CASE REPORT

Small bowel evisceration through the anus in rectal prolapse in an Indian male patient

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SUMMARY

Evisceration of small intestine through anus is a rare presentation in emergency. We reported a case with long history of recurrent complete rectal prolapse presenting in emergency as small bowel protruding out through anal orifice. The small bowel herniated out from a spontaneous perforation in rectosigmoid. After resuscitation, emergency exploratory laparotomy was carried out and small bowel was repositioned in the peritoneal cavity through the site of perforation by pulling and pushing maneuver and the perforated segment of rectosigmoid was exteriorised as double barrel colostomy.

BACKGROUND

Evisceration of the small intestine through the anus is a rare presentation in emergency. Spontaneous rupture of the colon or rectum is also a very rare event. Perforated complete rectal prolapse and small bowel evisceration through perforation and bowel lying outside anus become extremely rare condition. Spontaneous perforation has been reported in elderly patients with chronic constipation, colonic or rectal malignancy. Presentation is with acute severe abdominal pain usually following the intake of laxatives for chronic constipation, with or without signs of peritoneal irritation. Spontaneous perforation of the colon or rectum is seen as a complication of various pathological conditions such as diverticular disease, carcinoma, colitis, blunt or penetrating trauma and injury from faulty instrumentation.¹ Protrusion of several loops of the small bowel through anal orifice through colonic, rectosigmoid or rectum perforation is a very rare presentation.

CASE PRESENTATION

A 60-year-old man was admitted to the department of surgery with a history of intermittent complete rectal prolapse for 20 years. The patient was almost fit prior to this event and never consulted a doctor for this condition and he used to manually reposit the prolapsed part. The patient noticed rectal prolapse and loops of bowel through the anus in the morning after a sudden episode of lower abdominal pain when he went for defaecation and reached the hospital 4 h after this event. There is no history of rectal trauma. At the time of admission patient was pale, in low general condition with pulse rate 120/min, blood pressure 100/70 mm Hg and respiratory rate 24/min. He was afebrile. There was a huge amount of clotted blood at the perineum with protruding small bowel (figure 1). A perforation along

Figure 1 Clinical picture showing small bowel and prolapsed rectum.

with active bleeding in prolapsed part of rectum was noticed through which small bowel protrusion was seen (figure 2).

TREATMENT

The patient was resuscitated vigorously. After stabilisation, a laparotomy was carried out by lower midline umbilical incision under general anaesthesia. There was no faecal contamination in the peritoneal cavity. The small bowel was repositioned back in peritoneal cavity by traction–pulsion maneuver (figure 3). After repositioning of the small bowel rectosigmoid colon revealed a 3–4 cm size perforation at the antimesenteric border (figures 4 and 5). After hot moist packaging and oxygenation, the small bowel, which was dusky, becomes viable pink and peristaltic. The peritoneal cavity was washed and the bleeding was controlled. The unhealthy portion of the rectosigmoid was resected and colostomy was created. The abdomen was closed in layers. The histopathology of the resected segment was consistent with the resected segment of sigmoid colon with perforation 3×4 cm in size at antimesenteric

Figure 2 Clinical picture showing small bowel and prolapsed rectum with perforation site.

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Figure 3 Intraoperatively after small bowel reposition.

Figure 4 Perforation in sigmoid colon.

border. No specific pathological lesion was found and there was no evidence of malignancy.

OUTCOME AND FOLLOW-UP

Colostomy becomes functioning after the second day. The post-operative period was uneventful and colostomy closure was performed after 3 months (figure 6; follow-up).

DISCUSSION

The small bowel evisceration through the anus is very rare. Brodie¹ was first to describe the condition in 1827. After him, there are very few cases reported in the literature. Usually this type of evisceration occurs in a prolapsed rectosigmoid colon. Increased intra-abdominal pressure is usually the precipitating factor.² The relationship between a rectal prolapse and a spontaneous perforation in its wall has been poorly understood.

Figure 5 Perforation in sigmoid colon at anti-mesenteric border.

Figure 6 Six weeks of follow-up.

Most acceptable pathophysiology seems to be a rectal prolapse in the form of a 'sliding hernia' in the pouch of Douglas and the contained viscera form the hernia sac.²⁻³ The hernia sac invaginates the anterior wall of the rectum into the rectal lumen and it usually happens at the antimesenteric border.⁴⁻⁵ This repeated insult to the wall results in ischaemia at the local site along with weakening. Increased intra-abdominal pressure which is the cause for a prolapse may also be responsible for the perforation of weak portion of a rectosigmoid wall. Other possible causes may include chronic decubitus ulcer in prolapsed rectum secondary to pressure necrosis.

The basic principle of management in such case should be like any emergency abdominal case. First adequate resuscitation should be performed and hot moist mops should be applied on the exposed bowel. Emergency surgery under general anaesthesia should be carried out with the aim of exploration. The bowel is repositioned in the peritoneal cavity and perforation is identified. The extruded small intestine should be checked for viability. The perforated area may be repaired at the same time or after some interval by creating temporary colostomy depending on the condition of the patient.⁵

This rare condition can be prevented by elimination of precipitating events, such as rectal prolapse and avoidance of conditions which heads to increased intra-abdominal pressure. In our patient we resected the unhealthy part of the rectosigmoid and create a temporary colostomy which was closed after 6 weeks.

Learning points

- ▶ Increased intra-abdominal pressure which is the cause for prolapse may also be responsible for perforation of weak portion of rectosigmoid wall.
- ▶ The perforated area may be repaired at the same time or after some interval.
- ▶ The basic principle of management in such case should be like any emergency abdominal case.

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Competing interests None.

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