International Surgery Journal
Bursalyan D. Int Surg J. 2025 Dec;12(12):2159-2160
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

DOI: https://dx.doi.org/10.18203/2349-2902.isj20253843

Case Report

Persistent postoperative ileus versus partial small bowel obstruction: a diagnostic and therapeutic challenge

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Received: 09 October 2025
Revised: 16 October 2025
Accepted: 04 November 2025

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ABSTRACT

Distinguishing postoperative ileus (POI) from early mechanical small bowel obstruction (SBO) remains a challenging clinical dilemma after abdominal surgery, especially among elderly, frail patients with baseline gastrointestinal dysfunction. We describe an 83-year-old man with multiple comorbidities who underwent a robotic umbilical hernia repair converted to open due to incarcerated omentum and small-bowel dilation. The postoperative course was notable for persistent abdominal distention, high nasogastric output, alternating imaging interpretations of jejunal obstruction versus ileus, severe malnutrition requiring total parenteral nutrition, multidrug-resistant urinary infection, and progressive debility. Despite partial return of bowel function, the patient remained debilitated and elected hospice care. This case underscores the diagnostic ambiguity between persistent POI and partial SBO, emphasizes multidisciplinary management, and highlights the importance of aligning treatment with patient-centered goals in frail postoperative patients.

Keywords: Postoperative ileus, Small bowel obstruction, Ventral hernia repair, Nasogastric decompression, Elderly surgery, Palliative care

INTRODUCTION

Postoperative ileus (POI) is a common but typically self-limited impairment of bowel motility after abdominal surgery, whereas early SBO represents a mechanical blockage requiring distinct management.[1,2] Prolonged POI beyond 5 days is associated with complications, longer hospital stays, and increased healthcare costs.[3,4] Adhesive or transition-point SBO is a leading cause of postoperative readmissions and may closely mimic ileus radiographically.[5,6] Enhanced recovery protocols-emphasizing early ambulation, multimodal analgesia, and early enteral feeding-reduce POI duration.[7]

We present a complex case illustrating the diagnostic and therapeutic challenges encountered when persistent ileus and partial SBO coexist following conversion from robotic to open hernia repair in an elderly, frail patient.

CASE REPORT

An 83-year-old man with irritable bowel syndrome, benign prostatic hyperplasia, peripheral vascular disease, and a history of recurrent abdominal pain presented on April 17, 2025, with three days of worsening abdominal distention and pain. He lived with his spouse, had a history of high-risk alcohol use, and denied tobacco use. He reported anxiety with morphine and abdominal pain with dicyclomine. Esophagogastroduodenoscopy revealed only a hiatal hernia, while CT imaging demonstrated a fat-containing umbilical hernia with bowel dilation. On April 28, 2025, he underwent attempted robotic umbilical hernia repair, converted to open due to incarcerated omentum and dilated small bowel without ischemia. Postoperatively, he experienced persistent distention, bilious nasogastric output up to 900 mL/day, and minimal bowel function for over ten days. CT scans alternated between findings suggestive of

jejunal obstruction and diffuse ileus. On May 11, imaging demonstrated a terminal ileal transition point consistent with partial SBO. Management included nasogastric decompression, bowel rest, IV fluids, TPN, physical therapy, and multidisciplinary consultations. Complications included ESBL *Escherichia coli* and Proteus mirabilis urinary tract infections treated with ertapenem, severe malnutrition, and intermittent delirium. By mid-May, the patient had intermittent bowel movements but ongoing high nasogastric output. With no signs of peritonitis or worsening obstruction, conservative management continued. On May 24, 2025, due to persistent debility despite partial bowel recovery, he transitioned to hospice care. Discharge diagnoses included partial SBO versus postoperative ileus, severe malnutrition, intractable abdominal pain, and complicated UTI.

DISCUSSION

This case illustrates the diagnostic overlap between POI and partial SBO following abdominal wall repair. Diffuse gaseous dilation and air-fluid levels favor ileus, while a discrete transition point suggests obstruction.[5,6] Guidelines recommend initial conservative management for stable partial SBO, including decompression, fluid optimization, and careful monitoring.[7] In elderly patients, prolonged POI is associated with higher morbidity and delayed recovery.[3,8] Conversion from minimally invasive to open surgery increases the risk of postoperative dysmotility.[1,2] Approximately 60-80% of partial adhesive SBOs resolve without surgery within 72 hours.[9] Our patient's persistent nasogastric output, infection, and malnutrition necessitated multidisciplinary care. Despite conservative management, frailty and poor recovery led to hospice transition, underscoring the importance of patient-centered goals. This aligns with prior literature emphasizing that prolonged dysfunction requires nutritional and palliative support rather than continued invasive interventions in frail patients.

CONCLUSION

Prolonged POI and partial SBO may present with overlapping features following abdominal surgery. Serial imaging and clinical correlation are critical to distinguishing between them. Multidisciplinary management, adherence to evidence-based conservative therapy, and early goals-of-care discussions optimize outcomes and prevent unnecessary intervention in debilitated patients.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

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Cite this article as: Bursalyan D. Persistent postoperative ileus versus partial small bowel obstruction: a diagnostic and therapeutic challenge. Int Surg J 2025;12:2159-60.