

Endoscopic stent placement and suturing for the management of a disconnected Roux limb after bariatric surgery



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Bariatric surgery remains the most durable long-term option for weight management.¹ Although mortality related to bariatric surgery remains low, 6% to 10% of patients can present with morbid adverse events depending on the type of bariatric surgery performed.² Therapeutic endoscopy has become an accepted first-line approach for the management of most of these adverse events, either by providing definitive therapy or as a bridge to surgical revision.³ Complete dehiscence resulting in separation of the jejunal limb from

the gastric pouch (disconnected Roux limb) is an uncommon, yet serious, adverse event.^{4,5} We present an unusual case of endoscopic suturing and stent placement as a bridge to definitive surgery in a patient with a disconnected Roux limb after bariatric surgery complicated by abscess formation and multiple jejunal and colonic fistulas.

A 49-year-old woman with a history of gastrojejunal anastomotic ulcer that developed 8 years after her Roux-en-Y gastric bypass was admitted to our hospital with sepsis. CT revealed a 10-cm abscess cavity at the site of the gastrojejunal anastomosis, for which a percutaneous drain was placed. Once the patient's condition had stabilized, EGD was performed, confirming a perforated marginal ulcer and a completely dehiscent gastrojejunal anastomosis with separation of the Roux limb in the setting of a large abscess cavity (Figs. 1A and B). Both a jejunal fistula and a large transverse colon fistula opened into the abscess cavity (Fig. 2). Given her acute illness and poor nutritional status, the decision was made to proceed with endoscopic therapy before definitive surgical revision.

The overstitch endoscopic suturing system (Apollo Endosurgery, Austin, Tex, USA) was backloaded onto a double-channel endoscope and advanced into the abscess cavity (Video 1, available online at www.VideoGIE.org). The jejunal fistula was identified and successfully repaired by the use of 1 suture in a running fashion with

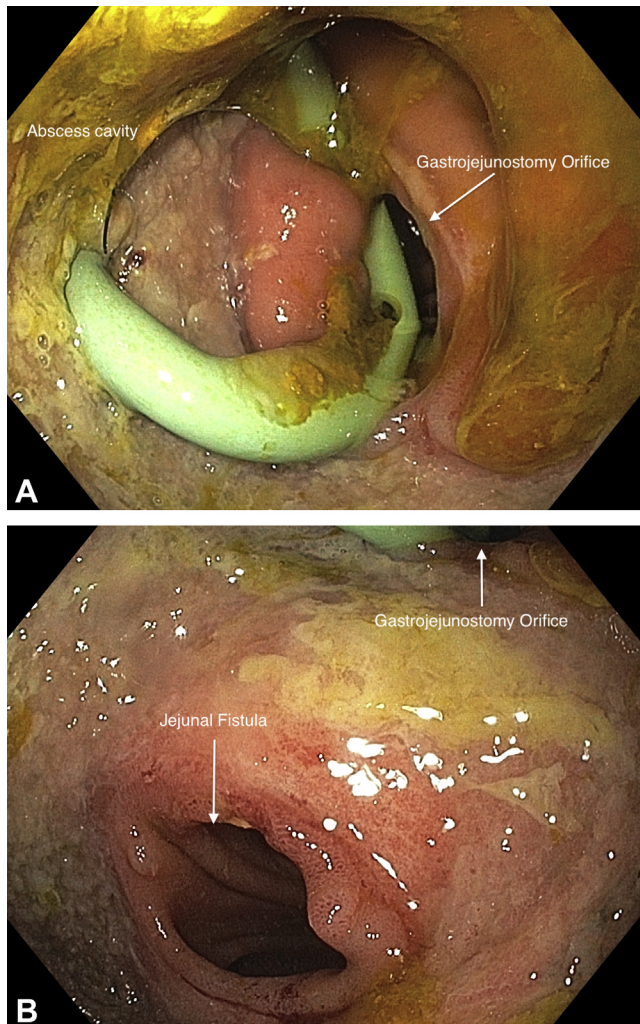


Figure 1. A, B, Abscess cavity separating the gastric pouch from the Roux limb. Evidence of percutaneous drain within the abscess cavity with both the gastrojejunostomy orifice and the jejunal fistula visible.

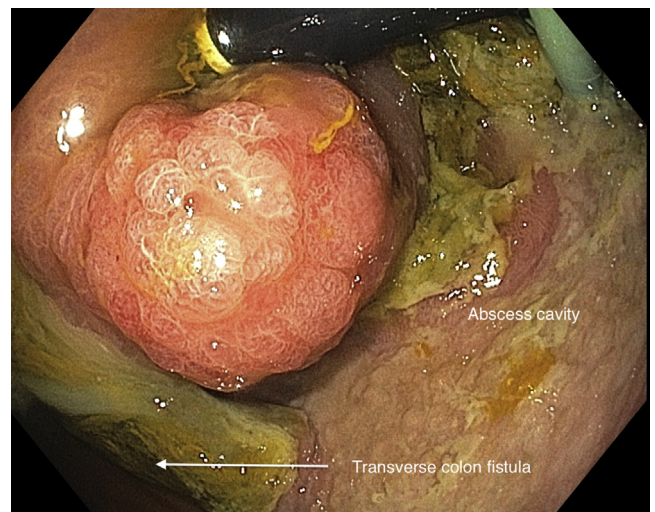


Figure 2. Retroflexed view into the abscess cavity from within the jejunal fistula. The transverse colon fistula is visible.

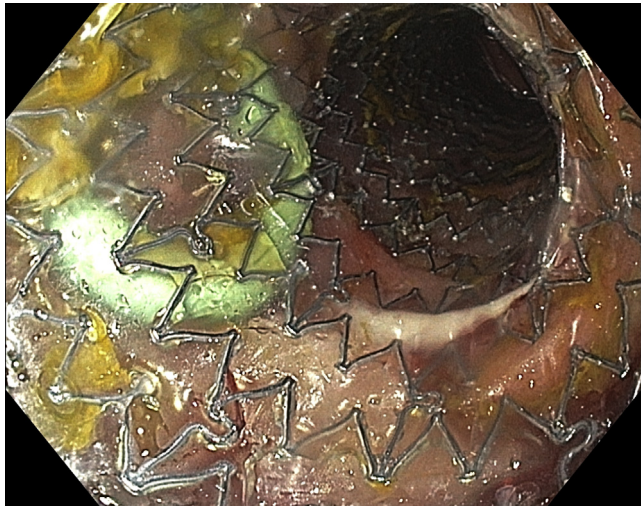


Figure 3. Two fully covered metal stents placed in overlapping fashion, ensuring sealing of the abscess cavity and successful bridging of the disconnected Roux limb to the gastric pouch.

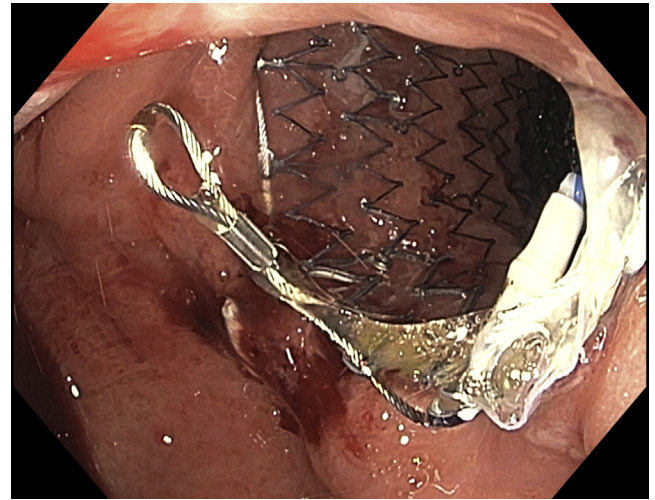


Figure 4. Proximal end of the second stent sutured to the wall of the gastric pouch to minimize the risk of stent migration.

adequate tissue approximation. Next, a 0.035-inch Jagwire (Boston Scientific Corp, Marlborough, Mass, USA) was coiled deep into the Roux limb, and a fully covered stent (Wallflex 23 mm × 150 mm; Boston Scientific) was deployed. A second fully covered stent (Wallflex 23 mm × 100 mm; Boston Scientific) was subsequently placed in an overlapping fashion, ensuring sealing of the abscess cavity and successful bridging of the disconnected Roux limb to the gastric pouch (Fig. 3). Finally, the proximal end of the second stent was sutured to the wall of the gastric pouch to minimize the risk of stent migration (Fig. 4). Injection of contrast material under fluoroscopy revealed successful passage of contrast material from the pouch into the jejunum without extravasation into the abscess cavity or colonic fistula.

The patient recovered from the procedure and subsequently underwent elective surgery after she had achieved optimal nutritional status, nearly 4 months after endoscopic intervention. Unroofing of the abscess cavity during open surgery exposed the completely dehiscenced gastrojejunal anastomosis. The overlapping endoscopic stents were in place, adequately bridging a 5-cm gap between the gastric pouch and the disconnected Roux limb. The previously endoscopically repaired jejunal fistula was intact. The gastrojejunal anastomosis was completely excised, along with the proximal portion of the Roux limb fistulizing to the colon, followed by creation of a new gastrojejunostomy. The patient's postsurgical course was uneventful, and she was discharged 1 week after surgery.

Complete dehiscence at the gastrojejunal anastomosis with separation of the Roux limb is a serious life-threatening situation. Our case clearly illustrates the expanding role of therapeutic endoscopy both as definitive therapy and as a bridge to surgery, even in the most challenging postbariatric surgery cases.

DISCLOSURE

Dr Draganov is a consultant for Boston Scientific and Olympus. Dr Yang is a consultant for Boston Scientific, US Endoscopy, and Lumendi. All other authors disclosed no financial relationships relevant to this publication.

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