

ASPECTS OF TREATMENT*

Lahaut's operation for rectal prolapse

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Summary

Thirty-four patients with complete rectal prolapse were treated by Lahaut's operation in which the mobilised rectosigmoid was implanted in the posterior rectus sheath. There were no prolapse recurrences, but one patient died postoperatively. Of the 12 patients with incontinence, 11 were improved by the procedure. Lahaut's operation is a simple and effective procedure which avoids the potential problems associated with a surgical implant of Ivalon or Teflon.

Introduction

Lahaut's operation is an abdominal operation for rectal prolapse in which the mobilised rectosigmoid is fixed by implanting a segment into the posterior rectus sheath, and was first described in 1956 (1). Although the operation is cited in a major general surgical textbook (2) there are few published results. It remains a popular operation in the south west of England, and there are also some reports from India (3-5). We describe the findings of a retrospective analysis of 34 patients with complete rectal prolapse treated by this procedure.

Patients and methods

There were 34 patients with complete rectal prolapse—30 females and 4 males with an average age 66 (range 30-82) years. Of these 21 were over 70 years of age. Symptoms of prolapse (34 patients), incontinence to solid stool (12 patients), soiling (25 patients) and bleeding (20 patients) had been present for an average of 4 years. Eight patients had had previous surgery for prolapse—7 a Thiersch procedure and one an anterior resection. Follow up for an average of 7 years (range 2 months to 19 years, median 4 years) was by interview and examination in 11, questionnaire in 2, or where the patient could not be traced, a review of the hospital notes in 21. Of these, five patients had died of unrelated causes in the interval between operation and follow up.

PROCEDURE

The procedure outlined here is modified after the method of Lahaut (1), and was used in 19 cases. The patient was placed supine on the operating table and a urinary catheter passed. A left paramedian incision was made from the pubis to the umbilicus (Fig. a). The rectum was fully mobilised down to the levator ani muscle. It was not always necessary to divide

the lateral ligaments. The recto sigmoid could now be brought out of the incision and a segment selected for extra-peritonealisation. The adjacent mesentery was divided close to the recto-sigmoid in its long axis to make a slit about 5 cm long (Fig. c). Two cuts were made in the posterior rectus sheath at right angles to the incision at its upper end and about 5 cm apart (Fig. b). The lower slit may correspond with the arcuate line where the aponeurosis ends. The tongue so produced was then brought through the slit in the mesentery (Fig. d). The posterior rectus sheath and the peritoneum were closed using non-absorbable suture materials (Fig. e) leaving the recto-sigmoid segment outside the peritoneum and holding it in this position. The anterior rectus sheath and the skin and fat were then closed in the usual way. In the remaining 15 patients a more lateral incision was used, in the way previously described by Moore (6).

Results

There were 2 immediate operative complications. In one patient the rectum was perforated during mobilisation, but the operation was completed, the perforation oversewn and a transverse colostomy raised. This was subsequently closed uneventfully. In the other, the prolapse recurred in the recovery room, and the patient was immediately returned to the operating theatre where the nylon sutures were found to have come undone and were resutured. There was one death in an 82 year old patient who had a stroke in the 13th postoperative day. Two patients developed early complications; in one a wound infection and in the other small bowel obstruction at 14 days. At laparotomy this was due to herniation of small bowel through the incision alongside the extraperitonealised colon.

There were no recurrences of the prolapse, and in the 10 patients reviewed in the clinic no prolapse could be produced by straining. Of the 12 patients with associated incontinence to solid stool, only one remained incontinent with three patients continuing to soil postoperatively. Four late complications included two patients who developed faecal impaction some months after surgery, but the constipation responded to laxatives and dietary advice. One patient had an adhesion obstruction at 3 years but this settled on conservative management, and no case of obstruction of the extra-peritonealised bowel was found. The last was in a patient who developed diverticulitis in the extraperitonealised bowel and this resulted in a small faecal fistula for which she declined surgery.

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The Editor would welcome any comments on this paper by readers

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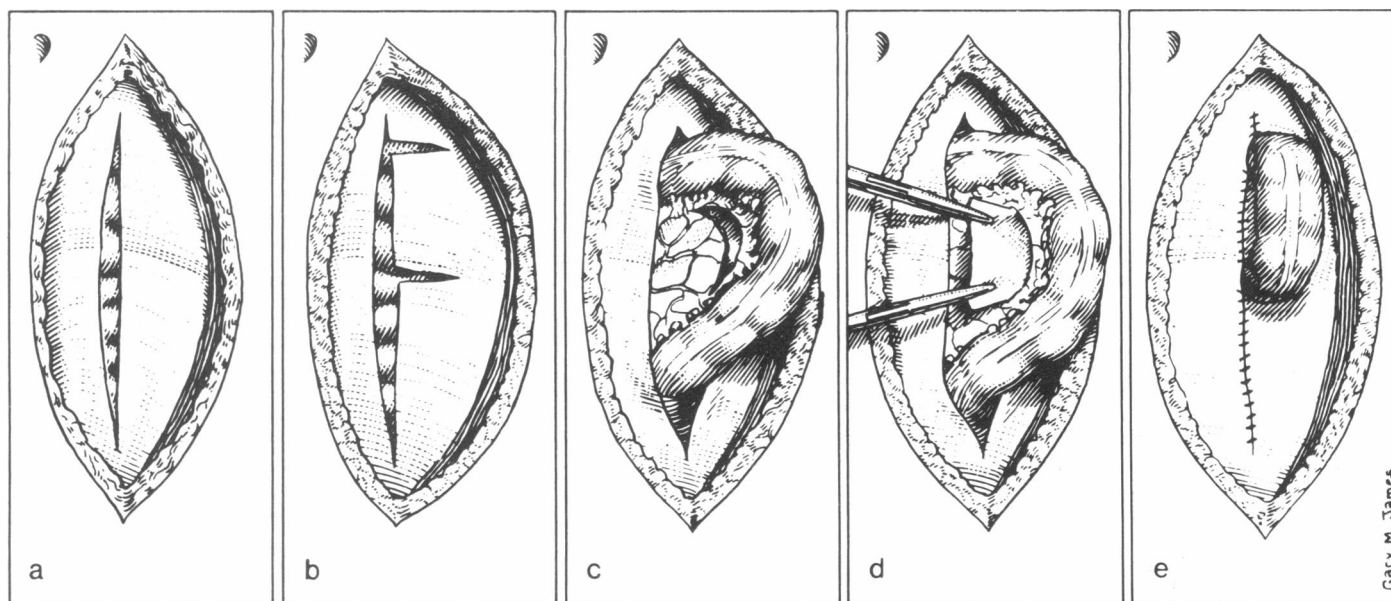


FIG. a. The rectum is mobilised through a left paramedian incision. b. Two lateral cuts are made in the posterior rectus sheath. c. The rectosigmoid mesentery is divided to make a slit about 5 cm long. d. The tongue of posterior rectus sheath is brought through the gap

in the mesentery. e. The posterior rectus sheath and peritoneum are closed using non-absorbable suture materials, holding the rectosigmoid in position.

Discussion

Jeannel described the first abdominal operation for rectal prolapse in 1896 (7) and this involved fixing the mobilised rectum to the pelvic brim and anterior abdominal wall. Pemberton and Stalker (8) at the Mayo Clinic described a similar operation in 1939, and the early results were encouraging with 5 recurrences after 56 operations (9). With longer follow up however, 17 of 52 patients had recurrent prolapse (10). The Pemberton-Stalker operation was succeeded by a number of procedures including the Ripstein procedure (11) and the Wells operation (12) both of which require the implantation of foreign material to secure the rectopexy.

An alternative to the use of an implanted material to fix the rectum was described by Lahaut (1). In his report all three cases did well, but no follow up was ever published. Moore (6) used a similar technique, placing the mobilised rectum more laterally than Lahaut, and reported 2 recurrences in 12 patients. In India the Lahaut operation is popular because it is relatively simple and avoids the use of an implanted material, which is both difficult to obtain and may become infected (4). In one series of 32 cases, no recurrences were reported in a 6 month to 5 year follow up, but one patient died with a chest infection. These results are similar to those presented in this paper and compare favourably with recurrence rates of 2 to 7% for the Ripstein operation (13) and 3% for the Wells procedure (14, 15).

Postoperative complications may arise as a result of small bowel herniating through the defect in the posterior rectus sheath caused by the rectopexy, but in the case described here and the two reported from India (16) this occurred within 2 weeks of surgery rather than some time later. A faecal fistula developing in diverticular disease in the extra-peritonealised bowel has not been previously described, and extensive diverticular disease can be considered a contra-indication to the procedure.

Lahaut's operation is a simple and reliable procedure for uncomplicated complete rectal prolapse. It avoids the special problems associated with the implantation of Ivalon or Teflon and the risk of infection. It may, however, give rise to unusual forms of incisional hernia or faecal fistula.

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