ACCOUNT OF A CASE
OF
INTESTINAL OBSTRUCTION
IN WHICH
AN ARTIFICIAL ANUS WAS MADE IN THE SMALL
INTESTINE.
RECOVERY, AND SUBSEQUENT DEATH FROM CANCER AND
FATTY DEGENERATION OF THE HEART.

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ON February 11th, 1872, I was summoned to the London Hospital to consider the propriety of operative interference in a case of intestinal obstruction in a man who had been admitted on the preceding evening on the medical side of the hospital.

The patient, æt. 52, a gardener by trade, stated that he had always enjoyed good health; that his father had died of obstruction of the bowels at a very advanced age, but that otherwise his family history was good; that he had been twice married, but had not any children by either wife, and that he had never contracted any venereal disease.

In November, 1871, he began to feel a sense of weight and discomfort after taking food, and to experience difficulty in

passing his motions. This latter trouble gradually increased to such a degree that he could only procure relief of his bowels by long continued straining over hot water, and had culminated a fortnight prior to his admission into hospital in complete cessation of natural motions. Having procured medical assistance he was given purgatives which always caused vomiting, and cathartic injections which at first brought away some fæcal matter, but afterwards none whatever. Except after taking purgatives he had not any sickness or nausea. He further stated that he had been losing flesh rapidly during the last few months. Although he had not any stricture he was unable to make water; but the quantity of urine drawn off by a catheter was about normal.

His face had a pinched and anxious expression, his complexion was slightly jaundiced, his tongue foul, his abdomen tense, and everywhere resonant on percussion. The abdominal walls were so stretched, that the coils of distended intestine could be distinctly traced. He did not complain of any localised pain, but said that he felt sore and uncomfortable all over. By digital examination of the rectum I found that there was intense spasm of the sphincter muscles, and when this had been overcome I could feel that the upper part of the pelvis was occupied by a globular and very tense tumour which pressed upon the middle portion of the rectum. The passage of some flatus through a portion of this tumour while my finger was in contact with it, proved it to consist of some coils of small intestine probably forced down by the distension of the rest of the intestinal tube. With some difficulty I was able to pass a long tube for about three feet, but had to desist on account of the pain the patient experienced. When it was withdrawn there was not any trace of fæces upon it.

This was all I could learn and discover about the case. It was clearly one of obstruction, and probably caused by some malignant growth, but there was no possibility of ascertaining the exact nature or position of it. Colotomy on the left side being out of the question, and the result of such an operation on the right side being altogether uncer-

tain, I had to choose between adopting medicinal treatment, making an artificial anus in the small intestine, or making a large opening into the peritoneum and tracing out the cause and seat of obstruction. Under these circumstances I consulted my colleague Mr. Maunder, and his opinion was that the case was favorable for operation, and that to open the small intestine in the right inguinal region would give the patient the best chance of relief.

The patient having given his consent I determined to adopt this course. I had intended to make an opening through the right linea semilunaris, but when about to do so found that there was at that part an intricate anastomosis of distended superficial veins which if divided would, probably, cause inconvenient hæmorrhage. I therefore made an incision in the skin about two inches below and to the right of the umbilicus downwards and outwards for about an inch and a half. The fasciæ and the anterior layer of the sheath of the rectus abdominis muscle were then divided on a director to an equal extent, and the fibres of the rectus muscle having been separated with the handle of the scalpel, the deep epigastric artery could be felt along the outer border of the incision. The posterior layer of the sheath of the rectus and the peritoneum were next divided for about three quarters of an inch. As soon as the peritoneum was opened a quantity of clear colourless fluid gushed out, and a small portion of the bowel bulged at the wound. This I secured with three sutures on either side to the margin of the wound, and then, having made a longitudinal incision in the bowel, I attached the cut edges to the integument by six fine silk sutures. A great deal of flatus and of dark semifluid fæces at once escaped and continued to do so for some hours. An opium suppository having been administered the patient was removed to bed. His subsequent course was one of uninterrupted recovery. On the morning after the operation he said he had not felt so comfortable for months. His tongue was cleaning rapidly, and he had not the slightest tenderness on pressure. His temperature was carefully taken for some weeks, night and morning, and never rose above 99°, usually

being exactly normal. He was ordered a grain of opium every four hours, and milk and beef tea, but his appetite being excellent and his general condition good, his diet was after the first two or three days changed to four eggs, six ounces of cooked meat, bread, a quart of milk, and a little brandy. As his bowels became relieved his difficulty in making water ceased.

The discharge from the artificial anus consisted of a semi-fluid, dark green pulp, very much resembling meconium. It varied occasionally in consistence, sometimes being much more fluid and frothy, especially if he drank beer, which, when he was in health, had a tendency to cause diarrhœa. It was altogether free from any offensive smell. The only difficulty experienced in the case was from the irritation of the surrounding skin, which was excoriated for some inches round the opening, but this was soon overcome by the application of powdered starch, and at the end of the fourth week the wound was soundly healed and the patient allowed to get up. Twice, subsequently to the operation, he passed motions by the rectum. He still continued to lose flesh, but not more than the confinement might perhaps account for. As the mucous membrane had a tendency to become everted whenever he stood up, an abdominal belt was ordered for him. On the forty-eighth day after the operation, having been in his usual health and spirits during the day, towards night he was suddenly attacked with faintness and died in half an hour.

The post-mortem examination proved that the obstruction had been caused by cancer which, originating in the cardiac end of the stomach, had involved the splenic flexure of the colon, which was so constricted as to barely admit the end of the little finger. The small intestine had been opened about eighteen inches from the cæcum, and there was not the slightest trace of peritonitis. The ascending and transverse portions of the colon were greatly distended and hypertrophied, and contained about two pints of bright yellow fluid fæces. The bowel below the constriction was empty, except for some scybala lodged in the upper part of the rectum. The peritoneum and pleura were everywhere

studded with small nodules of cancer much resembling miliary tubercle. The liver was the seat of numerous secondary deposits of cancer, which had apparently developed in the sheaths of the bile-ducts. The thoracic and abdominal lymphatic glands were also extensively diseased. The heart presented a well-marked example of fatty degeneration, and death had probably resulted from failure of its action.

Although cases where an artificial anus has been established for intestinal obstruction are by no means rare, and many such have been recorded in the 'Transactions' of this Society, I think that the present case presents some features of special importance. The first point to which I would call attention is the absence of peritonitis. Mr. Erichsen, in his 'Science and Art of Surgery,' states that "intense and frequently fatal peritonitis is the inevitable consequence of any such operation. That there was none in this case was due, I think, to the operation having been done as soon as possible, and before the symptoms had become extremely urgent, to the very slight disturbance of the bowel, and to the care taken to prevent the escape of any blood or fæces into the peritoneal sac. In all the already recorded cases where the small intestine has been opened in adults the operation appears to have been regarded as a forlorn hope, and to have been deferred until the patient's condition was desperate, to have been preceded by a long course of drastic purgatives, and to have been complicated by excessive disturbance of the viscera. May not, then, "inevitable" peritonitis be fairly regarded as the consequence not so much of the operation as of its having been too long deferred and of the preceding and accompanying conditions? Of course a single case forms but a slight basis on which to form such an opinion; but I am supported in it by what occurs in operations for strangulated hernia. It is, I think, generally admitted that the peritonitis which so frequently follows such operations in hospital practice depends not so much on the mode of operation, or the opening or not of the sac, as on the intensity or duration of the preceding strangulation.

The next point of interest in the case was the fact of there being very fluid but otherwise normal fæcal matter in the portion of the bowel between the artificial anus and the obstruction. That it was so very fluid was probably due to the escape of the more solid portions through the opening in the small intestine. Had the obstacle been merely of a temporary character, which would have disappeared under medicinal treatment, the patient would have had to balance the relief experienced by the operation against the inconvenience of a fæcal fistula which might have been closed at some future period; but as it was of a malignant character, which was certain to cause his death at no very distant period, it was clearly to his advantage that bile-containing fæcal matter should pass into the large intestine, whence the bile could be reabsorbed and of such a consistence as would admit of its filtering slowly and painlessly through the constriction.

Again, it is noteworthy that the patient did recover from the operation, as Mr. Cæsar Hawkins, in a most interesting paper on the subject in the thirty-fifth volume of the 'Transactions' of this Society, states "that there is no known instance of recovery after an artificial anus has been intentionally made in the small intestine except where there has been a protrusion of a hernia."

The relative merits of lumbar colotomy and of enterotomy have been long decided, and no surgeon would hesitate to prefer the former, where the seat of obstruction was known and the operation feasible. But I think that this case suggests the propriety of enterotomy at an early period in cases of obstruction where the cause and position are unknown, or where both being known there is reasonable probability of a second obstruction higher up in the alimentary canal.

I cannot conclude this paper without expressing my great obligation to Mr. Maunder for his kind advice, encouragement, and assistance, by which I was induced to undertake an operation which, from what has been heretofore written on the subject, I should have felt great hesitation in performing.