Unanticipated buried endoscopic ultrasound-guided lumen-apposing metal stent for gastroenterostomy concerning for potential dehiscence

► **Fig. 1** Initial placement of lumen-apposing metal stent during endoscopic ultrasound-guided gastroenterostomy.

A 55-year old man presented with a gastric outlet obstruction from metastatic duodenal cancer. Given his poor performance status from malnutrition, we decided to perform an endoscopic ultrasound (EUS)-guided gastroenterostomy with a lumen-apposing metal stent (LAMS). The procedure was performed successfully utilizing nasojejunal water irrigation and free-hand deployment of a 15-mm cautery-enhanced LAMS through the antrum (► **Fig. 1**). The patient was discharged the following day tolerating oral intake. He developed a biliary obstruction 1 month later and EUS-guided choledochoduodenostomy was performed. During this endoscopy, the previously placed LAMS was noted to be completely buried within the gastric wall with purulent material oozing from the embedded margin (► **Video 1**, ► **Fig. 2**, ► **Fig. 3**). Given the concern for separation between lumens, a through-the-scope 18mm×6cm long, fully covered metal stent was placed through the LAMS and oriented along the jejunal lumen. Three months later, the patient remains asymptomatic, maintaining weight and undergoing chemotherapy. EUS-guided gastroenterostomy with LAMS is a novel and disruptive alterna-

► **Video 1** A previously placed lumen-apposing metal stent (LAMS) was buried within the gastric wall. Given the concern for separation between lumens, a fully covered metal stent was placed through the LAMS.

► **Fig. 2** Lumen-apposing metal stent (LAMS) 30 days post-placement; buried LAMS with purulent discharge at the proximal edge (arrow).

► **Fig. 3** Computed tomography scan 1 month after placement demonstrating lumen-apposing metal stent within the gastric wall (red circle).

tive procedure that may offer long-lasting patency with less stent failure [1]. Retrospective series report stent dwell and patency ranging from 126 days for malignant disease to 319 days in benign scenarios [2]. Premature buried LAMS as early as 5 weeks has also been described when placed for drainage of pancreatic fluid collections [3]. We report a case of premature buried LAMS with a potential for lumen separa-

tion, supporting the need for prospective data for this technique.

Endoscopy_UCTN_Code_CPL_1AH_2AJ

Competing interests

Dr. Waxman is a consultant for Boston Scientific, Medtronic, Cook Medical, and Auris Health. Dr. Chapman is a consultant for Boston Scientific, Olympus, and Apollo Endosurgery. Dr. Siddiqui is a consultant for Boston Scientific, Olympus, ConMed, and Medtronic.

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Bibliography

Endoscopy 2021; 53: E348–E349

DOI 10.1055/a-1290-6653

ISSN 0013-726X

published online 11.11.2020

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Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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