It being now evident that this mass must give rise to such an amount of occlusion of the gut that any attempt to close the opening without removal of the mass could only afford a temporary relief, I determined to remove the affected portion of the bowel, which was done to the extent of 3 inches, and the extremities of the bowel united by Czerny-Lembert suture.

The patient rallied well after the operation, but in a couple of days became restless, vomiting frequently, his pulse rising rapidly to 120, and becoming very feeble; whilst the highest temperature recorded was 99.8° F. Delirium supervened, and he died on the fourth day with all the evidences of collapse.

On *post-mortem* examination of the abdomen, no evidence of peritonitis could be noticed; the sutured bowel was firmly united, as was also the opening into the bladder.

Microscopic examination of the portion of the bowel, which was removed at the time of operation, proved that it was affected by columnar epithelioma.

Although a fatal termination occurred in this case, I consider it fully demonstrated the feasibility, in certain cases, of laparotomy as a treatment, and, further, should it have been found that enterectomy and suturing were impossible after the abdomen was opened, the surgeon would be in a much better position to perform a laparo-colotomy than if laparo-colotomy was undertaken as the primary operation, being able to see the most favourable position to open the bowel.

I would draw attention to the fact that the bowel in this case was affected by malignant disease, although the symptoms pointed to simple ulceration; and, indeed, such might have been the diagnosis after operation were it not that the microscope proved otherwise.

VESICO- AND RECTO-VAGINAL FISTULÆ.¹

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I. VESICO-VAGINAL FISTULÆ.

COMPLETE as the labours of Gosset, Simon, and Sims appear to have been in instituting and establishing rational operative procedures for the cure of vesico-vaginal fistulæ, yet a

Fig. 1.

few failures, with consequent disappointment to patient and

¹ Read before the Manitoba Branch of the British Medical Association, Winnipeg.

surgeon, lead one to believe that the present methods of treatment may be considerably improved. Disappointing results, obtained by methods that are old and tried, induced the writer to venture an improvement of which "flap-splitting" is the central idea. As in the repair of the perineum, the success of the operation depends largely on the principle that no tissue is removed. No originality is claimed except as to the manner in which the flaps are formed and coapted by a deep buried suture.

The fistulous opening being exposed an incision is made through the mucous membrane of the vagina at the distance of the full eighth of an inch from the margin of the fistula; this incision is extended till it completely encircles the opening.

The line of incision is carefully deepened till the lining membrane of the bladder is reached, and great caution is exercised in retaining the integrity of that membrane. A stream of sterilised water directed on the wound keeps it free from blood. In this manner a circumferential flap, hinged by the mucous membrane of the bladder, is obtained. This flap is inverted into the bladder, thus forming a roof for the broad raw surface exposed, and it is held in such position by a continuous suture of fine chromic catgut, inserted in such a manner that the stitches do not pierce the wall of the bladder.

A narrow strip of vaginal mucous membrane, which, owing to its density, retains a suture well, becomes part of the lining of the bladder, and causes no disturbance in its new position. The artificial opening is now closed and watertight, and to complete the operation it is only necessary to pass and tie silkworm gut sutures on the vaginal surface in the ordinary way; great care must be taken lest these sutures include the mucous membrane of the bladder.

Fig. 2.

Fig. 3.

The vagina is carefully packed with iodoform gauze. This packing is left *in situ* for about eight days; it is then removed, the vagina is thoroughly irrigated, any loose suture withdrawn, and the packing renewed. This cleaning and dressing is repeated every five or six days for about three weeks.

In my opinion all the sutures should not be taken out on the eighth or tenth day (as recommended by so many operators); as long as a stitch is not easily moved in its bed it had better be left alone till fibrous tissue is fairly formed. When the vagina, cervix, and when necessary the uterus, have been rendered aseptic before the operation was begun, and the wound treated as above, direct union by first intention should ensue.

Figure 4 shows a sectional view of the flap inverted, sutures, and the projection into the bladder.

The chief advantages of this operation are:

1. There is no loss of tissue.
2. A very broad, raw surface is obtained for apposition.
3. At the site of the operation there is a projection into the bladder which forms a roof for the raw surface, and urine cannot trickle along sutures.
4. Should the mouth of a ureter be exposed at the edge of the fistula it is not injured, but merely turned into the bladder.

5. It obviates the danger of secondary hæmorrhage occurring into the bladder.

This operation has been successfully performed by its author three times, and in each instance union by first intention has been secured. The patient, in one instance, had been operated upon by reputable surgeons no less than four times, deriving therefrom no permanent benefit. Three weeks after the date of my operation she left the hospital perfectly and—as I have since repeatedly learned—permanently cured.

Fig. 4.

II. RECTO-VAGINAL FISTULÆ.

In looking over the literature of the treatment of recto-vaginal fistulæ, and noting the colotomies of Rose and Czerny; the episiotomy of Baker Brown, Slaviansky, Gerasimovitch, Crepsi, and Iakovleff (six cases in all) along with the rectangular flap method of Le Dentu, the writer felt justified in attempting a new procedure.

A circumferential flap is made from the vaginal surface; the incision extends to, but not through the mucous membrane of the rectum. The edge of the flap is now seized with four pressure forceps, inverted into the rectum, and a small pile clamp applied to it.

Fig. 5.

The free portion of the flap external to the clamp is burned off with the actual cautery, but the clamp is not removed until interrupted sutures of silkworm gut are inserted in the usual way without grasping the mucous membrane of the rectum, and tied on the vaginal surface. A rectal tube well wrapped with iodoform gauze is placed in the passage, while the vagina is also packed with iodoform gauze. In this manner an extensive denuded surface is secured and readily unites when properly coapted. The rectal flap is cauterised, thus lessening the liability to septic infection from that source. The rectal tube and vaginal pack further guard the wound against germs, and act as splints to ensure that rest so necessary to primary repair.

The after-treatment consists in keeping the parts as surgically clean as possible. The rectal tube is not disturbed for about a week, and when it is removed a copious enema is administered to move the bowels the first time after the operation. The rectum is washed out with plain water every twelve hours for the following week, and during that time a rectal suppository containing 5 grains of iodoform is inserted every six hours. The packing in the vagina is changed every six or eight days; the stitches are removed at intervals between the fourteenth and twenty-first days. It is better not to remove them all at one time. Previous to the first evacuation of the bowels the diet must be of a liquid consistency, and as free from excrementitious materials as possible.

My experience of the above detailed method of treating recto-vaginal fistulæ is limited to one case, which was completely cured by the one operation.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

EPIDEMIC JAUNDICE.

DR. CALVERT's letter in the BRITISH MEDICAL JOURNAL of February 3rd, on an epidemic of jaundice, decided me to give my experience of a somewhat similar epidemic I am now observing in my practice.

At the commencement of last September I was called into a cottage in a village, and found two children of the same family suffering from a mild form of catarrhal jaundice. At the same time I was shown another child from the next house with the same complaint. A few days later I came across two more cases in a house near, and after that several isolated cases in various houses in the parish. All the patients were children and the symptoms were simply those of jaundice with dyspepsia; no sign of influenza or any other infectious disease. In many cases the constitutional symptoms were so slight that the children ran about all the time.

About six weeks ago it appeared in another village about two miles distant, and I have already had several children brought to me with exactly the same symptoms, namely, jaundice, clay-coloured fæces, and very dark urine, and have heard of other cases in which the parents did not consider their children sufficiently ill to seek medical advice. All the cases soon recover on simple treatment. The epidemic has been a great puzzle to me until I read Dr. Calvert's letter. I had never heard of jaundice being in any way infectious. I am sure in my cases it was not a sequela to influenza, as at the time it appeared there was none in the district.

Bourton, Dorset.

B. POPE BARTLETT.

GONORRHOËAL INFECTION BY FOMITES.

On January 14th Mrs. P. consulted me about her daughter, aged 2 years, who was suffering from a discharge from the vulva. On separating the labia I found the parts in a catarrhal condition, bathed in pus. The hymen was intact, and it was difficult to ascertain the precise source of the discharge. Frequency of micturition and evident discomfort during performance of the act had, three or four days before, attracted the mother's attention to the child's condition. On examining another daughter, aged 4 years, a similar state of matters presented itself. I found that three weeks previously Mrs. P. had given birth to an infant which developed gonorrhœal ophthalmia, and had been treated by washing with strong nitrate of silver solution. Though specially warned of the infective nature of the pus, she admitted having used a towel employed for wiping the infant's eyes to dry the genitals of both children. Cover glass preparations of the pus from the infant's eyes and from the genitals of the sisters, stained with saturated alcoholic solution of eosin and Loeffler's blue, revealed typical gonococci. The discharge from the most recently infected case showed the largest number of cells containing the diplococcus.

Aberdeen.

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