Endoscopic septotomy for fistula after bariatric surgery

Gastric fistula following bariatric surgery is a complication with considerable morbidity and mortality [1, 2]. After Roux-en-Y gastric bypass (RYGB), the gastric pouch may develop a chronic fistula and the formation of a perigastric cavity bounded by a septum. The altered anatomy chronically elevates the intraluminal pressure, impairing emptying of the perigastric cavity and perpetuating the fistula [3].

Endoscopic septotomy is a minimally invasive technique for cutting the septum. The goals are ensuring adequate patency of the perigastric cavity, decreasing its pressure, and draining the fistula [1, 4, 5]. A 67-year-old woman underwent a RYGB (body mass index: 48 kg/m² before, 25 kg/m² after). She developed a gastrocutaneous fistula, which was unsuccessfully treated with a long-term nasoenteric tube. Eight months after RYGB, she was referred for endoscopic assessment (Video 1). Sutures were identified in the greater curvature of the gastric pouch. They were removed with endoscopic scissors and a perigastric cavity (bounded by a septum) with a fistula orifice in it was identified. The fistula orifice was initially treated with argon plasma coagulation and a guidewire was externalized through the fistula's cutaneous orifice (Fig. 1), with placement of a 7-Fr double-pigtail stent in the fistula tract. After 3 months, the gastrocutaneous leak was reduced but not resolved. We removed the pigtail, performed a septotomy with an IT knife, and placed an esophageal fully covered (28 × 160 mm) self-expandable metal stent. The proximal end of the stent was fixed by endostitch to avoid migration. After 1 week, the stent was removed and the patient was able to take a soft diet. Four weeks later, the cutaneous fistula orifice was closed (Fig. 2) and esophagogastro-duodenoscopy confirmed closure of the fistula's gastric orifice (Fig. 3). At 3 weeks' follow-up, the patient was asymptomatic and doing well on a regular diet.

Competing interests

The authors declare that they have no conflict of interest.
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References

Fig. 3 Endoscopic appearance of the perigastric cavity: a after suture removal, b after 7-Fr double-pigtail insertion through the fistula orifice, and c after treatment with argon plasma coagulation and 7-Fr double-pigtail stent. d Closed fistula after septotomy (final appearance).

Bibliography
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