EUS-guided drainage with LAMS to treat a refractory micro-fistula after sleeve gastrectomy: Widen the fistula if you cannot seal it



A 26-year-old female with a history of sleeve gastrectomy presented with a leak and underwent surgical drainage. She had recurrent sepsis 3 days later due to a perigastric abscess.

An esophageal stent $(23 \text{ mm} \times 15 \text{ cm})$ was deployed [1-3] and sutured to the wall.

The abscess was aspirated percutaneously. A percutaneous drain could not be placed due to a difficult location. She was discharged.

Three weeks later, the patient had a recurrent abscess (▶ Fig. 1). The stent was removed and no patent orifice was identified. Pneumatic dilation of narrowing at the incisura angularis [1–3] was performed (30-mm balloon, PSI 15). Endoscopic ultrasound (EUS)-guided drainage using a double pigtail stent was performed (▶ Fig. 2) and the patient was discharged.

After confirming resolution of the abscess the stent was removed, pneumatic dilation was repeated, and the site of entry was sutured. An upper gastrointestinal series showed no leakage.

Two months later, the patient had a recurrent abscess. Pneumatic dilation was repeated, followed by EUS-guided drainage using a hot LAMS (1.5 cm) (▶ Fig. 3). The abscess was lavaged. Two double pigtail stents were deployed inside a lumen apposing metal stent (LAMS). A nasoduodenal feeding tube was placed. The patient was discharged.

After confirming resolution of the abscess, the stents and the feeding tube were removed. A septum separated the cavity from the gastric lumen (> Fig. 4). Septotomy [4] and pneumatic dilation were performed (> Fig. 5). The patient was discharged.

Endoscopy 3 months later showed epithelialization of the cavity (▶ Fig. 6). The patient has been asymptomatic for the last 4.5 months.

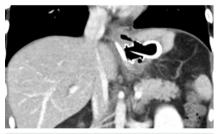
▶ VIDEO



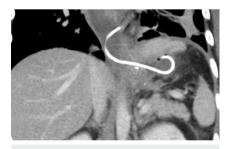
▶ Video 1 Endoscopic management of a refractory leak after sleeve gastrectomy.



► **Fig. 1** CT image of the perigastric abscess.



► Fig. 3 CT after EUS-guided drainage using LAMS.



► Fig. 2 CT after EUS-guided drainage using a double pigtail stent.

In conclusion, EUS-guided drainage with a LAMS can be used to widen a refractory

micro-fistula after sleeve gastrectomy to



► **Fig. 4** Septum separating the cavity from the gastric lumen.

allow septotomy.



▶ **Fig. 5** Endoscopic image after septotomy.



► Fig. 6 Endoscopic image showing collapse and epithelialization of the cavity.

Competing interests

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

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