Endoscopic ultrasound-guided recanalization of a 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 stent (Fig. 5). The LAMS was then dilated using the through-the-scope esophageal balloon dilator up to 10 mm. 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.
Competing interests
The authors declare that they have no conflict of interest.

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Endoscopy
DOI 10.1055/a-1418-7609
ISSN 0013-726X
published online 2021
© 2021. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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

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

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