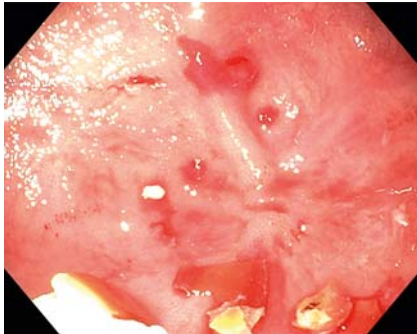


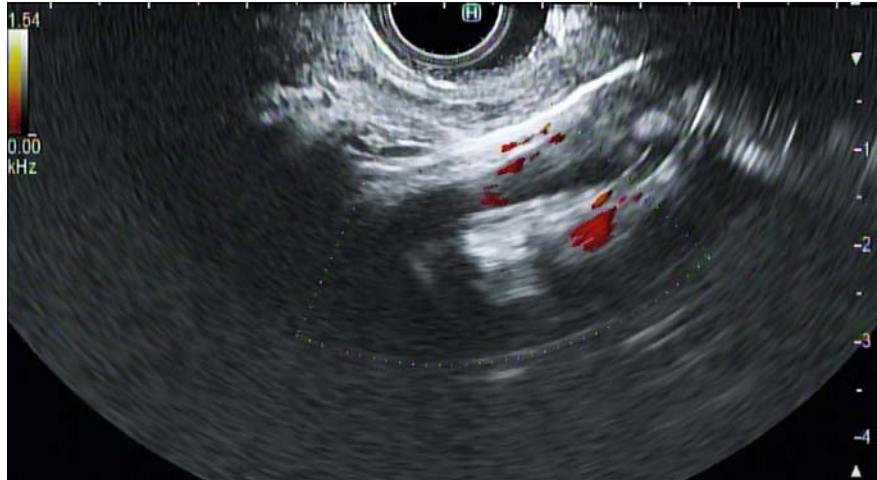
## Endoscopic ultrasound-guided recanalization of a complete esophageal stricture



► **Fig. 1** Endoscopic view of the complete esophageal stricture.

Complete esophageal strictures are rare and pose technical challenges in management. We present a case of a 34-year-old man with a long-standing history of uncontrolled gastroesophageal reflux disease (GERD) who was referred for management of a complete esophageal stricture. Prior to his presentation, a gastrostomy tube was placed surgically owing to severe malnutrition.

Esophagogastroduodenoscopy revealed a complete esophageal stricture at 35 cm from the incisors without a clear luminal opening (► **Fig. 1**). Contrast was instilled and fluoroscopically confirmed the endoscopic findings of a complete esophageal stricture. The decision was made to attempt endoscopic ultrasound (EUS)-guided placement of a lumen-apposing metal stent (LAMS). Initial endosonographic evaluation did not reveal a clear window to target a safe recanalization attempt (► **Fig. 2**). The gastrostomy tube was used to instill copious amount of sterile water to distend the stomach allowing a target for LAMS placement under fluoroscopic and endosonographic guidance (► **Fig. 3**). Once a safe window was achieved, a 19G needle puncture was performed and a 0.0125-inch guidewire was passed into the gastric lumen (► **Fig. 4**). The LAMS was then deployed over the guidewire using electrocautery, and the fluid instilled into the stomach was seen passing through the



► **Fig. 2** Endosonographic view prior to water irrigation through the gastrostomy tube, revealing no clear window to target lumen-apposing metal stent placement.



► **Fig. 3** Endosonographic view after water irrigation through the gastrostomy tube.

stent (► **Fig. 5**). The LAMS was then dilated using the through-the-scope esophageal balloon dilator up to 10mm. At 4 weeks post-procedure, the patient is tolerating a soft diet and has gained 16 pounds.

Gastrostomies have been utilized to recanalize complete esophageal strictures using an antegrade and retrograde endoscopic approach for proximal strictures [1, 2]. In our case, the gastrostomy tube was used to create a pocket of fluid

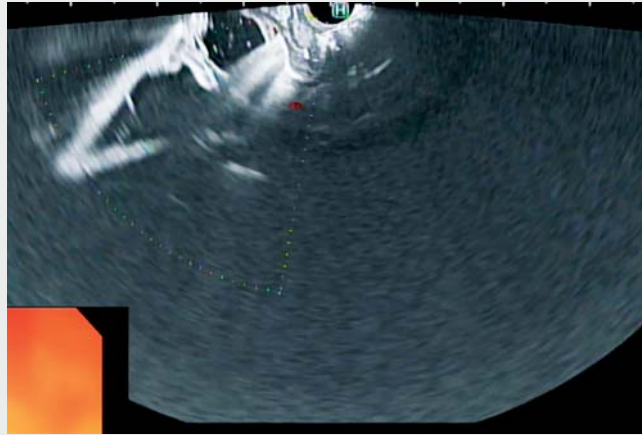
in the stomach to allow a target for LAMS deployment in the distal esophagus (► **Video 1**).

EUS-guided recanalization using a LAMS is an efficacious and safe option for patients with complete esophageal strictures. These interventions may prevent the need for more invasive surgical interventions.

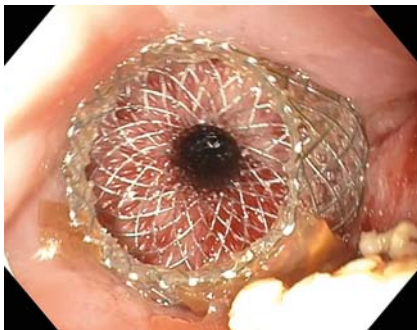
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► **Fig. 4** Fluoroscopic view after 19G needle puncture and wire advancement into the gastric lumen.



► **Video 1** Endoscopic ultrasound-guided recanalization of a complete esophageal stricture using a lumen-apposing metal stent.



► **Fig. 5** Recanalized esophageal lumen after deployment of lumen-apposing metal stent.

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### Competing interests

The authors declare that they have no conflict of interest.

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