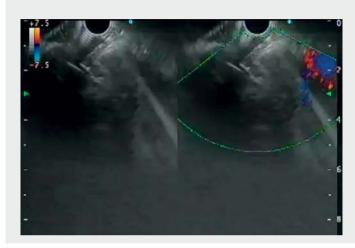
# Endoscopic ultrasound-guided rendezvous recanalization of a completely obstructed esophagogastric anastomosis



► Fig. 1 Completely obstructed esophagogastric anastomosis in a 63-year-old woman.

A 63-year-old woman who had undergone resection of adenocarcinoma at the gastroesophageal junction was admitted with complete obstruction of the esophagogastric anastomosis (> Fig. 1). For the past 2 years, gastrostomy tube feeding had been her only source of enteral nutrition. Endoscopic ultrasound (EUS)-guided rendezvous recanalization of the obstruction was attempted to allow her to resume oral intake (> Video 1).

An antegrade linear ultrasound endoscope was placed at the blind end of the esophagus to locate the gastric lumen, determine the optimal puncture site, and guide the puncture process. A retrograde standard endoscope with biopsy forceps was introduced via the gastrostomy tube to offer direct vision of the gastric lumen, assist puncture, and function as a location sign with a strong echo (> Fig. 2). A 19-gauge needle was advanced towards the gastric lumen under Doppler EUS guidance (▶ Fig. 3). Once the needle had passed beyond the obstruction, a guidewire was inserted through it. Next, a 6-Fr biliary dilation catheter was advanced over the guidewire. Sequential endoscopic balloon dilations were then performed over a 2-month period before a fully covered

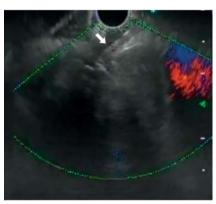


▶ Video 1 Endoscopic ultrasound-guided rendezvous recanalization of a completely obstructed esophagogastric anastomosis.



➤ Fig. 2 The endoscope with forceps (green arrow) in the gastric lumen was detected by endoscopic ultrasound (EUS) as a strong echo, from the tip of which the puncture route was marked (yellow dotted line).

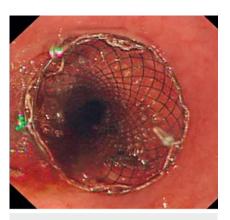
retrievable metal stent (60 × 20 mm) was deployed (▶ Fig. 4). No adverse event occurred. The patient started to eat semiliquid food and gained weight, so the gastrostomy tube was removed. After 2 months, the esophageal stent was retrieved, followed by another dilation, and the tract from the esophagus to the



▶ Fig. 3 A 19-gauge needle (white arrow) was advanced towards the gastric cavity under Doppler EUS guidance.

stomach was seen to be well formed (> Fig. 5).

The treatment of a completely obstructed esophagogastric anastomosis was often reported as part of the treatment of complete esophageal obstruction (CEO), and combined antegrade–retrograde endoscopic dilation (CARD) has been the most widely used approach in CEO [1,2]. However, the fluoroscopically guided access procedure is not precise



► **Fig. 4** A fully covered retrievable metal stent (60×20 mm) was placed.

enough because of limited real-time guidance and the invisibility of adjacent structures and vessels; this is why we introduced EUS into the scenario. Although we report it here in the setting of anastomotic obstruction, the technique may be extrapolated to the treatment of CEO from other causes.

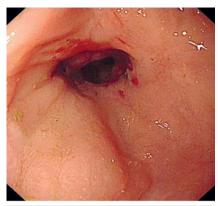
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#### Competing interests

The authors declare that they have no conflict of interest.



▶ Fig. 5 The stent was removed, followed by another dilation, and the tract from the esophagus to the stomach was seen to be well formed.

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#### **Bibliography**

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