteri, with a patch of red, granular surface upon each lip, especially the right one, the direction of the os tinæ being rather antero-posterior than transverse. She had had very little leucorrhœa, and very little pain; the great trouble was the hæmorrhage, which was always aggravated by exercise. She had lost considerable flesh, but had a good appetite, and sufficient milk for her child. The bowels were always costive.

The granular patches were lightly touched with the solid nitrate of silver, which turned them of a snow-white color. She was ordered astringent vaginal injections, hip baths, laxatives, and a mixture containing sulphate of iron, sulphuric acid and sulphate of magnesia.

July 1st.—Having accidentally brought a different speculum from that employed at the last visit, I found it impossible to introduce it without giving much pain. I therefore applied a crayon of sulphate of copper freely to the os tinæ, without the aid of the speculum. There had been no hæmorrhage since the last visit.

July 11th.—The patient was greatly improved in all respects. There had been no hæmorrhage. She was much stronger, and felt quite well. On careful examination by the speculum, the cervix and os uteri appeared perfectly healthy. No application was made, and the patient has since been quite free from uterine symptoms.

If this patient had neglected to apply for advice at an early

period, or had refused to submit to local treatment, as is so often the case, the chances are that she would have become a miserable invalid for months, and been cured with great difficulty.

VACCINATION.—A REVIEW.*

[Communicated for the Boston Medical and Surgical Journal.]

THIS is truly a valuable discourse. Partaking more of the character of a scientific paper than of an oratorical effusion, it records, in a manly and unassuming style, important results of personal observation and actual experiment. Its appearance is not untimely, for it is not a little remarkable that a subject so nearly within the range of demonstration, should, after the lapse of more than half a century, continue to give occasion for so great differences of opinion and such prolix discussions. Some very sanguine practitioners would still have us believe that vaccination "well performed," that is to say, performed by themselves, is in every instance an unfailing and complete protection. Others, in distrust of the experience of so many years, seem to fear its gradual loss of efficacy, and begin to advocate, more or less boldly, a return to variolous inoculation. While the larger number, between these two extremes, appear to be greatly disturbed, from time to time, by the speculations of some new theorizer, attempting to show, amongst other things perhaps, that the vaccine protection is gradually eliminated by time or the normal changes in the constitution of the individual, so as to render re-vaccination necessary after three, five, seven, ten, or more years, according to his own peculiar fancies. The discourse before us will do much to settle the opinions of the undecided, and will give all, who may carefully study its pages, a surer foundation for rational practice.

Notwithstanding the prevalent obscurity, it seems to us that the gist of the whole matter may be expressed in a very few words.

Smallpox is an infectious† disease. Some individuals, as in other infectious diseases, enjoy a natural exemption, and, however much or frequently exposed, go through life without contracting it. Others may suffer from repeated attacks. The number liable to a second or a third attack of smallpox, is much greater than is generally supposed.

Vaccine disease is the result of smallpox infection communicated to the cow.

As these diseases are identical, it is easily seen why the one, and that the milder of the two, may be substituted for the other; though it is not unreasonable to conclude that the modified form

* Investigations upon the subject of Vaccination; being the Annual Discourse read before the Massachusetts Medical Society at the Annual Meeting, May 26, 1858. By Horatio Adams, M.D., of Waltham. Med. Com. Mass. Med. Society. Second Series. Vol. V., Part IV., Article IV. Pp. 221-254.

† Contagious, if any one chooses—we prefer infectious.