Clot busters! Relief of gastric outlet obstruction after Roux-en-Y gastric bypass

Roux-en-Y gastric bypass (RYGB) is a highly effective surgical approach for the treatment of morbid obesity [1]. Postsurgical bleeding leading to intraluminal blood clot formation causes gastric outlet obstruction (GOO) at the site of the anastomosis, and is typically managed by laparotomy or surgical revision [1,2]. Gastrojejunal clots causing GOO following laparoscopic RYGB occur in 3%-27% of patients [2]. Endoscopic dilation of gastrojejunal obstruction provides an alternative to surgical revision, but symptomatic relief may require up to three dilations [3, 4]. We present a case series of three patients who developed intraluminal blood clots at the gastrojejunal anastomosis (GJA) within 72 hours of robotically assisted RYGB surgery.

The first case was a 63-year-old woman with morbid obesity (body mass index [BMI] 42 kg/m²) who presented with persistent nausea and vomiting for 3 days after an elective RYGB. Routine upper gastrointestinal series revealed no evidence of emptying into the alimentary limb. Subsequent esophagogastroduodenoscopy revealed a large blood clot at the GJA (• Fig. 1). After unsuccessful attempts to irrigate the clot, biopsy forceps were utilized to fragment it. In addition, an 8-mm balloon was advanced twice through the clot and inflated to successfully create a lumen (• Fig. 2).

The second and third cases were a 53-year-old woman (BMI 46 kg/m²) and a 29-year-old woman (BMI 43 kg/m²), respectively, who presented with nausea for 3 days after RYGB surgery. Upper gastrointestinal series revealed retention of contrast in the gastric pouch, suggesting stricture at the GJA. In both patients, a 10-mm gastroscope was used to break up the clot, and create a lumen through which passage into the alimentary limb was possible (**Pig. 3** and **Pig. 4**).

All three patients experienced relief of GOO without undergoing surgical revision, resulting in a shorter hospital stay and lower morbidity [4,5]. Moreover, these cases show that a single dilation may be sufficient to provide relief.

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Fig. 1 Intraluminal blood clot at the gastroiejunal anastomosis.



Fig. 2 Endoscopic image showing balloon dilation of the stricture made by the clot.



Fig. 3 Lumen created by the endoscope to relieve the obstruction.



Fig. 4 Passage of the endoscope into the rest of the alimentary limb after creation of the