Roux-en-Y to the Rescue: Robotic Repair of a Gastropleural Fistula from Chronic Sleeve Leak

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Introduction

- Weight loss surgery is a highly effective approach for improving health outcomes for patients with obesity. However, accessibility to these treatments can be hindered by restrictive health insurance coverage.
- An estimated 2% of bariatric surgeries performed abroad are for medical tourism, and the facilities offer these services at 40-80% less than the cost in the US. Despite these financial incentives, significant gaps exist in follow up care and treatment of surgical complications.

Case

- Here, we present the case of a 35-year-old female who underwent a sleeve gastrectomy in Mexico in 2022. One month following surgery, her course was complicated by a proximal sleeve leak requiring prolonged hospitalization, long-term antibiotic therapy, esophageal stent placement, and percutaneous pleural drainage.
- She later returned with cavitary pneumonia requiring thoracotomy and decortication. During that hospitalization, gastric contents drained from the thoracotomy site prompting an esophagram revealing the gastropleural fistula (Image 1).
- She was transferred to our institution for evaluation by the bariatric surgical team. A feeding jejunostomy was placed and she underwent a prolonged NPO period to allow the fistula tract to mature.

Figure 1

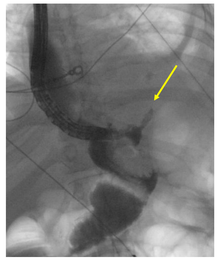


Figure 2

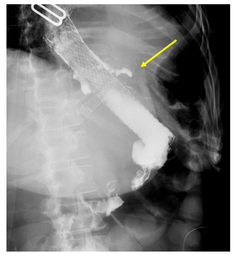


Figure 1: Swallow study demonstrating contrast leaking from the proximal stomach to the pleural space.

Figure 2: Swallow study demonstrating contrast entering the endoscopic stent within the esophagus and stomach. Contrast can be seen leaking from the proximal stomach around the stent (arrow).

Figure 3



Figure 4

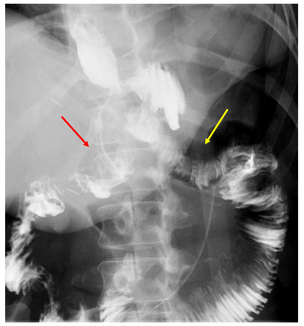


Figure 3: Illustration of anatomy of fistulajejunostomy. Ward M, Davis D, and Leeds S. When Endoscopic Therapies for Sleeve Leaks Fail: Safe Salvage Operations Including Esophagojejunostomy and Fistulajejunostomy. *Bariatric Times*. 2022;19(6):14–15.

Figure 4: Post-operative swallow study demonstrating a patent Roux-en-Y fistulojejunostomy without evidence of leak. Contrast is seen going through both the roux limb (yellow arrow) and sleeve stomach (red arrow).

Case

- In July 2024, she was taken to the OR for a robotic takedown of the gastropleural fistula, takedown of the feeding jejunostomy, and Roux-en-Y fistulojejunostomy reconstruction. After a prolonged adhesiolysis and difficult dissection around the fistula, the surgery was successfully performed.
- On post-operative day one, a fluoroscopic upper GI study was negative for a leak (Image 2). She was started on clear liquids and discharged home on post-operative day 2. She has advanced to a normal diet outpatient and is doing well.

Discussion

- Roux-en-Y fistulojejunostomy is a described technique for treating chronic sleeve leaks resulting in gastropleural fistula. Here we demonstrate a case of a gastropleural fistula treated successfully using this technique.
- Sleeve gastrectomy remains a safe and effective bariatric procedure for weight loss. Barriers to care and limited access have increased medical tourism for these procedures. As this trend grows, we must address limited access to bariatric procedures in this country and surgeons should be equipped to manage complications that may arise.