Sleeve gastrectomy leak: endoscopic management through a customized long bariatric stent

Figure 1. **A**, Endoscopic view of perigastric cavity and septum below the GEJ. **B**, Radiographic view of stomach with flow of contrast medium through leak orifice. **C**, Totally covered nitinol stent, 200 mm × 28 mm × 30 mm. **D**, Radioscopic control: stent positioned 3 cm above GEJ, in a transpyloric manner. **E**, Stent removal: proximal suture grasped by raptor forceps, with removal under radiologic control. **F**, Radiographic control after stent removal, showing resolution of axis deviation and closure of leak orifice. *GEJ*, gastroesophageal junction.

A 28-year-old woman, body mass index 35 kg/m², underwent laparoscopic sleeve gastrectomy, without drain placement. Twelve days later, she experienced abdominal pain with radiation to her left shoulder, fever, and leukocytosis. The patient was admitted with a clinical diagnosis of gastric leak. Endoscopy showed a leak orifice below the gastroesophageal junction (GEJ), allowing passage to a

perigastric cavity, with a small amount of purulent fluid and debris (Figs. 1A and B). This cavity was endoscopically washed with saline solution until the return of fluid was clear. The stomach had an axis deviation to the right, creating a stricture at the level of the incisura angularis, with difficult endoscope passage. A customized metallic bariatric stent (totally covered

Written transcript of the video audio is available online at www.VideoGIE.org.

nitinol stent, 200 mm × 28 mm × 30 mm, Expand Stent, Plastimed S.R.L., Buenos Aires, Argentina) was placed, with the patient under general anesthesia (Fig. 1C; Video 1, available online at www.VideoGIE.org). The stent was placed 3 cm above the GEJ, with the distal end on the duodenum, by use of a guidewire, under radioscopy guidance (Fig. 1D). No sutures, clips, or other fixation methods were used. Antibiotic agents already prescribed for sepsis control by the surgical team were maintained. For 3 days the patient experienced thoracic pain, moderate nausea, and biliary vomiting as a result of the stent diameter and position in the duodenum. A control radiograph showed the stent in a proper position.

The patient was discharged on the fourth day after stent placement, with a liquid diet, a proton pump inhibitor agent, antiemetic agents, and instructions to sleep in a semisitting position. On the seventh day, a radiograph with contrast medium showed good flow through the stent, which was in a good position. During the following weeks, her diet was progressed to soft foods, and the patient had no pain, with occasional biliary vomiting. After 3 weeks, the patient was readmitted for stent removal. Endoscopy showed the stent in the proper position, with small tissue ingrowth at the proximal end. There was exuberant tissue formation at the distal end, but with lumen patency. Associated with this, an asymptomatic shallow

ulcer was seen on the duodenum. The stent was removed with the aid of a raptor forceps (US Endoscopy, Mentor, Ohio) without difficulty (Fig. 1E). Endoscopic revision showed resolution of the axis deviation and closure of the leak, confirmed by radiograph with contrast medium (Fig. 1F). At a 3-month follow-up visit, the patient was asymptomatic.

DISCLOSURE

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