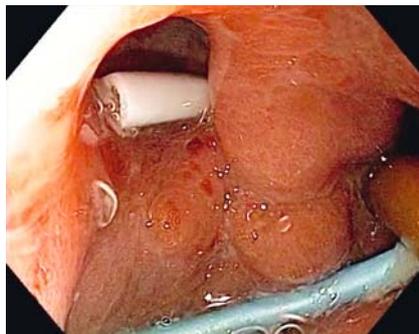


Stent migration requiring surgical removal: a serious adverse event after bariatric megastent placement



► **Fig. 1** Radiographic image showing the final position of the first megastent placed to treat a leak at the angle of His following sleeve gastrectomy.



► **Fig. 2** Endoscopic image showing the two pigtail stents placed at the site of the leak.



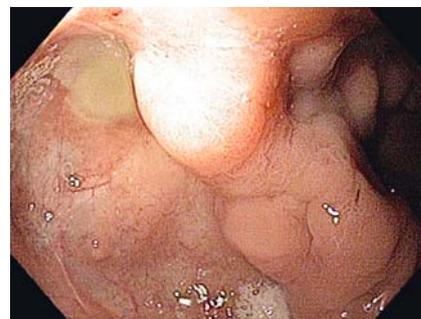
► **Fig. 3** Endoscopic image showing the second megastent in position.



► **Fig. 4** Computed tomography scan showing the megastent located in the proximal jejunum.



► **Fig. 5** Macroscopic appearance of the 27-cm enterectomy specimen.



► **Fig. 6** Endoscopic image showing a shallow ulcer at the angle of His after closure of the leak.

Leaks are serious complications after sleeve gastrectomy, with an incidence rate up to 7% [1]. Currently, stent placement and other endoscopic techniques are recommended for the treatment of post-bariatric leaks (PBLs) [2]. Bariatric stents are a feasible, effective and life-saving method [3]. They achieve leak closure rates between 72.8% and 87.8% but are associated with significant migration rates (16.9%–28.2%) [1,4]. The large bariatric-specific stent (LBSS) has

been developed as an important device to fit bariatric anatomy and avoid migration because of its long length with the distal edge being placed in the duodenum [5].

We report the case of 34-year-old woman who underwent sleeve gastrectomy. On the 5th post-operative day (POD), she developed abdominal pain and purulent output from the drain. Computed tomog-

raphy (CT) scanning showed a leak at the angle of His without any collections.

We opted to place an LBSS (24 cm × 28 mm; Hanarostent, MITECH) to bypass the whole stomach (► **Fig. 1**). The LBSS was removed 4 weeks later (33th POD), but the leak persisted. We then placed two single-pigtail stents (► **Fig. 2**) and kept them in place for 10 days, but this was also unsuccessful. On the 43rd POD, we removed the pigtail stents, performed a septotomy, and placed a second LBSS (► **Fig. 3**).

After 3 weeks (64th POD), the patient again presented with abdominal pain. On this occasion, esophagogastrodu-



▶ Video 1 Insertion of the first bariatric megastent to treat a leak; removal of the megastent and insertion of two single-pigtail stents; removal of pigtail stents and insertion of a second megastent; the bariatric megastent is found to have migrated into the small bowel and eventually required surgical removal.

denoscopy (EGD) and upper gastrointestinal series showed complete closure of the leak, but the LBSS could not be seen. A CT scan identified the stent in the proximal jejunum (▶ **Fig. 4**). An enteroscopic attempt to retrieve the stent and 7 days of conservative treatment (laxative, diet, and antispasmodic drug) were unsuccessful, and a laparoscopic enterectomy and primary anastomosis were eventually needed (▶ **Fig. 5**). Finally, 15 days later (86th POD), she was asymptomatic and an EGD showed only a shallow ulcer at the angle of His (▶ **Fig. 6**; ▶ **Video 1**). An LBSS seems to be a useful device for PBL management, but it may cause serious adverse events. Further controlled studies should assess the precise success and complication rates of such stent.

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Competing interests

None

The authors

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