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Brief Report

BRIEF REPORT

Endoscopic management of obstructing pouch twist

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Introduction

Restorative proctocolectomy with ileal pouch–anal anastomosis (IPAA) has been a standard of surgical management of medically refractory ulcerative colitis (UC), UC with neoplasia, or familial adenomatous polyposis. While IPAA significantly improves patients' health-related quality of life, complications are common. Common complications include anastomotic leaks, abscesses, pouch strictures, pouchitis, and fistulas [2, 3]. These complications can result in poor functioning of the pouch or even pouch failure, which requires a multimodal approach. Rare complications include afferent limb syndrome, pouch volvulus, and twisted pouch, which traditionally require surgical intervention [4–9]. This case report describes successful endoscopic management of a twisted pouch in a symptomatic patient with long-term follow-up.

Case report

A 35-year-old female presented with left-sided UC in 2015 and was managed medically on adalimumab and 6-mercaptopurine. Her UC progressed into extensive colitis 1 year later. She underwent a three-stage restorative proctocolectomy with IPAA for medically refractory UC in 2016. After stoma closure, she gradually developed symptoms of nausea, vomiting, diarrhea, significant weight loss, and abdominal tenderness. Computed tomography (CT) revealed dilated entire small bowel with possible obstruction at the pouch–anal anastomosis. She underwent a pouchoscopy in 2017 that revealed a dilated pouch lumen with a 4-cm-long cuff. There was volvulus-like axial twist in the distal pouch with the nearly complete blocking of the pouch outlet (Figure 1A). An expert colorectal surgeon was consulted and the consensus was to perform endoscopic therapy first. The twisted pouch was treated with outpatient endoscopic needle-knife septectomy with electroincision of the twisted folds, followed by the placement of two endoclips as spacers (Figure 1B). The procedure was performed with the patient being under conscious sedation, observed for 30 mins in the recovery room and discharged afterwards. This led to immediate resolution of her symptoms.

A repeat pouchoscopy 2 weeks later revealed a mild outlet stricture and this was further treated with endoscopic septectomy. A repeat pouchoscopy 6 months later showed complete resolution of the obstruction. Yearly routine pouchoscopy showed that the pouch twist remained resolved, but there was a severe circumferential anastomotic stricture. The latter was treated with endoscopic circumferential stricturotomy using the needle knife. Her last follow-up was in 2021 with the pouch twist remaining resolved on pouchoscopy.

Discussion

Twisted pouch and volvulus are rare complications of IPAA with few cases being reported in the literature [4, 5, 7–9]. Pouch twist is believed to result from poor orientation of the mesentery or adhesions. An iatrogenic twisted pouch may result in having to place the mesentery posterior or to the left of the created pouch. It is more common in women as there is more room in the pelvis. A severe twisted pouch can lead to acute or chronic pouch obstruction. Acute pouch twist requires timely management to avoid bowel necrosis and obstipation. The reported cases in the literature presented 2–5 years after surgery with pouchitis, ulceration, chronic abdominal pain, and incontinence. Diagnosis of this condition typically requires a high degree of suspicion, CT, and gastrografin enema. The patients reported in the literature have been managed surgically with adhesiolysis and derotation and fixing the pouch with or

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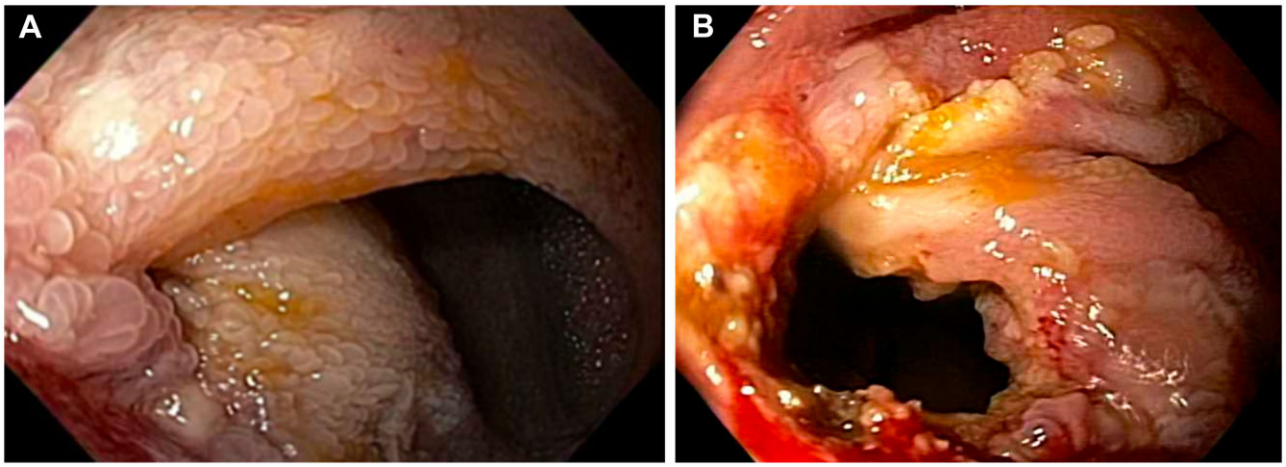

Figure 1. Endoscopy images of the patient before (A) and after (B) endoscopic septectomy.

without revision of the ileorectal anastomosis [5, 6, 8, 9]. Twists can be managed with an endoscopic approach, which avoids the need for a large open surgical procedure that can be technically challenging due to severe adhesions and might lead to increased complications and prolonged hospital stay.

This case report describes the successful endoscopic treatment of the twisted pouch with septectomy. We believe that endoscopic septectomy can be offered as a first-line therapy.

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Conflict of Interest

None declared.

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