

A Case of Transverse Colon Tumor Presenting as Acute Bowel Obstruction: Surgical Management and Postoperative Challenges

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Abstract

Case Report

We present the case of a 61-year-old woman with no prior medical history who was admitted for acute bowel obstruction. Imaging studies revealed a tumor in the transverse colon causing the obstruction. Initially, a caecostomy was performed to relieve the obstruction and stabilize the patient. However, the postoperative period was complicated by a significant prolapse of the stoma, leading to discomfort and functional issues. This complication necessitated a second surgical intervention, during which an extended right colectomy, including the transverse colon, was performed, followed by an ileocolic anastomosis to restore bowel continuity. This case underscores the importance of selecting the optimal surgical strategy for malignant colonic obstructions and highlights the need for vigilance in managing potential postoperative complications.

Keywords: Bowel Obstruction, Transverse Colon Cancer, Caecostomy, Stoma Prolapse, Right Colectomy.

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INTRODUCTION

Acute bowel obstruction is a common surgical emergency, often resulting from colorectal malignancies. Effective management of obstructive colonic tumors necessitates a tailored surgical approach that considers the patient's overall condition, tumor location, and potential complications. In this report, we discuss the case of a 61-year-old woman who developed an obstructive tumor in the transverse colon, requiring staged surgical interventions due to postoperative complications.

CASE PRESENTATION

A 61-year-old woman, with no known medical history, presented to the emergency department with symptoms of acute bowel obstruction, including progressive abdominal distension, nausea, vomiting, and the absence of bowel movements. On clinical examination, her abdomen was markedly distended and tympanic, with tenderness but no signs of peritonitis.

Imaging studies, including abdominal CT scan, revealed a significantly dilated colon with a clear transition point at the transverse colon, highly suggestive of a malignant obstruction. Given the severity of the

obstruction and the risk of bowel perforation, the patient was promptly taken to the operating room for emergency surgical intervention.

During surgery, a large obstructing tumor was confirmed at the transverse colon. To alleviate the obstruction and stabilize the patient for further oncological evaluation, a caecostomy was performed as a temporary diversion. The immediate postoperative period was uneventful, with the patient showing good initial recovery.

However, within a few days, the patient developed a significant stomal prolapse, leading to discomfort and functional limitations. The prolapse was extensive and could not be managed conservatively, necessitating a second surgical intervention (figure 1).

After multidisciplinary discussion, a decision was made to perform an extended right colectomy, including the transverse colon, with an ileocolic anastomosis. This approach ensured a definitive oncological resection while simultaneously addressing the complications related to the previous caecostomy.

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The procedure was carried out successfully, with no intraoperative complications. Postoperatively, the patient had a smooth recovery, with gradual return of bowel function. No further surgical complications were observed, and she was discharged in stable condition.

This case highlights the challenges in managing acute malignant colonic obstructions and underscores the importance of selecting the most appropriate initial surgical strategy to minimize postoperative morbidity.



Figure 1: image of the stomal prolapsed

DISCUSSION

Transverse colon tumors leading to complete bowel obstruction present a complex surgical challenge due to their anatomical location and the urgency of intervention. Unlike tumors in other colonic segments, which may allow for primary resection with anastomosis, lesions in the transverse colon often carry a higher risk of complications such as perforation, ischemia, or sepsis at the time of diagnosis [1]. Management strategies must therefore balance the need for immediate decompression

with definitive oncological resection while considering the patient's overall condition and surgical risks [1, 2].

In emergency settings, diversion procedures such as a caecostomy or colostomy are commonly performed to rapidly relieve obstruction and prevent further complications, including bowel perforation and peritonitis [2]. These temporary measures create a controlled stoma, allowing decompression and time for oncological staging and treatment planning. However, while diversion procedures are effective in stabilizing

patients, they are not without risks. One of the major complications associated with caecostomy is stomal prolapse, which can cause significant discomfort, functional impairment, and potential ischemia or necrosis of the prolapsed bowel segment. In the present case, the patient developed a severe stomal prolapse, necessitating a second surgical intervention [3].

The decision to proceed with an extended right colectomy with ileocolic anastomosis was guided by both oncological and functional considerations. This approach ensures complete tumor resection while restoring bowel continuity, thereby eliminating the need for a permanent stoma [4]. Extended right colectomy is particularly advantageous in cases involving transverse colon tumors, as it provides adequate oncological margins, reduces the risk of local recurrence, and minimizes the likelihood of further complications. Additionally, by re-establishing intestinal continuity, this procedure improves long-term gastrointestinal function and enhances the patient's quality of life [5].

The postoperative recovery in this case was favorable, with a gradual return of bowel function and no immediate surgical complications. The patient was discharged in stable condition, with planned oncological follow-up to assess long-term outcomes. This case highlights the importance of individualized surgical planning in the management of malignant colonic obstructions [5]. While temporary diversion procedures remain valuable in acute settings, they must be carefully weighed against their potential complications, which may require additional surgical interventions. Close postoperative monitoring and timely reoperation when necessary are crucial to optimizing patient outcomes and reducing morbidity in such complex cases [6].

CONCLUSION

This case underscores the multifaceted challenges involved in managing malignant colonic obstruction and the potential complications associated with initial diversion procedures. The occurrence of stomal prolapse, as observed in this patient, highlights the need for careful postoperative monitoring and timely surgical intervention when complications arise. Early recognition and prompt correction of such complications are crucial in preventing further morbidity and ensuring favorable patient outcomes. The decision between initial

diversion and primary resection remains a subject of debate, particularly in emergency settings where patient stability and oncological considerations must be balanced.

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