of the catamenia. Possibly some observers may look upon the abnormal sensitiveness at the internal os as evidence of endometritis, but such a view seems to me untenable. The explanation which I have already given seems to me the reasonable one.

Our treatment should be directed to the solution of two problems: first, to enlarge and straighten the canal; second, to diminish the sensitiveness at the inner os. It is hopeless to expect that the uterus can ever be made normal and that the flexion can be absolutely cured. The most that can be hoped for is some straightening of the canal. The necessity for this has been clearly seen ever since the malformation has been recognized, and various methods of treatment have been devised. Among the first was dissection of the cervix, which consisted in nicking the internal os, and enlarging the cervical canal backwards, accompanied by some dilatation. This was only occasionally successful, as the dysmenorrhea often recurred, and it left the cervix in a more or less deformed condition. It is justly relegated to a more or less complete obscurity.

Attempts to straighten the cervix by vaginal operations, such as Dudley advocated, have in my hands proved disappointing, and the explanation has been that the operation has not been directed to the seat of the trouble, namely, the internal os uteri.

Dilatation has, of course, been almost universally recognized as the appropriate treatment, and temporary dilatation without ether has so often proved of value that in some form of other it has been generally tried. The cause of failure has been the tendency of the tissues to contract, and to cause a return of the old trouble. The desideratum has therefore seemed to be to devise some method which will without danger secure as much permanency as possible.

The method I employ is not new in principles, but is the result of experience in trying to secure the best results. The essential feature is the use of a stem or plug sewn into the uterus, and allowed to remain for several weeks. The steps of the operation are as follows: Under strict antiseptic precautions, the uterus is dilated, first, with Hanks hard-rubber dilators, and then with the steel dilator of Ellinger, until it will easily admit the largest number of Hanks—which has a diameter of one centimetre. Prolonged moderate dilatation is better than more rapid extreme stretching, as by the former method the muscles are more thoroughly paralyzed, and less likely to contract immediately. To obviate the difficulty of introducing the fairly straight dilators through the curved canal, I have had some of the smaller numbers of Hanks series given a greater curve.

After thorough dilatation the uterus is carefully curetted throughout its whole extent, then irrigated through Burrage's speculum. A hard-rubber plug of the following description is then introduced. It is solid, with a flange at the lower end perforated by four equidistant holes corresponding to the anterior, posterior and lateral aspects. It has a slight anterior curve. This is pushed into place in the canal and attached to the cervix by four silver-wire sutures which pass through the cervical tissue, and the holes in the flange provided for the purpose. I found by experience that four sutures were necessary, as with two only the uterus occasionally was able to force the plug out by its contractions, the sutures cutting through.

I prefer a solid plug because a hollow tube practically does not drain, the blood and secretions collecting in it and increasing the danger of sepsis. With full dilatation, the uterus drains by the side of the plug, and if there is a temporary failure of the secretions to pass off, this is usually overcome by the contractions of the uterus in a few hours.

The patient is usually kept in bed a week. She is then allowed to get gradually about and to resume her ordinary life in a few days. She is told that while the plug remains in the uterus, she should avoid unusual exertion or fatigue. After a period of from four to six weeks, during which one menstrual period has been passed, the plug is removed by cutting the sutures.

As a rule, there is little or no general disturbance from this operation. Severe pain is the rule for a few hours after the dilatation, but it is often not so bad as at an ordinary menstruation, and subsides in a few hours. There is sometimes a feeling of discomfort at intervals all the time the plug is worn, but it does not usually interfere with the patient's going about as usual.

The question of drainage is the most important. In not more than five or six cases out of a hundred has there been any failure to drain thoroughly, as would be shown by a rise in the temperature; and in the most of these it has been a matter of only a few hours before the uterus succeeded in expelling the small amount of retained secretions by the side of the tube, and the temperature has returned to normal. Twice, or at the most three times, I have removed the tube within the first week; but in none of these was there any evidence of sepsis. I think with full dilatation, and care as regards the diet and bowels, there need be no fear of any subsequent trouble.

The results of the operation have been satisfactory, more so in my hands than by any other method of operation. Fully seventy-five or eighty per cent. have been wholly relieved, or made so comfortable that they feel satisfied. Of the remaining twenty or twenty-five per cent., the most have shown some improvement, and in only a very few instances has the operation been a failure.

Clinical Department.

TWO CASES OF CÆSAREAN SECTION.¹

BY G. H. WASHBURN, M.D., BOSTON.

MOST of the cases that have been reported thus far have been done under favorable circumstances. These have been considered worthy of notice because they were done under adverse circumstances. There was no hospital with its completeness of conveniences and its excellent nursing. There were not even the conveniences of a luxurious home. The operations were both done in country tenements.

In one case, to be sure, the house was new and the patient's family the first tenant; but in the other the house was old, the tenement a very small one of two rooms. The room where the woman was sick was about seven by fourteen feet, and contained a large double bed, bureau, washstand, table, chairs and

¹ Read before the Obstetrical Society of Boston, February 15, 1898.

trunk. The time of the operation was night, and the illumination consisted of the light of a kerosene lamp and a candle with a reflector.

The first case occurred in Manchester-by-the-Sea during the time of my summer's practice. I was called in consultation by Dr. Blaisdell, the older of the physicians of the village, to see a woman who had been in labor for about twenty-four hours. She was about thirty-eight years old, had recently married for the first time, and this was her first pregnancy.

The labor was at term, and the pains had been strong but did not seem to accomplish much. The os was so slow in dilating that the doctor had tried to dilate artificially, but found much resistance, and found also that the child's head did not seem to engage at the brim, or come down low enough to be an efficient dilator of the cervix.

It was decided that the pelvis was too small to allow the large head present to pass. The obstetrical conjugate was a little over three inches. Fetal heart was strong and good. Preparations were at once begun for operation. A few of the things in the room were removed and an operating-table improvised by laying an ironing-board across a trunk and two boxes. Over this was thrown a boiled sheet. Sheets and towels were sterilized by boiling in the wash-boiler. Dr. James M. Jackson very ably assisted me, and Dr. Glendenning, of Manchester, gave the ether. Dr. Blaisdell was ready to take the baby and resuscitate it. The patient's abdomen was scrubbed and rendered aseptic with permanganate and oxalic solutions followed with alcohol, ether and finally a lysol solution.

The abdomen was opened by a long incision in the median line, through which the uterus was lifted, or rather squeezed, out of the peritoneal cavity and packed around with hot, wet towels. A rubber tube was slipped about the cervix to be used in emergency, but dependence was placed on manual compression of the arteries in the broad ligaments, by an assistant. With one hand compressing each broad ligament, the bleeding can be absolutely controlled. The uterus was now cut in the median line, the cut passing through the placenta.

The child was seized by the head and neck and lifted out, the cord cut, and the child handed to the doctor to be started breathing. The placenta and membranes were torn off rapidly; the uterus washed out with hot lysol solution, the washing being down through the cervix and vagina; a strip of iodoform gauze was packed into the uterus and down through into the vagina. The uterus was sewed up by a double row of sutures. The muscular portion was sewed with No. 3 Leavens catgut, the stitches being about an inch apart. The sero-serous layer was sewed by a continuous suture of smaller size catgut. This prevented absolutely any bleeding from the uterus, which was well retracted. The uterus was returned now to the abdominal cavity, and the wall united by silkworm-gut sutures, and a simple aseptic dressing applied.

The patient was returned to bed in excellent condition. The baby was resuscitated quite readily, and was found to weigh eleven pounds.

The convalescence was not absolutely good at first, owing to the fact, that in the effort to be rapid in stripping off the membranes from the uterus some portions tore off and were left inside. These pieces

came away in a couple of days after an intra-uterine douche; and after that the progress was good. She was up and about in five weeks, and three months later considered herself perfectly well. She felt so well that she got out of bed several times when the nurse was out of the room, during the first ten days.

The second case was in the town of Hamilton, a patient of Dr. Thayer's. The woman, a healthy Irish woman, apparently of good build, had been in labor for a day and a half without much progress, when he called Dr. James M. Jackson in consultation. After some delay he put on high forceps, but could not bring down the head at all. I was sent for, and found the woman somewhat tired from the long-continued labor, but otherwise in good condition. The fetal heart was of good strength and regularity. Conjugate diameter three inches, os fully dilated, pains of fair strength, but accomplishing nothing.

A Caesarean operation was decided upon and preparations made at once. A fourth assistant, Dr. Swan, of Beverly, was sent for and arrived just in time to help resuscitate the baby. Sheets and towels were boiled and the same antiseptic preparations made as in the last case. Bleeding was controlled by an assistant holding the arteries in the broad ligament.

A little more time was taken in this case to peel off the membranes from the uterine wall. A lysol solution was used to wash out the uterus down through the vagina, and a strip of iodoform gauze passed through. The uterus retracted well. To prevent the collection of clots in the uterus, a good-sized strip of iodoform gauze was packed into the uterus while the stitches were being passed, and while the uterine muscle was retracting. This was taken out before the deep layer of stitches was tied. Leavens catgut, No. 3, was used for the deep sutures; No. 1 for the sero-serous continuous suture. As soon as the deep sutures were tied the compression of the broad ligaments was relaxed. The second layer of suturing made everything perfectly tight and dry.

The details of the operation were practically the same as in the first. The baby was resuscitated with more difficulty. The convalescence was excellent and uneventful. There was a slight rise of temperature on the second day, which promptly disappeared after free emptying of the bowels. At last accounts mother and baby were both very well.

TWO CASES ILLUSTRATING THE VALUE OF EXPLORATORY LAPAROTOMY.¹

APPENDICITIS. — VOMITING OF PREGNANCY.

BY EDWARD REYNOLDS, M.D.

CASE I. Mrs. C., seen with Dr. A. L. Flanders, of Jamaica Plain, on December 2, 1897. Forty-eight years old; catamenia ceased one year before. Has had six children. Has been separated from her husband for ten years, during which time she has considered herself in absolutely good health except for chronic constipation. Was thoroughly well on the morning of November 21st, but towards afternoon became chilly and feverish, and felt her clothes tight around the abdomen. The next day remained in bed, with sharp pain in the iliac region. On November 23d

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