Evisceration of Small Bowel Through Rectum: A Case Report
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ABSTRACT
Evisceration of small bowel through the rectum is extremely uncommon, chronic long standing prolapse and/or increased intra-abdominal pressure being the most frequent association. Management is in line of any acute abdomen with resuscitation beginning as soon as patient arrives with covering the bowel with moist hot packs. The management of such patients depends on the general state of each individual patient. In extremely frail patients, palliative care should be instituted. Laparotomy and Hartmann’s procedure is the safest option. Here we report a case of an elderly female with full-thickness chronic rectal prolapse who presented acutely at the Emergency Department with small bowel eviscerating through the anus following it herniating through the rectum.

Keywords: chronic rectal prolapse, rectal perforation, small bowel evisceration, palliative care.

INTRODUCTION
Perforation of colon or rectum can result from numerous pathological conditions, including diverticular disease, colitis, carcinoma, penetrating/blunt trauma or iatrogenic endoscopic injury (1). Evisceration of small bowel through rectal perforation in a patient with chronic prolapse is an extremely rare presentation.

CASE REPORT
An 88-year-old woman with chronic rectal prolapse presented acutely to the emergency department by ambulance after complaining of abdominal pain and rectal bleeding. Two months prior to her admission, she had been reviewed at the surgical out-patient clinic and the diagnosis of a full thickness rectal prolapse was confirmed. A flexible sigmoidoscopy was carried out to rule out any other pathology in the left colon. No further surgical options were explored at this time as she was noted to be generally frail with severe cardiac co-morbidities, which would preclude surgical intervention. A Community Do Not Resuscitate Order was in place.

On this admission, the patient recounted a fall that morning when rising before her carers
arrived. She was mildly confused and complained of abdominal pain. On examining the patient, small bowel could be seen eviscerating through her anus (Figures 1 and 2). The small bowel on appearance seemed viable, but was coated in faecal material, suggesting evisceration through a perforation in the recto-sigmoid area. A CT scan was undertaken. This confirmed a perforation in the anterior rectal wall with small bowel passing through the defect and exiting via the anal canal (Figures 3 and 4).

Given her general frailty and after discussion with the patient, her family and the anaesthetic team, the decision was made not to attempt surgical correction but to palliate her symptoms. The patient died three days later under the care of the palliative care team.

**DISCUSSION**

Small bowel evisceration via the anus is extremely uncommon. The first documented case report was written in 1827 by Brodie et al (1). To date, a further 70 case reports have been documented in the medical literature (2). Chronic rectal prolapse appears to be the most common aetiological factor associated with the condition. A history of a sudden increase in intra-abdominal pressure prior to the event is also commonly noted (3).
The exact mechanism by which evisceration occurs has not been clearly elucidated. Jeong et al suggested that chronic prolapse results in a hernia sac between the rectum and Pouch Of Douglas which becomes stretched and attenuated over time (4). Repeated friction on the anterior rectal wall due to the recurrent prolapse leads to fibrosis and ischemia. A sudden increase in intra-abdominal pressure could then lead to perforation and subsequent small bowel prolapse (5). Other possible causes reported are forceful reductions of rectal prolapse, incision for thrombosed piles, prolapse with chronic decubitus ulcer and pressure necrosis (3, 5).

The management of this condition depends on the general state of each individual patient. In our case, palliative care was instituted as she would not have survived a surgical intervention. In a fitter patient, immediate resuscitation, intravenous antibiotics and laparotomy are recommended. The eviscerated bowel should be covered in warm saline packs until transfer to theatre. At laparotomy, the bowel should be reduced back into the abdomen, limiting further peritoneal contamination. The eviscerated bowel is checked for viability and if non-viable then resection is performed. A Hartmann’s procedure would be the safest procedure of choice to deal with the large colonic perforation. Colonic resection and primary anastomosis, with a covering stoma should only be considered in very fit individuals with limited contamination (4). A single case report mentions trans anal reduction and trans anal repair of perforation followed with Thiersch repair with covering stoma. This may be an option for high risk patients, but this local approach has not been successful in other case reports (6). In experienced hands, a laparoscopic repair may be an option (7). Some authors have attempted a simple repair of the perforation. This may be a higher risk strategy as the underlying condition of the bowel is uncertain.

Mortality is 100% if left untreated or if the bowel is only pushed back and it reduces to 46% when the bowel is reduced and the tear repaired, whereas addition of covering stoma reduces mortality to 23%. In those who had Hartmann’s resection, mortality was not reported (2). □

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References