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IMAGE | INFLAMMATORY BOWEL DISEASE

Chronic Volvulus of the Ileal J-Pouch After Total Proctocolectomy and Ileal Pouch-Anal Anastomosis for Ulcerative Colitis

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CASE REPORT

A 39-year-old woman with medical history of ulcerative colitis managed with total colectomy and ileal pouch-anal anastomosis presented with 2-year history of diffuse lower abdominal pain radiating to the back that worsened 2 weeks before presentation. Her acutely worse pain was associated with constipation, loss of flatulence, nausea, and vomiting. She endorsed reduced pouch function for over a year with difficulty in emptying pouch and straining with bowel movements, along with episodes of abdominal bloating and pain with spontaneous resolution.

Evaluation at an outside hospital was inconclusive with contrasted computed tomography (CT) scan reporting only postoperative changes without acute findings, and flexible sigmoidoscopy reported as "unremarkable proctocolectomy ileal-anastomosis with no mucosal abnormality in the terminal ileum or the residual rectum." Pathology revealed mild focal active ileitis in the pouch.

Magnetic resonance enterography demonstrated dilation of the pouch with swirling appearance with some dilatation of more proximal small bowel loops, leading to the pouch (Figure 1).

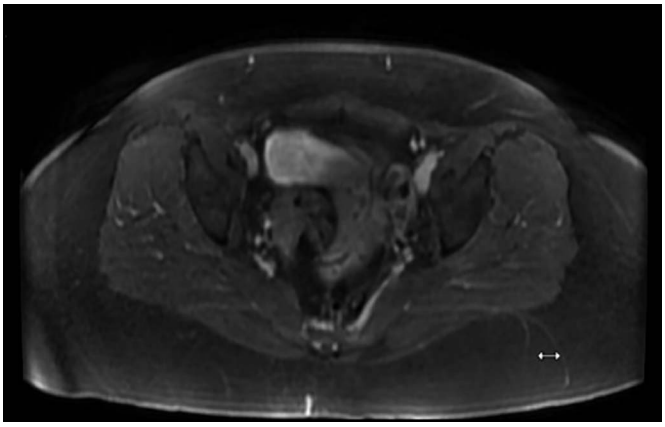

Figure 1. Magnetic resonance enterography showing a swirled appearance of the pouch.

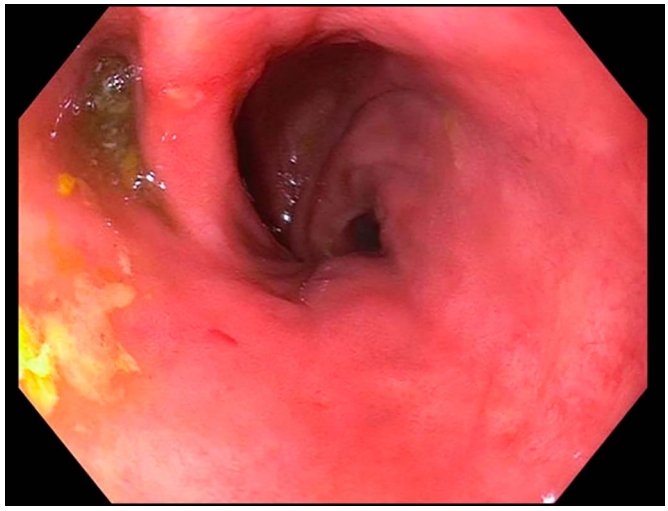

Figure 2. Pouchoscopy showing swirling of the mucosa of the pouch and blind sinus. Magnification: D.F:1 Eh:B7 Cm:1.

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Flexible sigmoidoscopy revealed torsion of the body of the pouch, seen as swirling of the mucosa in the lumen, with a blind sinus seen at the ileoanal anastomosis (Figure 2). The mucosa in the ileal reservoir was mildly erythematous, with shallow ulcerations found at the pouch inlet consistent with pouchitis. Overall, the findings were concerning for a functional obstruction secondary to mechanical dysfunction and mild pouchitis.

She underwent diagnostic laparoscopy, later converted to exploratory laparotomy because of copious adhesions. Intraoperative findings included volvulus of the pouch and twists at the duodenal area with bowel passing underneath the pedicle to the J-pouch, consistent with an internal hernia. Extensive lysis of adhesion was undertaken, followed by complete detorsion of the pouch, reduction of the internal hernia, and closure of the mesenteric defect.

Volvulus of the pouch is a rare complication, reported at 0.18% (3/1,700).[1] Contrast-enhanced CT scans are sensitive for complications of the ileoanal pouch, and magnetic resonance imaging is not commonly used.[2] In cases with high clinical suspicion of mechanical pouch dysfunction despite normal CT and laboratory values, magnetic resonance imaging and pouchoscopy should be strongly considered.[3]

Flexible pouchoscopy allows for evaluation of pouch viability and degree of necrosis and opportunity for endoscopic detorsion. In most cases, endoscopic detorsion would be technically impossible and if performed successfully would have a significantly increased risk of recurrence compared with surgical intervention, ultimately requiring surgical revision.[2,4]

DISCLOSURES

Author contributions: SM Shenoy performed review of literature and wrote the manuscript. J. Yoon and AJ Greenstein edited and reviewed the manuscript. BE Sands reviewed, edited, and supervised the manuscript writing process. SM Shenoy is the article guarantor.

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