ILEOCOLIC ANASTOMOSIS VOLVULUS: A RARE PRESENTATION AND SURGICAL MANAGEMENT STRATEGY FOLLOWING RIGHT HEMICOLECTOMY

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Introduction

Intestinal volvulus, a twisting of a segment of the intestine around its mesentery, can lead to vascular compromise, closed-loop bowel obstruction, and eventual bowel necrosis. This condition may arise due to congenital malrotation, prior abdominal surgery, adhesions, or chronic constipation. Mortality rates can exceed 30%, particularly with delayed diagnosis or treatment. We present a rare case of ileocolic anastomosis volvulus with chylous ascites occurring three months after a right hemicolectomy, challenging the conventional notion that right hemicolectomy is curative for cecal volvulus. This case underscores the importance of recognizing subacute progressive presentations and the need for further investigation into standardized management strategies.

Case Description

A 57-year-old male with a history of diabetes mellitus, hypertension, and prior open right hemicolectomy for bowel obstruction presented with progressive abdominal pain, distension, and vomiting. A prior admission noted imaging findings concerning for volvulus or internal hernia, yet the patient continued to tolerate diet and pass bowel movements. Readmission imaging demonstrated worsening vascular congestion, mesenteric volvulus, and significant ascites, prompting exploratory laparotomy.Intraoperative findings included 3 liters of milky chylous ascites, severe mesenteric congestion, diffuse mesenteric lymphadenopathy, and a 360-degree counterclockwise rotation of the ileocolic anastomosis and small bowel around the root of the mesentery. Reduction of the volvulus immediately resolved obstruction and vascular compromise. The ileocolic anastomosis was severely thickened, with extensive venous collaterals.

The transverse colon was tensely distended with a transition point at the splenic flexure. Reduction was performed via a 360-degree clockwise maneuver, leading to immediate passage of colonic contents.The patient had an uneventful postoperative course, tolerated diet, and was discharged on postoperative day three. Follow-up plans included screening colonoscopy to assess for underlying colonic pathology and potential elective resection to prevent recurrence.



Figure 1. Scout of the volvulus involving the ileocolic anastomosis



Figure 2. Volvulus of the ileocolic anastomosis and majority of small bowel around SMA pedicle. Tense dilation, severe venous congestion apparent

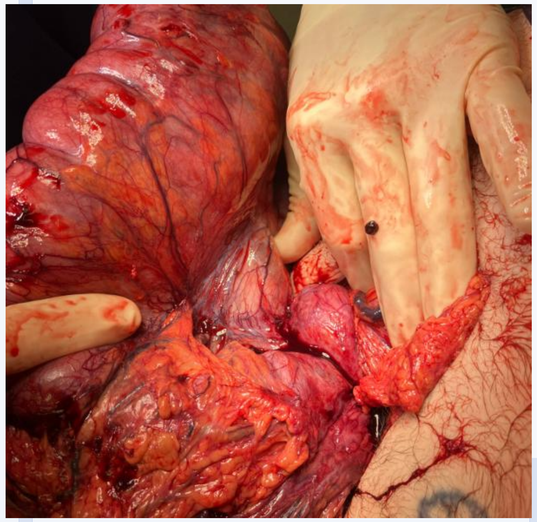


Figure 3. Close up of the mesenteric twisting of the ileocolic anasomosis and small bowel around the SMA pedicle

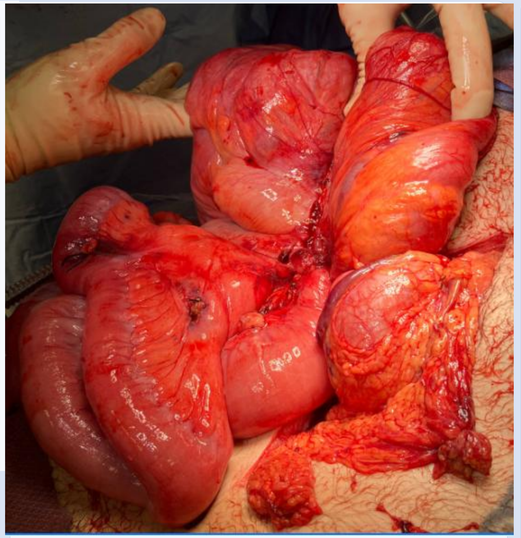


Figure 4. After 360 degree clockwise reduction of ileocolic anastomosis and small bowel about the SMA pedicle with immediate reduction in venous congestion, bowel distension, and prompt passage of contents from the dilated small bowel, through the ileocolic anastomosis

Discussion

Volvulus can present acutely or subacutely, with symptoms ranging from intermittent obstruction to acute vascular compromise. The presence of chylous ascites and severe venous congestion in this patient indicated advanced disease progression. Notably, a non-peritonitic exam, normal lactate, and evidence of bowel movement passage do not necessarily exclude the need for surgical intervention.This case challenges the notion that right hemicolectomy is definitive for cecal volvulus and highlights the potential for ileocolic anastomosis volvulus as a rare but life-threatening complication. The mesenteric closure from the initial surgery created a newly formed mesenteric stalk, which subsequently underwent volvulus, involving the superior mesenteric artery and vein.

Discussion

Had the vascular compromise progressed, this could have led to a catastrophic loss of nearly the entire small bowel.Given the lack of established management guidelines for this scenario, treatment decisions must be individualized. While colopexy has been proposed for colonic volvulus, its application to ileocolic anastomosis volvulus remains uncertain. Colonoscopic decompression, typically ineffective for cecal volvulus, was not considered due to the risk of perforation and delayed surgical intervention.

Conclusion

This unique case of ileocolic anastomosis volvulus post-hemicolectomy, accompanied by chylous ascites, highlights the need for high clinical suspicion and prompt surgical intervention, even in the absence of classic signs such as lactic acidosis or peritonitis. Although right hemicolectomy is considered definitive for cecal volvulus, this report suggests that long-term surveillance and consideration of alternative management strategies may be necessary. Future studies should aim to establish guidelines for managing similar cases to improve patient outcomes and prevent recurrence.

References

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