

A unique treatment of “candy cane” Roux syndrome following Roux-en-Y gastric bypass: a multidisciplinary approach

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Candy cane Roux syndrome, or gastrojejunostomy blind pouch syndrome, is a rare adverse event that can occur following Roux-en-Y gastric bypass surgery. When this occurs, the excess length of the Roux-en-Y proximal limb creates a divergent reservoir for food particles to collect, rather than proceeding down the Roux limb proper toward the jejunojunal anastomosis. This abnormal anatomy can lead to symptoms of dysphagia, nausea, vomiting, and abdominal pain. Diagnosis is made by upper endoscopy or upper GI series. Definitive treatment of candy cane Roux syndrome is typically surgical resection of the blind limb; however, consideration should be given to patients with complex medical problems who may not be optimal surgical candidates for a redo operation. Here, we demonstrate the use of endoscopic suturing in the closure of the blind pouch as a bridge to more definitive intervention ([Video 1](#), available online at www.videogie.org).

A 38-year-old woman presented with a history of Roux-en-Y gastric bypass performed 15 years prior, and she had a complex medical history including recurrent admissions for alcohol withdrawal. She presented with severe nausea and vomiting, dysphagia, and inability to tolerate oral intake. The index endoscopy demonstrated a slightly stenotic gastrojejunal anastomosis and preferential passage of the upper endoscope into a dilated blind limb, which measured 11 cm and contained significant food debris ([Fig. 1](#)). Given her lack of improvement with serial dilations of the gastrojejunal anastomosis and her blind limb anatomy, we presumed that her symptoms were caused by candy cane Roux syndrome. Her case was reviewed in a multidisciplinary conference, and the decision was made to proceed with an attempt at endoscopic closure of the blind limb.

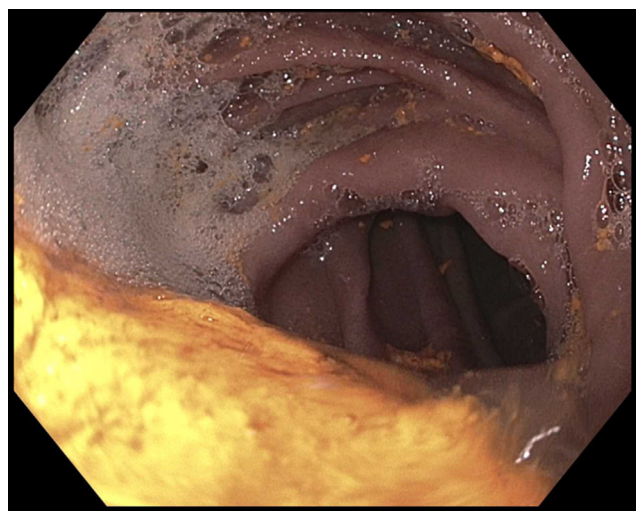


Figure 1. Stasis of oral contents in the blind limb.

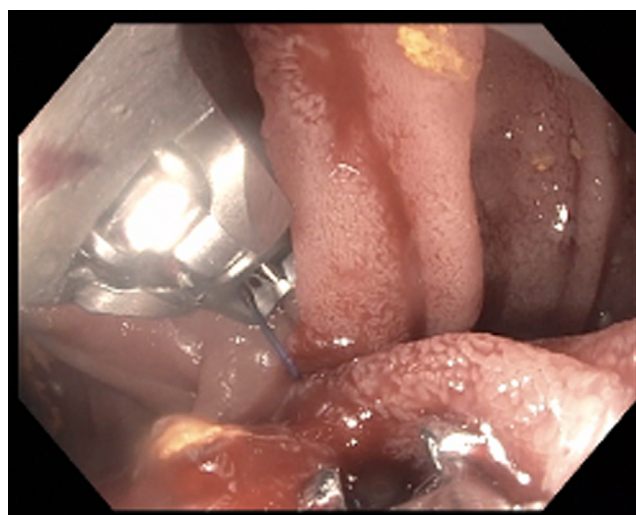


Figure 2. Placement of simple interrupted sutures to facilitate closure of the blind limb.

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Endoscopic suturing was performed with successful closure of the blind limb ([Figs. 2 and 3](#)). The patient's symptoms improved following endoscopic intervention, although the symptoms returned 6 weeks later. An upper GI series showed early preferential flow of contrast into the blind limb with subsequent flow of contrast into the Roux limb

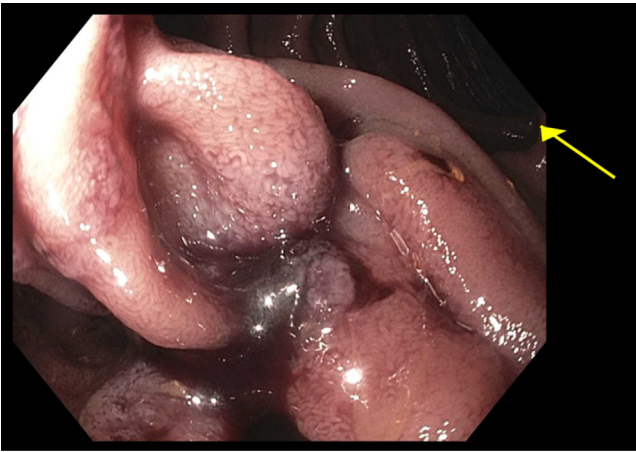


Figure 3. Successful closure following endoscopic suturing of the blind limb, enabling passage of oral intake through the Roux limb (*yellow arrow*).

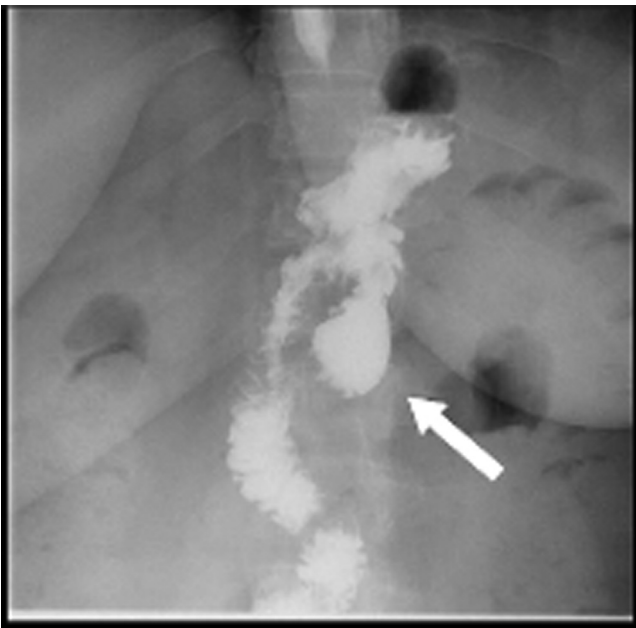


Figure 4. Upper GI series demonstrating preferential flow of contrast into the dilated blind limb (*white arrow*), suggesting the endoscopic closure was no longer intact.

(*Fig. 4*). Her case was again reviewed in a multidisciplinary conference and, given temporary complete resolution of her symptoms with endoscopic closure, the decision was made to proceed with definitive surgical intervention (*Figs. 5 and 6*). Following surgery, she reported complete



Figure 5. Identification of the blind limb laparoscopically prior to transection.

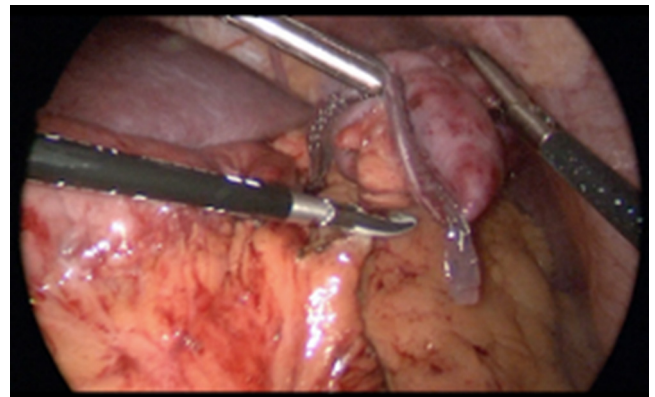


Figure 6. Surgical ligation of the blind limb.

resolution of her symptoms at her 2-week postoperative visit and continues to be symptom free 6 months later.

This case highlights the use of endoscopic intervention as a way of setting the stage for future surgical intervention, as well as the benefit to patients in being cared for by a multidisciplinary team.

DISCLOSURE

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