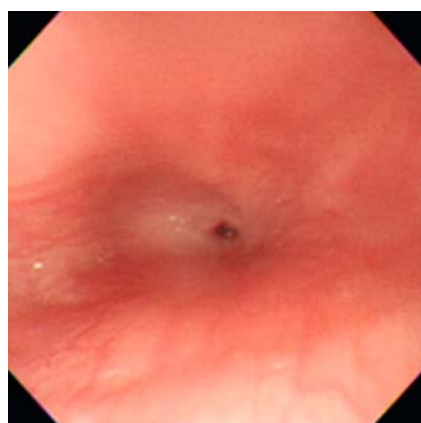
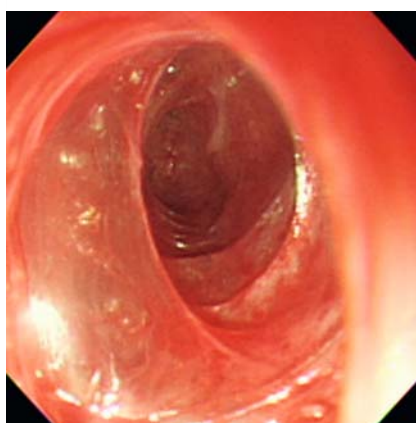


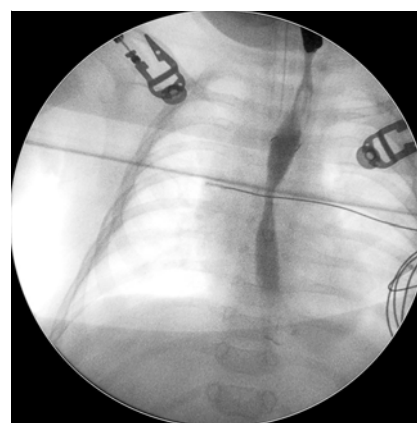
## Retrograde esophageal stenting for esophageal stenosis following esophageal atresia repair



► **Fig. 1** Endoscopic view of the severe stenosis over the anastomosis.



► **Fig. 2** Endoscopic view of inadvertent dilation into the esophageal submucosal space.

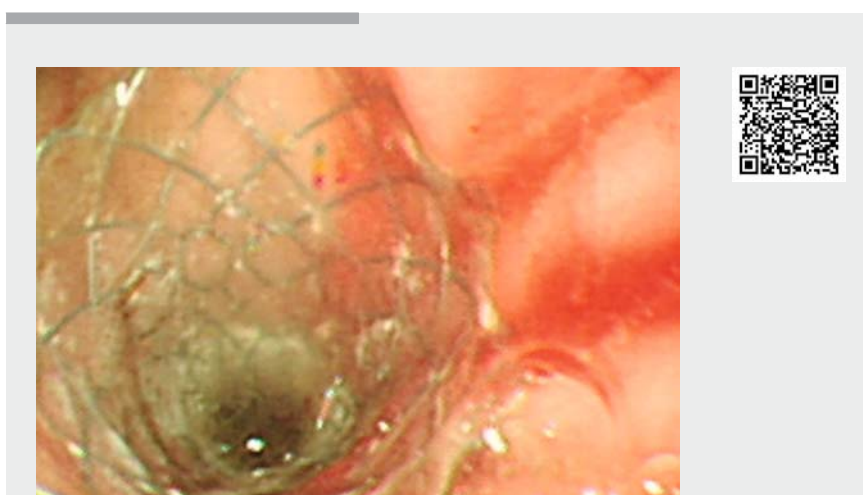


► **Fig. 3** Fluoroscopic view after successful placement of a fully covered metal biliary stent over the anastomosis.

A 3-month-old girl was admitted with vomiting following esophageal repair surgery to treat congenital esophageal atresia. Endoscopy revealed stenosis (► **Fig. 1**) over the anastomosis site, and she underwent three sessions of endoscopic balloon dilation. During the fourth session of esophageal dilation, dissection of the submucosal layer (► **Fig. 2**) occurred after inflation of the balloon, and the procedure was postponed. The patient was subsequently fed via gastrostomy.

Follow-up endoscopy after 3 months revealed further stenosis of the anastomosis site and a guidewire could not be placed via the oral route. In a retrograde approach via the gastrostomy site, the guidewire was successfully passed over the stenosis proximally (► **Fig. 3**, ► **Video 1**). A fully covered metal stent (Niti-S biliary covered stent, 10 × 60 mm; Taewoong Medical, Gyeonggi-do, South Korea) was successfully deployed over the guidewire via the oral route (► **Fig. 4**). The stent remained in place for 1 month and was removed smoothly (► **Fig. 5**).

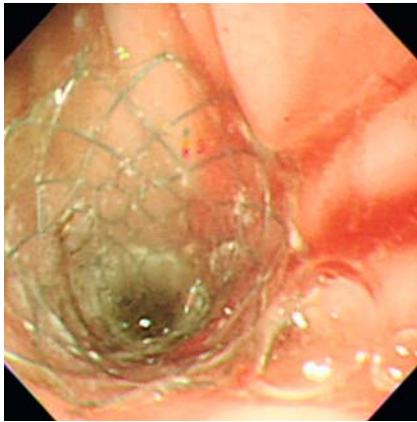
Anastomotic stricture and leakage are the two most frequent complications that occur after esophageal atresia repair



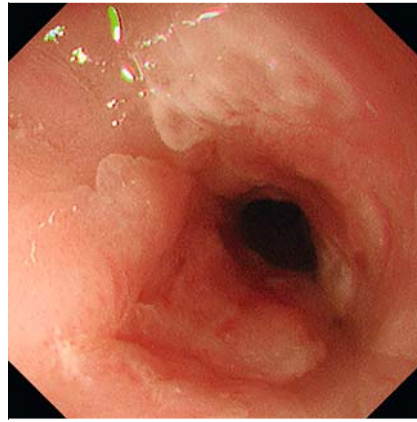
► **Video 1** Peroral endoscopy failed to reveal the anastomosis opening, and the guidewire could not be passed. Therefore, the endoscope was inserted via gastrostomy, the guidewire was placed using fluoroscopy, and the metal stent was deployed via the oral route.

[1]. Esophageal balloons are considered the preferred method to manage such complications via the oral approach, and metal stent placement is the preferred rescue therapy for refractory stenosis [2]. The present case involved a complication after esophageal dilation that may preclude subsequent endoscopic therapy, as the guidewire could not be

passed via the oral route. The use of retrograde esophageal stenting as rescue therapy has been described for palliation of malignant obstruction [3] and fistula [4]. To the best of our knowledge, this is the first report to describe this technique to treat anastomosis stenosis in a case of esophageal atresia in an infant.



► **Fig. 4** Endoscopic view from the gastric side of the stent.



► **Fig. 5** Endoscopic view after removal of the metal stent.

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### Competing interests

The authors declare that they have no conflict of interest.

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