SEQUEL TO A CASE
OF
COLOTOMY FOR VESICO-INTESTINAL
FISTULA

RECORDED IN THE LAST VOLUME OF THE 'TRANSACTIONS;'

DEATH HAVING ENSUED FROM AFFECTION OF THE
BOWEL HIGHER UP.

(ACCOMPANIED BY A PREPARATION AND DRAWING OF THE
PARTS CONCERNED IN THE DISEASE.)

BY

TIMOTHY HOLMES, F.R.C.S.,

SURGEON TO THE HOSPITAL FOR SICK CHILDREN; ASSISTANT-SURGEON
TO, AND LECTURER ON SURGERY AT, ST. GEORGE'S HOSPITAL.

Received Nov. 2nd, 1866.—Read Jan. 8th, 1867.

THE object of the following paper is to lay before the Society the termination of a very rare and highly interesting affection of the intestinal tube, by which a communication was effected between the sigmoid flexure of the colon and the bladder, leading to great distress from the passage of fæces per urethram. On this account colotomy was performed in June, 1865, and with immediate and permanent relief to the symptoms, as related in the last volume of the 'Transactions.' The diagnosis made of the case at the time was that the fistulous communication was formed between

the sigmoid flexure of the colon and the bladder, and that it was the result of simple or non-malignant ulceration. Both conclusions, it will be seen, were justified by the post-mortem examination. But after an interval of about fifteen months the fæces reappeared in the urine, and shortly afterwards they altogether ceased to pass by the artificial anus. It was feared that the ulceration had extended from the sigmoid flexure into some adjacent coil of small intestine accidentally adherent. But on post-mortem examination it was discovered that the cause of death was a similar, though independent, affection of the cæcum.

The following particulars will complete the notes of the case :

Case and post-mortem examination.—After the operation the patient recovered completely from the consequences of the intestino-vesical fistula, except that he still occasionally, and at rare intervals, passed some water per anum. This, however, did not amount to any serious inconvenience. The urine was quite clear and free from fæces.¹ The man improved greatly in health and strength, and talked about soon resuming his occupation. He still, however, suffered from occasional attacks of pain—referred to the pelvis. These pains became more severe in the latter part of the summer of 1866, and he began rather to fail in health and to lose flesh; but there did not seem any serious cause of alarm

¹ It was so on all the occasions that I procured any for examination; but it was said that he occasionally passed fæces per urethram. If this were really true, which seemed doubtful, it was at such rare intervals, and in so small quantity, that it might have been merely the result of some small masses accidentally slipping past the lumbar opening. On this subject Mr. Churchill, Mr. Faithorn's assistant, who was in attendance on the case, gives me the following information:—"The urine was perfectly free from fæces till the end of June, 1866, when a little fæcal matter passed; and then it remained free from fæces till a month before his death. At the end of August or beginning of September the water was examined and found highly purulent, but free from fæces. After the pus disappeared from the water, the fæces passed continually per urethram. No fæces were passed by the lumbar opening for the last five days of life."

until the month of September, when fæces again made their appearance in the urine, and this now became permanent. After about three or four weeks it was noticed that the artificial anus no longer transmitted the fæces, which passed entirely by the bladder. The urine also began to pass in much larger quantity through the anus, and his sufferings became very great indeed, more so than before the operation. He lost flesh rapidly, could hardly take any food, and after lingering in much distress for some time he died on October 26th.

After death Mr. Faithorn was so kind as to remove the left kidney, bladder, ileo-cæcal portion of the intestine and the whole of the large intestine down to the anus, in their natural connections, as they are now exhibited to the Society. The artificial anus is seen to be just below the lower end of the kidney, at the junction of the transverse and descending colon, and its relation to the peritoneum is well shown.

On laying open the bladder, a large irregular opening is seen by which it communicates with the large intestine. There is, in the first place, a free communication with the sigmoid flexure of the colon, which portion of the gut is drawn down to the fundus of the bladder and opens directly into it. The gut is somewhat bent at an angle in this situation, and thus considerable constriction or obstruction may at one time have been produced. But there is no appearance of malignant or other deposit in the tissue of the gut. External to the opening between the colon and bladder, and lying in the cellular tissue of the pelvis surrounding the gut, is a large lump or tumour. This has been laid open from behind in dividing the coats of the gut. It displays, on naked-eye and on microscopical inspection, no trace of malignant deposit; but, on the contrary, the thickened fibrous tissue and fat looked perfectly healthy both under the microscope and to the eye. This lump was obviously the result merely of healthy or ordinary inflammation, caused by the irritation of the disease in the gut and the passage of fæces into the cellular tissue. The cæcum was also closely adherent to the fundus of the bladder, and a similar perfo-

ration existed in its coats, so that it communicated as freely with the bladder as the colon did. There was no appreciable diminution of the calibre of this part of the intestine. A few inches of small intestine (ileum) had also been removed from the body. An ulcer of small size existed here also, and at the time of my receiving the parts the serous coat had given way; but it appeared to me as if this had taken place in handling the parts, and, on reference to Mr. Faithorn, I find that this was the case. Around this ulcer the coats of the gut were thickened, and its calibre contracted; but, on microscopic examination, no cancerous elements could be detected in the thickened portion, nor was there any appearance of cancer to the eye. That there had been no real stricture of the gut here was proved by the fact that below the ulcer it was full of fæces. The bladder also was completely full of fæces, which had passed into it from the cæcum. The only enlarged gland that could be discovered was in the omentum. It was about the size of a hazel-nut, and contained here and there a drop of pus, but no solid deposit.

EXPLANATION OF WOODCUT.

a.a.—A rod passed from the original vesical opening into the sigmoid flexure of the colon.

b.b.—A second rod passing from the subsequent vesical opening into the cæcum, near the ileocolic valve.

c.c.—A rod passed from the artificial anus into the colon, just below the kidney.

Remarks.—Although this case terminated in disappointment, as far as concerns the restoration of the patient to activity and enjoyment of life, yet I think that it only the more strikingly confirms the views which I advocated in the account of the case published in the last volume of the Society's 'Transactions.' In the first place, the post-mortem appearances entirely support the diagnosis which was made at the time of operation. There can be no doubt that, of the two openings which are present in the large intestine, the one in the sigmoid flexure of the colon was the one that

existed before the operation, and that the opening in the cæcum was formed afterwards, shortly before death, and was the cause of the failure of the artificial anus, and the miserable death which followed. It seems almost superfluous to point out, that if the perforation in the cæcum had existed before the operation, the latter would never have relieved (as it did for more than a year) the passage of fæces into the bladder. But this is perhaps too clear to need discussion. A more interesting problem is the nature of the ulceration. I am myself strongly of opinion that there is nothing specific about it; that it is neither cancerous nor tubercular, but the effect of simple inflammation, just as an ulcer on the leg might be. We see such ulcers often in the stomach, where they frequently cause sudden death by perforation. Why not in the intestine? In the œsophagus non-malignant ulceration is also common, as the 'Transactions' of the Pathological Society will show, where five cases are recorded, viz. vol. ii, p. 208; iii, p. 316; vi, p. 179; viii, pp. 175, 191. In the second of these cases the ulceration had perforated the tube and formed a communication with the pericardium; and it may be a matter of interest to notice that in the last or fifth case the patient had repeatedly suffered from abscess between the bladder and rectum. Again, we often see fæcal abscess in various parts of the intestinal tube, which is only remotely and dubiously connected with any constitutional condition, and which leaves the patient in sound health after its healing, if he can bear the irritation of the disease. My case appears to have been of this kind. Its interest pathologically lies in the occurrence of multiple ulcers in the gut, and in the singular fact that two of them should have reached the bladder, and its surgical interest in the complete success of the operation in relieving the symptoms connected with the affection as it at first showed itself in the sigmoid flexure of the colon.