Surgical Palliation of Malignant Small Bowel Obstruction in a Patient with Local Recurrence of Mucinous Adenocarcinoma on Active Chemotherapy: A Case Report

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Introduction

- Malignant small bowel obstruction (SBO) with peritoneal metastases presents a challenging clinical scenario
- Surgical palliation can relieve symptoms and improve quality of life even when systemic control is limited
- Procedures include decompression or stoma creation despite poor overall prognosis

Objective:
- To present a case of successful surgical palliation in a patient with recurrent mucinous adenocarcinoma on active chemotherapy

Patient

Patient History

- **Age/Sex:** 67-year-old female
- **Initial Cancer:** T4N2 mucinous adenocarcinoma
- **Prior Surgery:** Right hemicolectomy (2 years prior)
- **Current Treatment:** FOLFIRI/cetuximab chemotherapy

Disease Progression:
- Focal thickening at original anastomosis site
- Indeterminate left adnexal mass on CT
- Underwent TAH-BSO → recurrent colonic mucinous adenocarcinoma with signet ring cells identified

Resources

Santangelo, M. L., Grifasi, C., Criscitiello, C., Esposito, M. R., Esposito, G., Napolitano, M., Accurso, A., Amato, B., & Bianco, T. (2017). Bowel obstruction and peritoneal carcinomatosis in the elderly. A systematic review. Aging Clinical and Experimental Research, 29(Suppl 1), 73-78. https://doi.org/10.1007/s40520-016-0656-9
Judge, S. J., Ji, J., Liu, J., Mott, S. L., Kooshki, M., Metheny-Barlow, L. J., Tooze, J. A., Petty, W. J., Triozzi, P. L., Soto-Pantoja, D. R., & Miller, L. D. (2020). The role of palliative surgery for malignant bowel obstruction and perforation in advanced microsatellite instability-high colorectal carcinoma in the era of immunotherapy: Case report. Frontiers in Oncology, 10, 581. https://doi.org/10.3389/fonc.2020.00581

Clinical Course

Presenting Symptoms (1 year later)
- Intermittent abdominal pain
- Nausea and vomiting
- Constipation

Imaging Findings:
- Small bowel obstruction at original anastomotic site
- Nodular thickening
- Peritoneal nodules

Initial Management:
- NGT placement for decompression
- Failed non-operative management
- Proceeded to OR on hospital day 6

First Surgery: Exploratory Laparotomy:
- Findings: Carcinoma invading ileocolic anastomosis causing obstruction
- Procedure:
  - Controlled enterotomy with decompression
  - Side-to-side ileocolic anastomosis to transverse colon
  - Skin partially left open

Postoperative Complication (POD 2)
- Worsening abdominal pain
- Tachycardia, leukocytosis, hypotension

Second Surgery: Re-exploration (POD 3)
- Findings: Purulent peritonitis, gangrenous small bowel with enterotomy leak
- Procedure:
  - Small bowel resection
  - End ileostomy and mucus fistula creation
  - Abdomen partially closed

Clinical Course- continued

Recovery:
- Required pressors, meropenem for gram-negative sepsis, TPN, ventilatory support
- Gradual improvement → extubated → tolerated diet
- Discharged POD 15 from initial surgery

Discussion

Key Points:
Surgical palliation has a role in malignant bowel obstruction from recurrent disease with peritoneal spread
Can be performed even in patients on active chemotherapy
Despite significant postoperative complications in this case, surgical intervention:
- Successfully relieved obstruction
- Allowed patient recovery and discharge
- Improved quality of life

Clinical Implications:
Careful patient selection is essential
Multidisciplinary discussion recommended
Benefits must be weighed against surgical risks in advanced disease

Conclusion

Tailored surgical palliation can effectively address symptoms in advanced recurrent colorectal cancer with obstruction, including in patients on active chemotherapy.

Despite complications, this case demonstrates that surgical intervention can provide meaningful symptom relief and allow patients to return to baseline function and continue systemic therapy.