

Eviscerated bowel through the anus: managed by primary repair of rectosigmoid perforation in a young male

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Introduction

Bowel evisceration through the anus is an uncommon condition to see and represents a true surgical emergency. Appropriate and timely surgical intervention can yield good postoperative results. Management begins at the point of first medical contact and should be individualized depending on the hemodynamic status of the patient and intraoperative findings.

Case Presentation

A 40-year-old male presented to the surgical emergency with his bowel loops protruding through the anus for the past 8 hours. On arrival, the patient had tachycardia but was normotensive. He gave a history of lower abdominal pain with protrusion of a mass through the anus during straining at defecation. Past history revealed grade 2 rectal prolapse for the past 2 years for which he has not sought medical advice. Abdominal examination revealed lower abdominal tenderness and per rectal examination showed approximately 4 feet of small bowel protruding through the anus. Bowel loops had a dusky discoloration but no signs of overt gangrene.

The patient was started on intravenous fluids and oxygen by face mask. The prolapsed bowel loops were wrapped in a sterile towel moistened with warm saline and patient was rushed to the operation theatre. A lower midline laparotomy was performed and approximately 4 feet of small bowel was seen herniating through a 4 cm tear in the rectosigmoid area (figure 1). The bowel was gently reduced into the peritoneal cavity. After adequate oxygenation and wrapping of the bowel loops with warm and moist surgical towels, examination revealed a viable small intestine. Since the margins of the rectosigmoid perforation were healthy, the patient was hemodynamically stable and there was no visible peritoneal

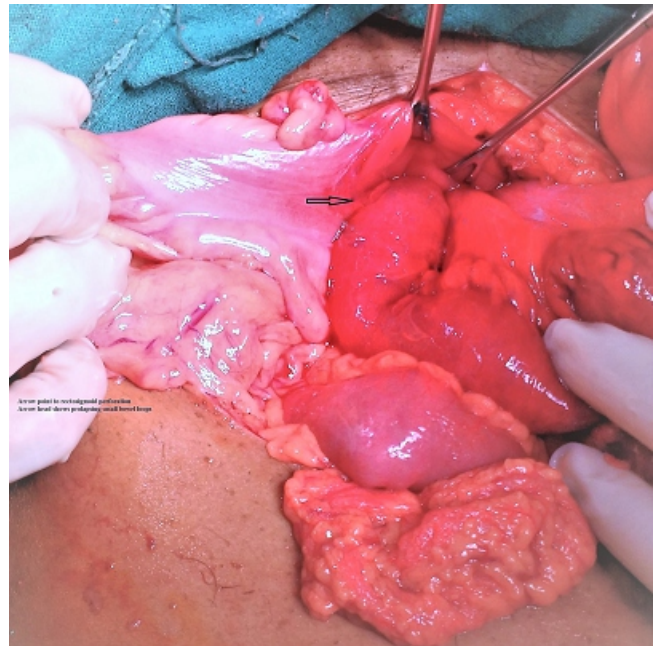


Figure 1. Small bowel herniating through the rectosigmoid perforation

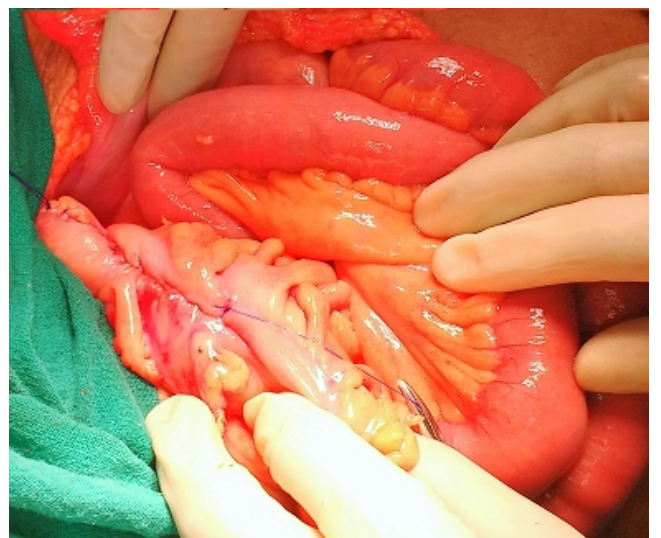



Figure 2. After primary repair of the rectosigmoid perforation

contamination, the perforation was repaired primarily (figure 2). A 28 French drain was put in the pelvis and abdomen was closed in layers.

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Postoperative Course

Postoperatively the patient was extubated and was shifted to the surgical ward. He had an uneventful recovery. He was started on liquids orally on a postoperative day (POD) 4 and was started on a soft diet on POD 5. The drain was removed on POD 6. The patient was subsequently discharged on POD 8 with the postoperative advice on stool softeners and pelvic floor muscle training exercises.

At 6 months of follow up, the patient is doing well and is planned of definitive rectal prolapse surgery for grade 2 rectal prolapse.

Discussion

Ever since its first description by Brodie¹ in 1827, bowel loops protruding through the anus continues to be a rare but important surgical emergency. Most of these cases give an underlying history of chronic rectal prolapse and increased intra-abdominal pressure is often the precipitating event.²⁻³ Early operative intervention is essential to prevent bowel ischemia and gangrene.⁴ Patients may present late if coming from remote areas with inadequate medical facilities and also due to delay in transit. It is important to wrap the eviscerated bowel loops in a sterile towel moistened with warm normal saline at the point of first medical contact.

It is a surgical emergency and does not warrant any imaging. Endoscopy can be performed in the follow-up period, to evaluate for any predisposing condition for the perforation. After an adequate initial resuscitation patient should be immediately taken to the operation theatre. The decision to do a colostomy or a primary repair is based on the degree of peritoneal contamination, hemodynamic and performance

status of the patient and margins of the perforation. A protective diverting ileostomy can be avoided if the conditions are favourable for a healthy anastomosis, but it remains a matter of surgeon's preference and experience.

Conclusion

Bowel loops through the anus, though rare represents a true surgical emergency. We report a case of a 40-year-old gentleman who presented to the surgical emergency with a grotesque picture of bowel loops through the anus. Exploratory laparotomy revealed a perforation in the rectosigmoid region with small bowel prolapsing through it. Bowel loops were repositioned back and tear was repaired primarily. We highlight the importance of timely and appropriate surgical intervention which saved a major morbidity and yielded uneventful recovery.

All authors disclose no conflict of interest. The study was conducted in accordance with the ethical standards of the relevant institutional or national ethics committee and the Helsinki Declaration of 1975, as revised in 2000.

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Learning Points:

- Spontaneous rectal perforation with eviscerated small bowel loops represents a true surgical emergency.
- Though most of the case occurs in elderly individuals with a history of chronic rectal prolapse, young individuals with a short history of rectal prolapse can also be affected.
- It is important to wrap the eviscerated bowel loops in a sterile towel moistened with warm normal saline at the point of first medical contact.
- Early operative intervention is essential to prevent bowel ischemia and gangrene.
- The decision to do a colostomy or a primary repair is based on the degree of peritoneal contamination, hemodynamic and performance status of the patient and margins of the perforation.