# Recurrent obstruction after surgical gastrojejunostomy in a rare case of gastric outlet obstruction: endoscopic ultrasound-guided gastrojejunostomy to the rescue



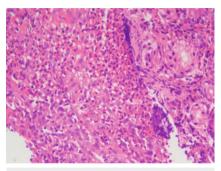
A 49-year-old man with alcohol-related chronic calcific pancreatitis presented with abdominal pain, vomiting, and weight loss (12 kgs) for 5 months. He had undergone truncal vagotomy with antecolic gastrojejunostomy 3 years previously for peptic ulcer disease with gastric outlet obstruction (GOO). After initially improving, he again became symptomatic with intermittent symptom-free intervals on proton pump inhibitors.

On admission, investigations revealed anemia (hemoglobin 8.7 g/dL) and hypoalbuminemia (2.9 g/dL). Esophagogastroduodenoscopy (EGD) showed confluent ulceration extending from the pylorus to the previous surgical gastrojejunostomy site (> Fig. 1). Histopathology from a biopsy of the ulcer bed showed eosinophilic infiltrates (40-50 per highpower field) with microabscesses, establishing the diagnosis of eosinophilic gastroenteritis (EoGE) (> Fig. 2). He underwent efferent loop dilation, with no improvement. A barium meal followthrough revealed long-segment strictures in both the afferent (8.5 cm) and efferent loops (22 cm), suggestive of active EoGE (> Fig. 3). A nasojejunal tube was placed deep into the normal part of the efferent loop of the jejunum under fluoroscopic quidance.

In view of his active disease and the poor outcomes of redo surgery, the patient opted to undergo endoscopic ultrasound-guided gastrojejunostomy (EUS-G]). Under EUS and fluoroscopic guidance, an EUS-G| was performed using the "free-hand" approach and a 20-mm lumen-apposing metal stent (LAMS; Axios, Boston Scientific, Marlborough, Massachusetts, USA) was deployed (> Video 1). The trick in this case was to identify a fully distended, healthy, uninvolved segment within the efferent loop of the jejunum as the puncture site (**Fig.4**). Subsequently, the LAMS was balloon dilated up to 15mm. > Fig. 5



► Fig. 1 Endoscopic image showing confluent ulceration extending from the pylorus to the site of the previous surgical gastrojejunostomy.

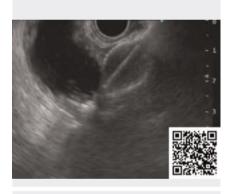


► Fig. 2 Microscopic appearance of a biopsy from the ulcer bed showing eosinophilic infiltrates (40–50 per high-power field) with microabscesses, consistent with the diagnosis of eosinophilic gastroenteritis.



▶ Fig. 3 Radiographic image from the barium meal follow-through showing a long-segment stricture (22 cm) in the efferent loop, suggestive of active eosinophilic gastroenteritis.

shows the two anastomosis sites: the surgical gastrojejunostomy and the EUS-GJ. The patient was discharged on steroids and elemental diet to manage his EoGE; he was asymptomatic at 1-year followup. It is planned that he will undergo LAMS replacement if tissue ingrowth/recurrence occurs and he remains under follow-up to ensure the active disease is controlled.



▶ Video 1 Endoscopic ultrasoundguided gastrojejunostomy using a lumen-apposing metal stent is performed for a patient with symptomatic recurrence following a prior surgical gastrojejunostomy for gastric outlet obstruction, due to active eosinophilic gastroenteritis.

EoGE is an extremely rare but treatable cause of GOO [1]. This is the first case report of an EUS-GJ being performed as rescue therapy for recurrence following a surgical gastrojejunostomy in a patient with active EoGE; this is a technically feasible and viable option.

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**Fig.4** Image during endoscopic ultrasound of the jejunal loops to select a healthy, uninvolved, dilated loop for puncture to create the gastrojejunostomy, avoiding the thickened diseased loops affected by active eosinophilic gastroenteritis.

#### **Conflict of Interest**

The authors declare that they have no conflict of interest.

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#### **Bibliography**

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► Fig. 5 Endoscopic image showing the two anastomosis sites: the endoscopic ultrasound-guided gastrojejunostomy with the lumen-apposing metal stent visible and the pervious surgical gastrojejunostomy.

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