



EUS-guided duodenojejunostomy by use of a 2-cm lumen-apposing metal stent to treat proximal jejunal stricture in a patient with chronic pancreatitis

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EUS-guided gastrojejunostomy has been increasingly used to treat patients with gastric outlet and duodenal obstruction, particularly in patients with many comorbidities prohibiting surgery.^{1,2} We describe a case of a proximal jejunal stricture treated by EUS-guided duodenojejunostomy with use of a 2-cm lumen-apposing metal stent (LAMS).

CASE REPORT

A 26-year-old man presented with a 2-week history of nausea and vomiting. His medical history was significant for recurrent pancreatitis secondary to hypertriglyceridemia, infected walled-off necrosis requiring cystogastrostomy, splenic vein thrombosis resulting in severe portal hypertensive gastropathy, and large gastric varices treated by splenic artery embolization followed by splenectomy. He later experienced chronic pancreatitis and pseudocyst that was treated with a second cystogastrostomy. He had pancreatic and biliary duct strictures that had been treated with stent placement.

Abdominal CT showed a severe stricture at the distal duodenum/proximal jejunum. Owing to his chronic pancreatitis and his previous complicated splenectomy, he was

deemed by the surgical team to be at a higher risk for adverse surgical event. An upper-GI study with contrast material revealed a long high-grade stricture at the proximal jejunum. The jejunal loop past the stricture appeared to be in close proximity to the third part of the duodenum (Fig. 1). After multidisciplinary discussion with the patient and the surgical team, a decision was made to proceed with EUS-guided duodenojejunostomy (Video 1, available online at www.VideoGIE.org).

Procedure description

Upper endoscopy was performed, and the adult gastroscopy was not able to pass the stricture. A 0.035-inch jagwire could not pass the stricture either. With difficulty, we were able to traverse the stricture with a pediatric gastroscopy all the way to the proximal jejunum. A linear echoendoscope was passed on the side of the pediatric gastroscopy to segment 3 of the duodenum (Fig. 2). The target jejunal loop was distended with contrast material by use of the gastroscopy water pump (Fig. 3). A 20-mm × 10-mm LAMS was advanced into the lumen of the jejunum by use of electrocautery. The stent was deployed under EUS and endoscopic guidance (Fig. 4). The stent was then dilated up to 2 cm (Fig. 5).

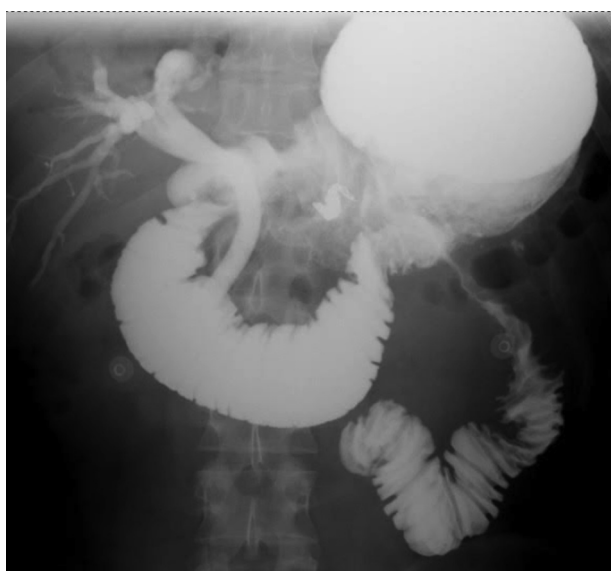


Figure 1. Upper-GI study showing a distal duodenal/proximal jejunal stricture.

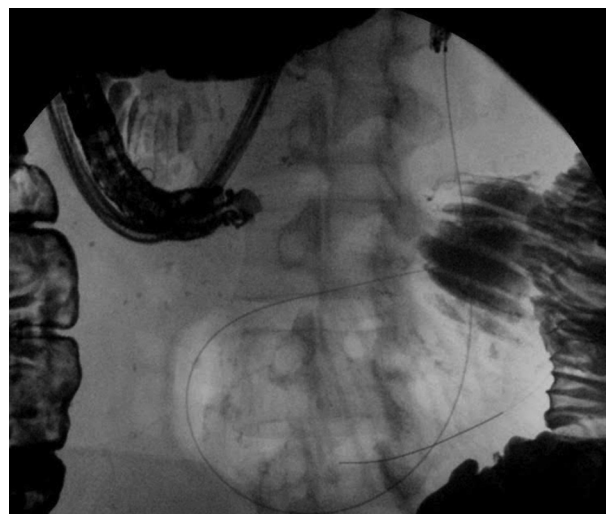


Figure 2. Pediatric gastroscopy tip at the proximal jejunum and the echoendoscope tip at segment 3 of the duodenum.



Figure 3. EUS image of the target jejunal loop.



Figure 4. Distal flange of lumen-apposing metal stent deployed inside the target jejunal loop.

Outcome

The patient experienced no adverse events. He was discharged with instructions to use a soft diet. A postoperative upper-GI study showed a successful duodenojejunoscopy bypassing the stricture (Fig. 6). At a follow-up visit 2 months later, he continued to do well. Our plan is to replace the LAMS after 5 to 6 months.

CONCLUSION

EUS-guided duodenojejunoscopy is feasible in selected patients with proximal jejunal strictures. A pediatric gastroscopist alongside the echoendoscopist can be helpful in distending the target bowel loop. This case demonstrates that endoscopy has come a long way in successfully managing many adverse events of acute and chronic pancreatitis.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

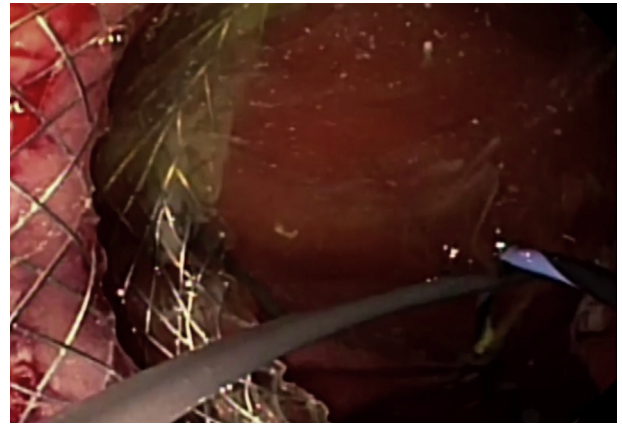


Figure 5. Duodenojejunoscopy after dilation with lumen-apposing metal stent.



Figure 6. Upper-GI study showing duodenojejunoscopy bypassing the stricture.

Abbreviation: LAMS, lumen-apposing metal stent.

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<https://doi.org/10.1016/j.vgie.2019.11.004>