

## Case Report

# Rupture of sigmoid colon with evisceration of bowel loops through the anus

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### ABSTRACT

Spontaneous rupture of sigmoid colon with small bowel evisceration through anus is rare and an acute gastrointestinal emergency. It occurs in patients with rectal prolapse. Protrusion of loops of small bowel through the anal orifice is usually associated with spontaneous rupture of the distal sigmoid colon or rectum caused by a sudden increase of intra-abdominal pressure.

**Keywords:** Sigmoid colon rupture, Small bowel evisceration, Thiersch repair

### INTRODUCTION

Spontaneous rupture of sigmoid colon with evisceration of bowel loops through anus is an acute gastrointestinal emergency. Majority of the patients have a past history of rectal prolapse.

We report a case of 35 year old male with past history of rectal prolapse who presented with protrusion of small bowel through the anus following defecation.

### CASE REPORT

A 35 year old male presented with protrusion of bowel loops through anus, following straining at defecation. He had rectal prolapse for the past two years and had not sought any medical attention. The patient had severe abdominal pain. Physical examination revealed tachycardia, hypotension and generalised abdominal tenderness. Per rectal examination showed loops of small bowel protruding through the anus (Figure 1). Examination of perineum after initial resuscitation, revealed no injuries or defects.

Surgical exploration (laparotomy), revealed haemoperitoneum which was cleared off. A tear in the anterior wall of sigmoid colon measuring 10 cms, through which bowel loops had eviscerated out was noted (Figure 2).

The bowel loops were reduced and they were found to be viable. Tear in sigmoid colon was sutured (Figure 3). Thiersch wiring was done to prevent rectal prolapse.

### DISCUSSION

Rectosigmoid rupture with prolapse of bowel through the anus is a rare condition and an emergency. The term "spontaneous rupture" describes those with no specific aetiology.<sup>1,2</sup>

Two factors predispose the patients to this unusual complication - sudden increase in intraabdominal pressure and presence of rectal prolapse.<sup>3,4</sup> Most believe that the primary mechanism of prolapse is a sliding hernia in which pouch of Douglas and the contained viscera form the hernia sac which invaginates the anterior wall of rectum resulting in weakening of the rectal wall.<sup>4,5</sup>

Bowel is examined for viability after reduction in the peritoneal cavity. The treatment of choice is repair or resection of the ruptured segment depending on the degree of contamination and patient's condition. If the degree of contamination is high, then a Hartmann operation may be needed, with restoration of bowel continuity at a later stage.<sup>4</sup>



**Figure 1: Bowel loops through the anus.**



**Figure 2: Tear in sigmoid colon.**



**Figure 3: Sigmoid colon being sutured.**

Herniation of small bowel through the colon results in obstruction of the lumen of ruptured recto-sigmoid,

blocking the passage of colonic contents into the peritoneal cavity and development of faecal peritonitis.<sup>3-5</sup>

This rare condition can be prevented by elimination of the precipitating factor-rectal prolapse.

## CONCLUSION

Spontaneous rupture of sigmoid colon with small bowel evisceration through anus is rare and an acute gastrointestinal emergency. It occurs in patients with rectal prolapse. Surgical exploration (laparotomy) to be done to examine the viability of bowel and then reduce the herniated bowel back in to the peritoneal cavity if found viable. The treatment of choice is repair or resection of the ruptured segment depending on the degree of contamination and patient's condition. If the degree of contamination is high, then a Hartmann operation may be needed, with restoration of bowel continuity at a later stage. This rare condition can be prevented by elimination of the precipitating factor-rectal prolapse.

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