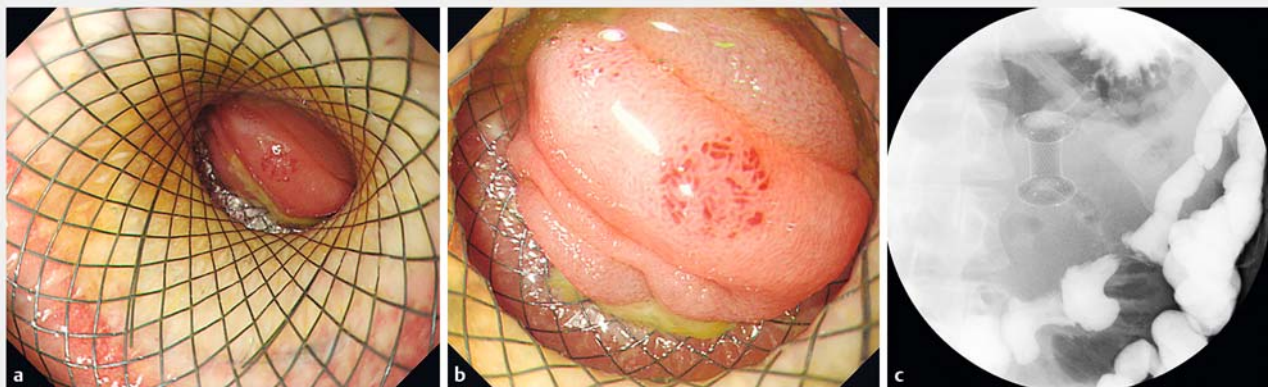


## Endoscopic exchange of a lumen-apposing metal stent after endoscopic ultrasound-guided gastroenterostomy in severe acute pancreatitis

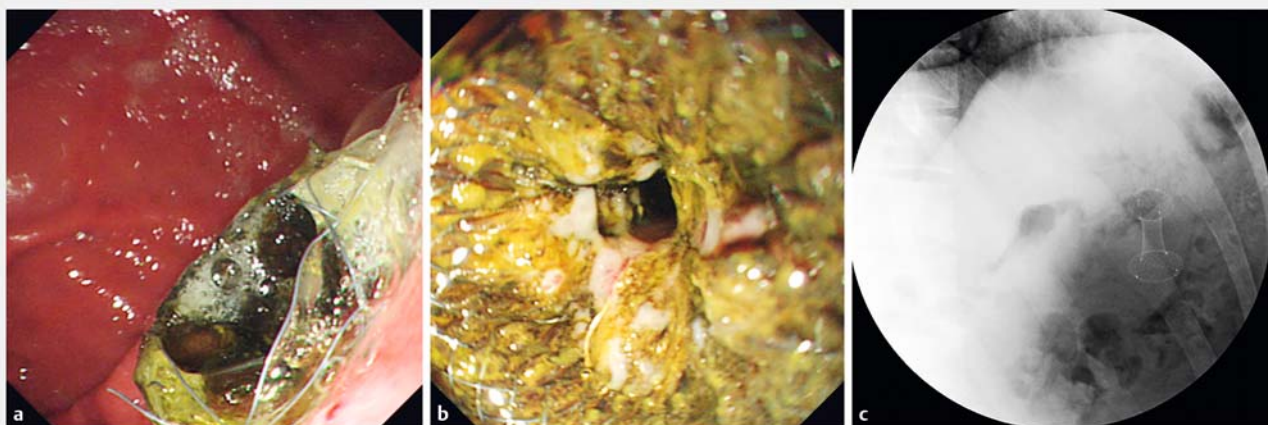
Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) has been an effective and safe alternative to surgery for the palliation of symptoms of gastric outlet obstruction (GOO) due to benign or malignant conditions [1–3]. The lumen-apposing metal stent (LAMS) is a necessary device for EUS-GE because of its anti-migration role and long-term patency [4]. However, there is no clear in vivo

evidence of the duration of LAMS efficacy. There is still no evidence on when the LAMS should be exchanged especially when used in benign GOO. We report a case of endoscopic exchange of LAMS after EUS-GE in severe acute pancreatitis. A 49-year-old man experienced severe acute pancreatitis after excessive alcohol intake. Although his condition greatly improved with active treatment, he pre-

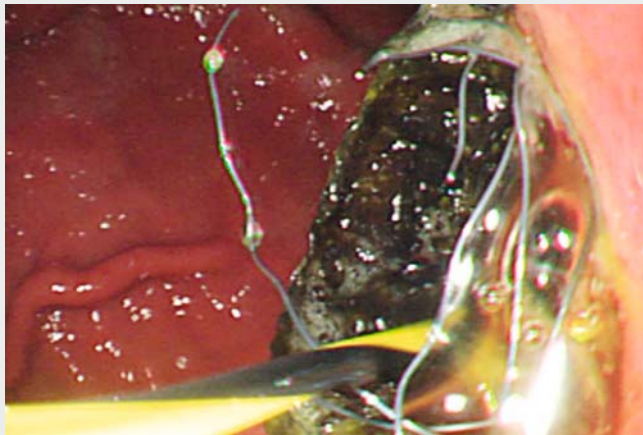
sented 3 months later with progressive nausea, vomiting, and poor oral food intake. Upper gastrointestinal imaging (UGI) and gastroscopy revealed duodenal obstruction due to distortion of the descending part of the duodenum. A nasojejunal feeding tube was implanted deeply beyond the ligament of Treitz and exchanged every 3 months. However, the symptoms had not improved



**▶ Fig. 1** Endoscopic ultrasound-guided gastroenterostomy with a lumen-apposing metal stent. **a** Gastroscopy showed that the stent had expanded well 2 days after the procedure. **b** Gastroscopy showed the mucosa of the jejunum clearly through the stent. **c** Fluoroscopy showed that the stent had expanded well.



**▶ Fig. 2** The stent became ineffective due to corrosion by gastric juice. **a** Gastroscopy found fractures in some of the steel wires of the stent. **b, c** Gastroscopy and fluoroscopy showed that the inner diameter of the stent had decreased significantly.



**Video 1** Endoscopic exchange of a lumen-apposing metal stent after endoscopic ultrasound-guided gastroenterostomy in acute pancreatitis.

significantly 9 months later. The patient could no longer tolerate the nasogastric nutrition but strongly refused surgery. Ultimately, he accepted treatment with EUS-GE, performed according to the reported method [5], and could tolerate a semi-liquid oral diet after the procedure (► Fig. 1, ► Video 1).

Unfortunately, the initial symptoms recurred and worsened 6 months later. UGI revealed no improvement in the duodenal obstruction. Gastroscopy found fractures in some of the steel wires of the stent (► Fig. 2a). Gastroscopy and fluoroscopy showed that the inner diameter of the stent had decreased significantly (► Fig. 2b,c). The stent might have been ineffective due to corrosion by gastric juice. A new LAMS was deployed into the gastrojejunal anastomosis (► Video 1), and the patient resumed a semi-liquid diet after the procedure.

This case suggests that LAMS could be effective for about 6 months but needs to be exchanged periodically in patients requiring long-term treatment.

Endoscopy\_UCTN\_Code\_TTT\_1AS\_2AG

## Competing interests

None

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## References

- [1] Khashab MA, Bukhari M, Baron TH et al. International multicenter comparative trial of endoscopic ultrasonography-guided gastroenterostomy versus surgical gastrojejunostomy for the treatment of malignant gastric outlet obstruction. *Endosc Int Open* 2017; 5: E275–E281
- [2] Chen YI, James T, Agarwal A et al. EUS-guided gastroenterostomy in management of benign gastric outlet obstruction. *Endosc Int Open* 2018; 6: E363–E368
- [3] Coronel E, Chapman CG, Matthews J et al. Endoscopic ultrasound-guided gastroenterostomy for the treatment of gastroduodenal obstruction in severe chronic pancreatitis. *Endoscopy* 2018; 50: 285–287
- [4] Binmoeller KF, Shah JN. Endoscopic ultrasound-guided gastroenterostomy using novel tools designed for transluminal therapy: a porcine study. *Endoscopy* 2012; 44: 499–503
- [5] Itoi T, Ishii K, Ikeuchi N et al. Prospective evaluation of endoscopic ultrasonography-guided double-balloon-occluded gastrojejunostomy bypass (EPASS) for malignant gastric outlet obstruction. *Gut* 2016; 65: 193–195

## Bibliography

DOI <https://doi.org/10.1055/a-0756-6971>  
Published online: 7.11.2018  
*Endoscopy* 2019; 51: E18–E19  
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Stuttgart · New York  
ISSN 0013-726X

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