

## Obstruction Due to Stomal Prolapse a Case Report

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### Abstract

### Case Report

Stomal prolapse is a common but potentially disabling complication of digestive stomas. It is characterized by excessive protrusion of the intestinal mucosa through the stomal orifice, often due to weakened fixation structures, increased intra-abdominal pressure, or technical errors during the initial creation of the stoma. This complication may remain asymptomatic or be associated with clinical manifestations such as pain, edema, altered bowel function, and in more severe cases, strangulation or bowel obstruction. We report here the case of a patient with a stomal prolapse complicated by intestinal obstruction, requiring emergency surgical management.

**Keywords:** Stomal prolapse, Intestinal obstruction, Colostomy, Irreducible, Edematous, Colorectal cancer.

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## INTRODUCTION

Stomal prolapse is a common complication of stomas, which can progress to severe forms when it becomes irreducible. In some cases, it can lead to intestinal obstruction, requiring urgent management. We present the case of a patient who developed an obstruction due to stomal prolapse, treated surgically.

## CASE REPORT

Mr. X, 68 years old, was admitted for suspected intestinal obstruction. The patient has a history of colorectal cancer, which was operated on two years ago, with the creation of a permanent left-sided colostomy. He is also being treated for well-controlled arterial hypertension and has no known drug allergies.

For the past 24 hours, the patient has reported diffuse abdominal pain, increasing in intensity, associated with nausea, abdominal bloating, and a complete cessation of bowel movements and gas. He also noted a change in the appearance of his stoma, which has progressively become more prominent, edematous, and irreducible over the past 48 hours, with no stool or gas output for the last 24 hours.

On clinical examination, the patient is conscious, afebrile (37.9°C), with blood pressure at 135/80 mmHg, heart rate at 96 bpm, and respiratory rate at 20 breaths/min. The abdomen is globally distended, tympanic on percussion, and tender to palpation, without

guarding or rigidity. Bowel sounds are diminished. The stoma appears prolapsed by approximately 12 cm, edematous, congested, and non-reducible, without apparent signs of necrosis (fig1).



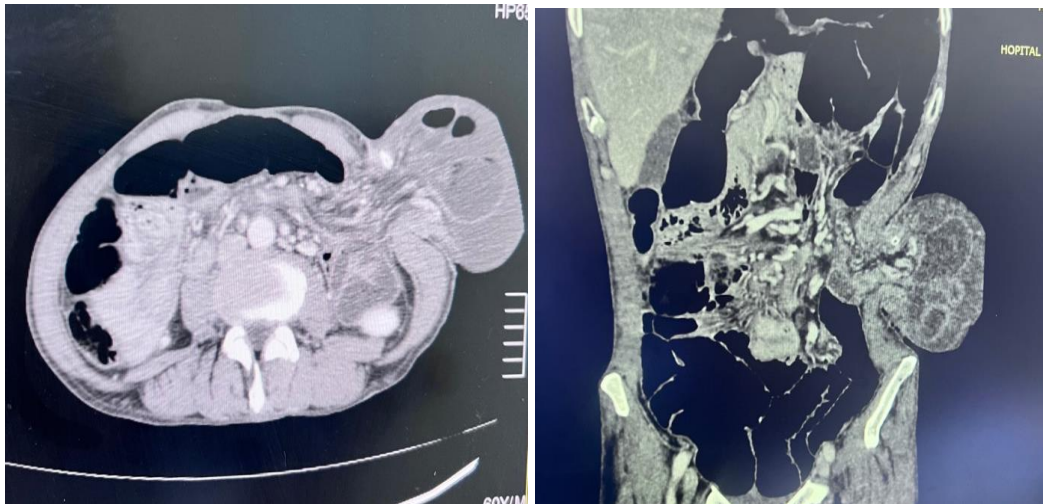
**Fig. 1: Stomal prolapse**

Blood tests show a moderate inflammatory syndrome with a CRP of 45 mg/L and leukocytosis at 11 G/L. The rest of the blood work, including the electrolyte panel, is unremarkable. A contrast-enhanced

abdominopelvic CT scan shows colonic distension upstream of the colostomy, with loops of intestine herniated into the prolapsed stoma. There is no pneumoperitoneum and no signs of bowel ischemia (fig2).

The diagnosis of mechanical intestinal obstruction due to irreducible stoma prolapse is

confirmed. The patient is maintained nil per os; a nasogastric tube is inserted, and intravenous rehydration is started. Following consultation with the digestive surgery team, emergency surgical management is planned to reduce the prolapse, revise the stoma, and consider repositioning based on intraoperative findings.



**Fig. 2: Abdominal CT scan image**



**Fig. 3: Surgical exploration: an incarcerated ileal loop was found within the stoma**



**Fig. 4: Appearance following surgical repair**

During surgical exploration, an incarcerated ileal loop was found within the stoma, with signs of bowel ischemia. The surgical procedure consisted of releasing the incarcerated ileal loop and creating a new colostomy (fig3,4). The Postoperative course was uneventful.

## DISCUSSION

Stomal prolapse is a relatively common complication of digestive stomas, particularly colostomies and ileostomies. It typically results from excessive protrusion of the intestinal mucosa through the stomal orifice. This complication is often caused by technical factors related to the creation of the stoma, such as inadequate fixation or incorrect sizing of the orifice, as well as external factors like increased abdominal pressure, obesity, or excessive physical strain. In rare cases, when the prolapse becomes irreducible, it can progress to intestinal obstruction, requiring emergency management [1,3,7].

Intestinal obstruction secondary to stomal prolapse is a severe complication characterized by abdominal distension, increasing pain, cessation of transit, and signs of tissue hypoperfusion at the stomal site, which can lead to bowel necrosis if not treated promptly. This complication can be diagnosed through a clinical examination, complemented by imaging, particularly abdominal CT, which allows for the visualization of the entrapped intestinal segment within the prolapse and the assessment of the absence of complications, such as perforation or ischemia [2,6].

The treatment of stomal prolapse complicated by obstruction generally involves emergency surgical management. The primary goal is to release the incarcerated bowel loop and perform a revision of the stoma, possibly repositioning or reconstructing it if necessary. The procedure must be performed with caution due to the high risks of infection and complications related to bowel devascularization. Additionally, strict follow-up is essential to prevent recurrence of the prolapse and other long-term complications [1,5].

Prevention of stomal prolapse relies on a meticulous stoma creation technique, careful selection of the stomal orifice location, and vigilant monitoring of patients, especially those with risk factors such as obesity, chronic constipation, or a history of multiple

abdominal surgeries. Early follow-up after stoma creation allows for the detection of prolapse signs before they progress to serious complications [4,7].

## CONCLUSION

Stomal prolapse is a complication that, although preventable, remains common and can lead to serious consequences when it progresses to intestinal obstruction. Prompt and appropriate management is crucial to prevent complications such as bowel necrosis and to improve patient outcomes. Prevention relies on a rigorous surgical technique and vigilant postoperative monitoring, especially in patients with risk factors. Long-term follow-up is crucial for minimizing recurrence and optimizing the quality of life for patients with stomas.

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