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## Transanal evisceration of the small bowel a rare complication of rectal prolapse

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## ABSTRACT

**INTRODUCTION:** Transanal evisceration of small bowel is an extremely rare surgical emergency. Of the nearly 70 cases reported in the literature, rectal prolapse is the predisposing factor that has been most frequently related to this pathology.

**PRESENTATION OF CASE:** We report a 78-year-old female with history of chronic rectal prolapse who presented in our emergency department with evisceration of small intestinal loops through the anus. In surgery after complete reduction of the eviscerated bowel into the peritoneal cavity, almost 20 cm of the terminal ileum up to the ileocecal valve were necrotic and therefore a right hemicolectomy with primary anastomosis was performed. Additionally a 2 cm craniocaudally tear was revealed in the antimesenteric border of the upper rectum and a Hartman procedure was also performed. The patient was discharged after 10 days.

**DISCUSSION:** Early recognition and timely surgical intervention offers the best prognosis, avoiding a fatal conclusion or an extensive intestinal resection.

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## 1. Introduction

Transanal evisceration of small bowel is an extremely rare surgical emergency with an impressive patient presentation. Less than 70 similar cases have been described in the literature since its first description by Brodie in 1827 [1]. This is the situation in which the small bowel herniates through a rupture in the rectal wall and eviscerates through the anal canal. We report a 78-year-old female with history of chronic rectal prolapse who presented in our emergency department with evisceration of small intestinal loops through the anus.

## 2. Case report

A 78-year-old woman with history of chronic rectal prolapse was referred to our emergency department, with evisceration of small bowel through anal canal after labored defecation. On examination, the patient was hemodynamically stable; her abdomen was soft without any signs of peritonitis and on limited rectal examination the sphincter had decreased tone but no palpable rectal wall defects. Approximately, 20 cm of the small bowel with its mesen-

tery was eviscerating through the anal canal which was congested and oedematous (Figs. 1 and 2).

In the emergency department, the eviscerated bowel was washed with warm saline and covered with moist towels and the patient was taken for a CT scan and then urgently to the operating room.

In surgery, the patient was placed in a modified lithotomy position and an exploratory laparotomy was performed. The eviscerated bowel was gently reduced into the peritoneal cavity. After complete reduction of the eviscerated bowel into the peritoneal cavity, a 2 cm craniocaudally tear was revealed in the antimesenteric border of the upper rectum (Fig. 3). The peritoneal cavity was thoroughly washed because of fecal contamination and the eviscerated loops were ascertained for viability. Almost 20 cm of the terminal ileum up to the ileocecal valve were necrotic and therefore a right hemicolectomy with primary anastomosis was performed. A Hartman procedure was also performed, with resection of the torn rectum and a stapled rectal stump closure.

The postoperative period was uncomplicated. The patient was discharged after 10 days, and two months later remained asymptomatic.

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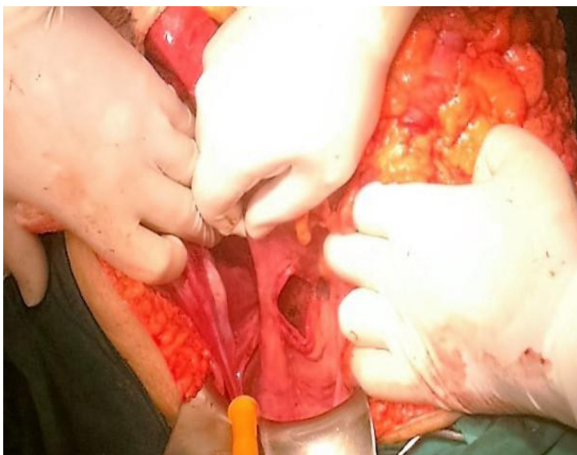
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**Figs.1.** Shows the evisceration of small bowel through anal canal in the emergency department.



**Fig. 2.** Shows the evisceration of small bowel through anal canal in the emergency department.



**Fig. 3.** Shows the tear of the antimesenteric border of the upper rectum in surgery.

### 3. Discussion

Transanal evisceration of small bowel is an extraordinary situation because of its rarity and dramatic presentation. Small bowel herniates through a breach in the rectal wall. The first time it was reported was in 1827 by Brodie [1]. Of the nearly 70 cases reported in the literature, rectal prolapse is the predisposing factor that has been most frequently related to this pathology, probably because such a prolapse induces ischemia in the neck of the hernia pouch and in the anterior rectal wall [2–5].

Other factors with spontaneous perforation were chronic constipation, enteroptosis, the existence of an underlying colorectal pathology (diverticulosis, colitis, ulceration, neoplasia) and rectal ulcerations. Traumatic rectosigmoid perforation has been reported from blunt abdominal trauma, suction injuries, and iatrogenic injuries following reduction of rectal prolapse [1,6,7].

The management of transanal evisceration of bowel rely on the viability of the herniated bowel and contamination of the peritoneal cavity, associated with co-morbidities and general condition of the patient [8].

The eviscerated bowel should be reduced into the peritoneal cavity with simultaneous support and guidance through the anal canal and the gangrenous segment of the bowel should be resected.

In reported series, when the perforation of the rectum was left untreated or only reduced, mortality was 100%. When the tear was only sutured, the mortality decreased to 46%, whereas when suturing was accompanied by a colostomy, the mortality declined to 23%. Hartmann's procedure have been reported in only three cases (including the above-mentioned), and those involved no mortalities [9].

### 4. Conclusion

Trans-anal evisceration of bowel is a very unusual surgical emergency. Elderly patients with chronic rectal prolapse and increased intra-abdominal pressure are greater risk. There are a number of options for repair though this depends on the patient's condition at presentation as well as any other co-morbidities. Early recognition and rapid preoperative management would help in efficient and prompt response in emergency setting, avoiding a fatal conclusion or an extensive intestinal resection and resulting in better recovery rates.

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None.

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