band stretching from the brim of the true pelvis into the mesentery of the colon; at its attached end it is perhaps best described as resembling the blade of a razor set in the mesentery, the thick back portion being towards the lateral abdominal wall. As it approached the lateral surface of the bowel it became spread out to form a thin sheet, the fibres of which passed actually into the peritoneal covering of the lateral aspect of the colon. It had not contracted sufficiently to tie the bowel at all tightly to the pelvic brim, and there was no external evidence of constriction of the lumen at this point. The descending colon was throughout provided with a loose abnormal mesentery, three to four inches in length at the iliac end, and about two inches as it approached the splenic flexure, which was normally fixed in good high position. The transverse colon appeared normal but sagged rather low in the centre; this probably was partly due to the low position of the hepatic flexure. The ascending colon was greatly dilated; it also appeared to have an abnormal mesentery, but this was not easy to demonstrate, because the anterior and external surfaces were invested with an extensive Jackson's membrane spreading from the colon to the lateral abdominal wall. In places this membrane was of the thin diaphanous type usually described, but in others it presented patches and bands of firm glistening fibrous tissue which were strong enough to resist digital separation. The caecum was more grossly dilated; it was entirely within the hollow of the true pelvis, and a large, thickened, chronically diseased appendix lay on the fundus of the urinary bladder.

The caecum was readily withdrawn from its pelvic bed, there being no adhesions in that cavity. A band stretched from the anterior surface of the caecum to the front of the terminal ileum, about two inches from their junction, but this did not appear to be causing any kinking of the latter. Lane's ileal kink was not present, nor were there any gall stones. The stomach was normal in size and high in position; it showed no sign of ulcer or other disease.

As the interest of this case lies entirely in the extensive pathological features present, there can be no purpose served by describing the operative procedures carried out. They were conservative in character, though I cannot help feeling that this was a case in which nothing short of a complete colectomy could be expected to yield any great degree of permanent benefit. I may add that this is one of the very few cases of this type in which I have felt thoroughly convinced that such a drastic operation would have been (in the hands of one accustomed to performing it) completely justified.

The points of special interest in this case appear to me to be: (1) the unduly long and mobile pelvic colon; (2) the Lane's "last" kink; (3) the descending mesocolon; (4) the proptosed dilated caecum and ascending colon with mesocolon; (5) the Jackson's membrane, and its remarkable density; (6) the inability of the caecum and ascending colon to propel their contents as shown by *x* rays.

In the performance of the operation I was greatly assisted by Dr. C. P. Lankester (Surgeon to the Royal Surrey County Hospital), who had carried out the radiographic examinations which had portrayed the actual conditions found at operation with such accuracy.

TREATMENT OF STRANGULATED OBTURATOR HERNIA.

BY

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STRANGULATED obturator hernia must be regarded as a rare condition. The case here recorded is the only one that has occurred in the practice of the Bristol Royal Infirmary, which is the largest hospital in Bristol, in about twenty-five years. It might, however, fall to the lot of any surgeon, in town or country, to deal with the condition. Most of the described cases have occurred in old women. The diagnosis is usually acute intestinal obstruction, as it was in my case at the first time of strangulation, but occasionally there may be pain down the distribution of the obturator nerve, or a deep swelling beneath the origin of the adductor muscles, to suggest the correct diagnosis.

The best account of the anatomy and operative treatment of the condition with which I am acquainted is in Lejars's *Urgent Surgery*, vol. ii. Three types of obturator hernia are described.

1. The bowel may traverse the whole length of the canal, emerging from the anterior aspect, and spreading out in front of the obturator externus and under cover of the pectineus.

2. It may push through the obturator externus muscle, not through the canal with the artery and nerve, and so be encircled by muscle fasciculi.

3. It may burrow into the layers of the obturator membrane beneath the obturator externus muscle, so that that muscle covers it, as well as the pectineus, when an attempt is made to dissect down to it from the groin.

The artery and nerve bear no constant relation to the sac. Usually they are behind the neck and a little to its outer side, but cases have occurred in which the artery has formed a circle around the neck.

It is generally advised that when the condition is diagnosed the swelling should be cut down on from Scarpa's triangle by an incision an inch and a half to the inner side of the femoral artery, the pectineus muscle being either divided or retracted.

My patient, an old woman of 75, came up in March, 1921, complaining of symptoms of acute intestinal obstruction. She had been ill for four days. There was no pain, and no swelling over the obturator region. On opening the abdomen a knuckle of gut was found tightly strangulated in the obturator canal. I reduced it and buried a small gangrenous area by a purse-string suture, but did not attempt to close the canal as she was very ill.

She came up again, sent by Dr. Angell James, in January, 1923, with a recurrence of the condition, this time on the third day. Again there was no pain down the leg and no swelling, but in view of the previous history the diagnosis was obvious. I again opened the abdomen without much difficulty, pulled out the small intestine which was snared in the opening, and ascertained that it was not gangrenous. About half the diameter of the gut was nipped; it was a Richter hernia. The patient was then placed in the Trendelenburg position, and it was found that the hernial canal was about two inches long, of uniform calibre, and just admitted the finger. The position of the vessels and nerve was not identified. I made a small incision over the lower rib cartilages, excised a piece of cartilage corresponding in length and thickness to the capacity of the canal, and inserted it into the obturator canal; by means of a purse-string stitch I drew the peritoneum together so as to close the canal over the piece of cartilage, which completely filled it. All this only took five minutes. She made an uninterrupted recovery in spite of her 77 years.

Herniotomy from the groin must surely be very difficult, especially in an aged patient acutely ill. If the bowel lies between the layers of the obturator muscle, it would be more difficult still. Then there is the grave uncertainty as to where to cut to free the strangulation without dividing the artery and nerve. If gangrene is found it will be necessary to open the abdomen to repair it. Difficult surgery is generally dangerous surgery.

It would appear, therefore, better practice, even when the condition is diagnosed, as it was on the second occasion in my patient, to perform laparotomy and use the Trendelenburg position. Perhaps the hernia will be reducible without cutting the neck of the sac; if it has to be cut the surgeon may be able to see and avoid the artery, and even if it be divided there will be no difficulty in securing it. The bowel can be examined for gangrene, and treated if necessary. The only risk is that dirty fluid from the sac may get into the peritoneal cavity; probably a little does so even if the hernia is reduced from without, and it can be guarded against by careful packing and mopping.

As my case shows, an attempt ought to be made, in favourable circumstances, to close the canal, or there will be recurrence. It would be easy to do so by a purse-string suture through the peritoneum, but it is doubtful if that will be effectual when, as in my case, there is an open canal, with firm walls, inviting the peritoneum to stretch and form another sac. The peritoneum is very loose at this point. To close the canal by suture of the obturator muscle is difficult; it will not yield easily and it has to be sewn to bone or periosteum. The nerve might very likely be included and give rise to persistent pain. When the size and shape of the canal is suitable, and the contents not noticeably septic, the introduction of a piece of rib cartilage seems to be quick, safe, and effectual. Cartilage needs a very small blood supply, and can readily unite with fibrous tissue to form a firm resistant mass.

THE late Mr. Joseph Constantine, shipowner, of Northallerton, has by his will bequeathed £1,000 each to the North Riding Infirmary and the Cottage Hospital, North Ormesby, and £500 to the Rutson Hospital, Northallerton.

THE trustees of the estate of Mrs. Constance Armstrong, who bequeathed a large part of her fortune to cancer institutions, have allocated £1,600 each to the Imperial Cancer Research Fund, the Cancer Hospital, Fulham Road, London, the Cancer Charity, Middlesex Hospital, the Liverpool Hospital for Cancer, and the Caird Cancer Wards of the Dundee Royal Infirmary; also £1,040 to be used on behalf of cancer cases at the Royal South Hants Hospital; and £1,500 for the same purpose at the Royal Victoria and West Hants Hospital, Boscombe.