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Endoscopic management of tracheoesophageal prosthesis-induced esophageal mucosal bridge

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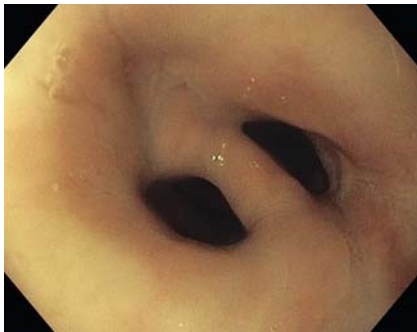
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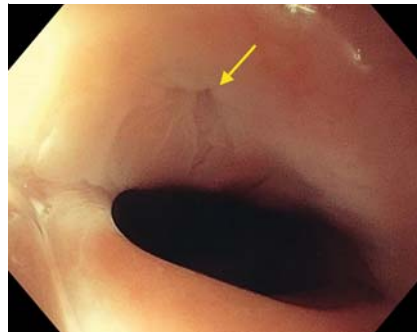
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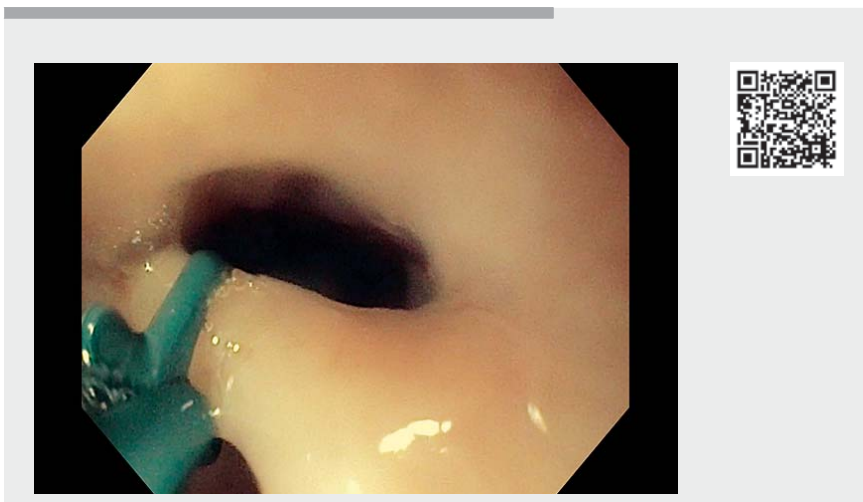
► **Fig. 1** Endoscopic finding of complete esophageal mucosal bridge.



► **Fig. 2** Tracheoesophageal voice prosthesis fistula site (arrow).



► **Fig. 3** Through-the-scope dissection knife (SB-Knife; Olympus, Center Valley, Pennsylvania, USA).



► **Video 1** Endoscopic examination of esophageal mucosal bridge followed by epinephrine injection and dissection with scissor-type electrocautery knife, resulting in complete disruption of the bridge without recurrence on follow-up endoscopy.



► **Fig. 4** Complete disruption of esophageal mucosal bridge with healed mucosa was noted on follow-up endoscopy.

Esophageal mucosal bridge (EMB) is a rare, often incidental finding encountered during esophagogastroduodenoscopy (EGD). It can be of congenital origin, or occur secondarily to local esophageal trauma, radiation therapy, and various inflammatory conditions involving the esophageal mucosa [1]. While mostly asymptomatic, EMB can often result in dysphagia by causing luminal obstruction. We present a case of symptomatic EMB secondary to long-standing tra-

cheoesophageal voice prosthesis (TEVP) that was successfully treated with endoscopic resection using a scissor-type electrocautery knife.

A 77-year-old man with a history of recurrent squamous cell carcinoma of the vocal cords, which required laryngectomy, left pectoralis flap, tracheoesophageal puncture for TEVP, and chemoradiation, presented with progressive dysphagia to solid foods. Ear, nose, and throat evaluation confirmed EMB, which was dilated

with rigid dilator to 16.5 mm without symptomatic relief. EGD revealed a complete EMB that was 2 cm in thickness at 17 cm from the incisors (► **Fig. 1**). The endoscope was able to pass on either side of the bridge. Immediately adjacent to the bridge, a small fistulous opening, consistent with TEVP fistula site, was noted (► **Fig. 2**). The esophagus was normal distal to this area. The decision was to proceed with dissection of the mucosal bridge.

The bridge was injected with epinephrine with adequate blanching, followed by dissection using a scissor-type through-the-scope dissection knife (SB-Knife; Olympus, Center Valley, Pennsylvania, USA)

using Endocut settings (► Fig. 3). This was done in a similar fashion to a Zenker's septotomy [2]. This resulted in successful complete disruption of the bridge with no bleeding or evidence of mucosal or muscle injury (► Video 1).

The patient reported significant improvement in dysphagia. Repeat EGD at 6 weeks revealed complete disruption of the EMB with absence of bridge regrowth (► Fig. 4).

This case highlights endoscopic management of EMB, a rare cause of dysphagia. EMB management using a scissor-type knife is safe and provides durable clinical improvement.

Endoscopy_UCTN_Code_TTT_1AO_2AG

Competing interests

The authors declare that they have no conflict of interest.

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Endoscopy 2023; 55: E625–E626

DOI 10.1055/a-2055-9768

ISSN 0013-726X

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