



Conservative Management Of Post-Appendicectomy Bowel Obstruction: A Case Study

¹Dr.Rashmi Anil Kale, ²Dr.Govind Dnyanoba Gutte

¹Professor and HOD of Dept of Shalyatantra , ²Ms Shalya (Scholar)

¹Sumatibhai shah Ayurved mahavidyalaya Hadapsar Pune,

²Sumatibhai Shah Ayurved Mahavidyalaya Hadapsar Pune

Abstract:

Postoperative small bowel obstruction (SBO) is a recognized complication of abdominal surgery, most often due to adhesions. Early recognition and appropriate management are critical to prevent morbidity. We report the case of a 53-year-old female who developed bowel obstruction 10 days after open appendicectomy. She presented with abdominal pain, distension, vomiting, and constipation. Radiological evaluation confirmed features of SBO. The patient was successfully managed conservatively with nasogastric decompression, intravenous fluids, electrolyte correction, and close monitoring. Symptoms resolved within 72 hours, and she was discharged in stable condition. This case highlights that, in the absence of strangulation or peritonitis, conservative management is a safe and effective treatment option for early postoperative SBO.

Keywords: Postoperative small bowel obstruction, Adhesions, Open appendicectomy, Conservative management

Introduction:

Small bowel obstruction is a common surgical emergency, accounting for 12–16% of hospital admissions for acute abdominal pain [1]. Postoperative adhesions are the leading cause, responsible for up to 60–70% of cases [2,3]. Although appendicectomy is one of the most frequently performed emergency operations, the occurrence of postoperative SBO is relatively uncommon but clinically significant.

The pathophysiology of early postoperative obstruction is usually related to intraperitoneal adhesions, inflammatory bands, or kinking of bowel loops near the operative site [4,5]. Clinical features include abdominal pain, distension, vomiting, and obstipation, typically within days to weeks following surgery. Most adhesive SBOs can be managed conservatively, with reported success rates of up to 70–90% [2,3].

However, timely recognition of strangulation or ischemia is crucial, as these require urgent surgical intervention [5].

We present the case of a 53-year-old female who developed early postoperative Small bowel obstruction following open appendicectomy, which was successfully treated with conservative management.

During the period of 2023–2024, a total of 694 surgical cases were performed at Sane Guruji Arogya Kendra, Hadapsar, Pune. Among these, 74 cases were appendectomies, giving a prevalence of appendectomy of 10.66%.

Case Presentation:

- **Patient profile:** A 53-year-old female presented to the surgical outpatient department with complaints of abdominal pain, distension, vomiting, and inability to pass flatus/stool for 2 days.
- **History:** The patient underwent **open appendicectomy** for acute appendicitis 10 days earlier. Recovery was initially uneventful, and he was discharged on the 4th postoperative day.
- Previous surgical history of tubal ligation
- **Examination:**
 - General: Mild dehydration, pulse 102/min, BP 110/70 mmHg.
 - Abdomen: Distension, diffuse tenderness without peritonitis, Absent peristalsis, and Absent bowel sounds.
 - Surgical wound: Healthy, no signs of infection.
- **Investigations:**
 - Hemogram: WNL (within normal limits).
 - Serum electrolytes: Mild hypokalemia.
 - X-ray abdomen (erect): Multiple air-fluid levels with dilated small bowel loops.
 - Ultrasound: Impending bowel obstruction, no collection.

Management:

- Patient was admitted and kept **nil per oral**.
- **Nasogastric tube** inserted: bilious aspirates drained.
- **IV fluids and electrolyte correction** initiated.
- Serial abdominal girth and NG output monitored.
- Antibiotics, Prokinetic and analgesics drugs administered.
- Patient mobilized early, encouraged to change position frequently.
- Over the next 48–72 hours:
 - Abdominal distension gradually reduced.
 - Bowel sounds became regular.
 - NG output decreased significantly.
 - Patient passed flatus and stools on day 3 of conservative management.

Outcome:

- Oral intake reintroduced gradually starting with clear fluids.
- Patient tolerated diet well, NG tube removed.
- Discharged in stable condition on day 5 of readmission.
- Follow-up at 2 weeks: Patient asymptomatic, normal bowel habits.

Discussion:

Post-appendicectomy obstruction is usually due to **postoperative adhesions or kinking of bowel loops near the operative site**. Most cases present within the first 2 weeks. Differentiating between simple adhesive obstruction and strangulation is critical: presence of peritonitis, tachycardia, persistent pain, or leukocytosis may mandate surgery. In this case, absence of systemic toxicity and peritonitis allowed successful conservative management.

Conclusion:

Early postoperative small bowel obstruction following open appendectomy can often be managed conservatively with bowel rest, decompression, and supportive care, provided there are no signs of strangulation or ischemia. Careful monitoring is essential to decide timely surgical intervention if the patient deteriorates.

References

1. Miller G, Boman J, Shrier I, Gordon PH. Small-bowel obstruction secondary to adhesions after appendectomy. *Ann Surg.* 2000;231(5):725–728.
2. Menzies D, Ellis H. Intestinal obstruction from adhesions—how big is the problem? *Ann R Coll Surg Engl.* 1990;72(1):60–63.
3. Parker MC, Wilson MS, Menzies D, Sunderland G, Clark DN, Knight AD, et al. The SCAR-3 study: 5-year adhesion-related readmission risk following lower abdominal surgical procedures. *Colorectal Dis.* 2005;7(6):551–558.
4. Fevang BT, Fevang J, Lie SA, Søreide O, Svanes K, Viste A. Long-term prognosis after operation for adhesive small bowel obstruction. *Ann Surg.* 2004;240(2):193–201.
5. Cappell MS, Batke M. Mechanical obstruction of the small bowel and colon. *Med Clin North Am.* 2008;92(3):575–597.

