

## Endoscopic ultrasound-guided gastrojejunostomy using a 2-cm lumen-apposing metal stent to treat benign afferent loop syndrome



► **Fig. 1** Computed tomography abdomen showing afferent loop obstruction.

Afferent loop obstruction is a complication of pancreaticoduodenectomy [1]. Traditionally, afferent loop obstruction is managed by surgical or percutaneous methods. We report on a case of afferent loop obstruction treated by endoscopic ultrasound (EUS)-guided gastrojejunostomy (► **Video 1**).

A 67-year-old woman with a history of ampullary cancer treated with Whipple procedure 16 months previously presented with abdominal pain, vomiting, and weight loss. Her lipase level was elevated. Abdominal computed tomography (CT) showed a distended stomach, and dilated

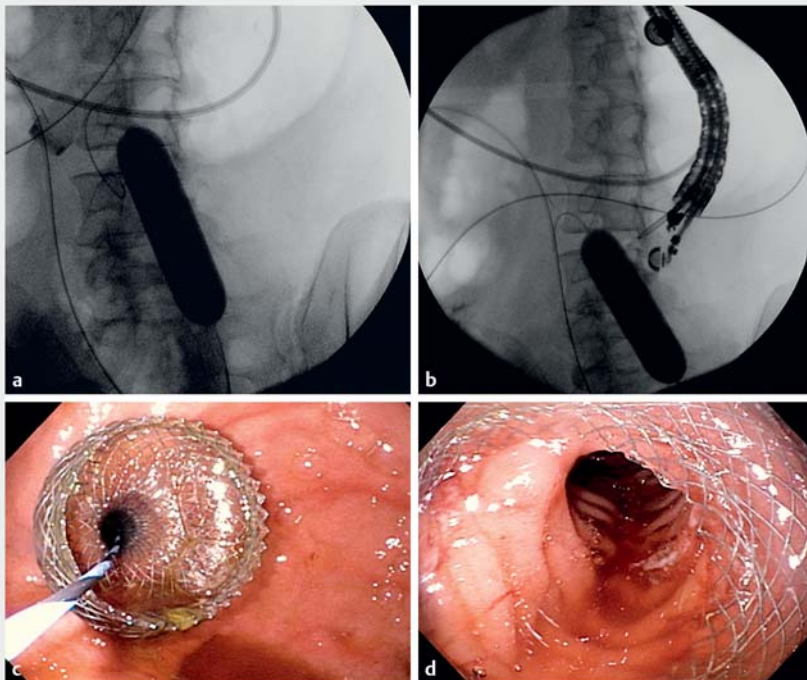
afferent limb and biliary tree (► **Fig. 1**). Upper endoscopy showed benign narrowing/angulation at the entrance to the efferent limb; the endoscope could not traverse the narrowing. A diagnosis of benign afferent loop syndrome was made. Surgical, percutaneous, and endoscopic options were discussed with the patient, and she elected to proceed with endoscopic treatment.

An overtube was mounted onto an endoscope. A guidewire was advanced to the efferent limb and the endoscope was removed. A CRE balloon catheter (Boston Scientific, Marlborough, Massachusetts, USA) was advanced over the wire and inside the overtube under fluoroscopy. The CRE balloon was positioned in the efferent jejunal loop past the narrowing and opposing the stomach silhouette. The balloon was inflated (► **Fig. 2 a**). The overtube was removed. An echoendoscope with a 2-cm hot AXIOS stent (Boston Scientific) was advanced to the stomach opposing the balloon (► **Fig. 2 b**). The AXIOS system catheter was advanced using electrocautery inside the balloon causing balloon rupture. The wire was advanced to the jejunum. The distal flange was deployed, followed by the proximal flange (► **Fig. 2 c**). The LAMS was dilated up to 2 cm using a CRE balloon (► **Fig. 2 d**).

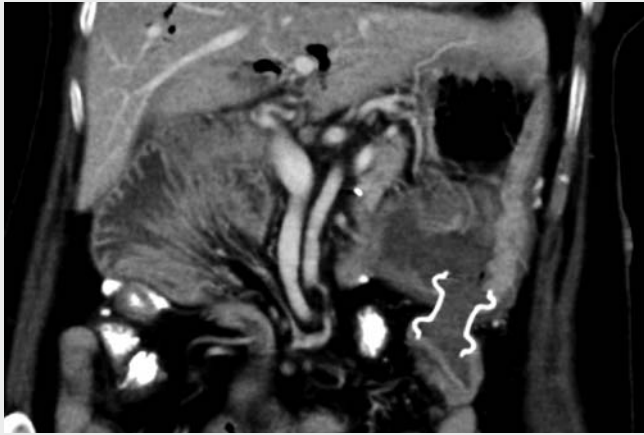
No complications occurred. CT showed decompression of the stomach and the afferent limb (► **Fig. 3**). The patient tolerated a soft diet.

In conclusion, EUS-guided gastrojejunostomy is an alternative treatment to surgery in the management of afferent loop syndrome, particularly in patients who are poor candidates for surgery [2–4].

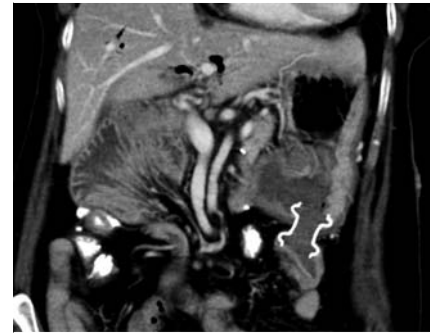
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► **Fig. 2** Placement of the lumen-apposing metal stent (LAMS). **a** Fluoroscopic view of the CRE balloon (Boston Scientific, Marlborough, Massachusetts, USA), which was positioned using an overtube. **b** Fluoroscopic view showing the LAMS access catheter tip in relation to the CRE balloon. **c** Endoscopic view of the deployed proximal flange of the LAMS. **d** Endoscopic view of the gastrojejunal anastomosis after stent placement.



▶ **Video 1** Endoscopic ultrasound-guided gastrojejunostomy for treatment of benign afferent limb syndrome using a 2-cm diameter lumen-apposing metal stent.



▶ **Fig. 3** Postoperative computed tomography of the abdomen showing decompression of the afferent loop.

### Competing interests

None

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### Bibliography

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