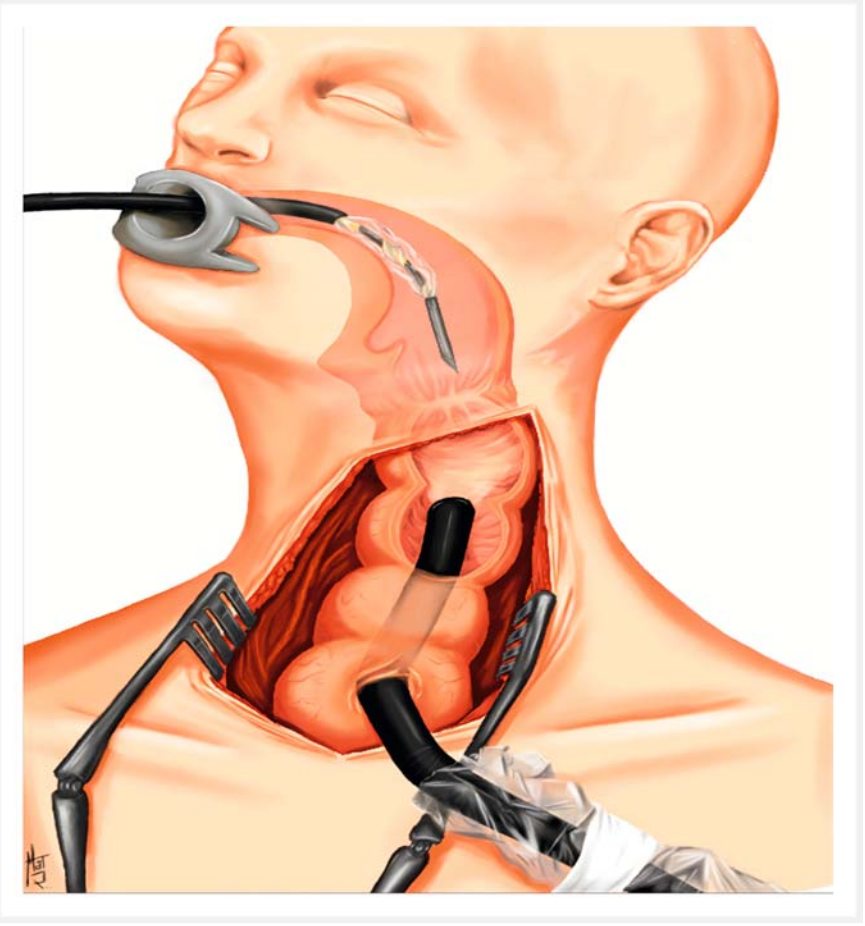
Article published online: 2020-05-06

Endoscopic rendezvous recanalization for complete anastomotic obstruction after retrosternal coloplasty: a novel approach through a cervicotomy

A healthy 19-year-old woman previously underwent a bipolar esophageal exclusion and total gastrectomy following caustic ingestion. After 13 months, she underwent an esophageal replacement by retrosternal left colonic interposition. She subsequently developed complete obstruction of the pharyngocolonic anastomosis. Because blinded antegrade reopening of the mucosa was considered too hazardous, we considered performing a combined antegrade–retrograde endoscopic rendezvous recanalization. Owing to the prior gastrectomy and because of the retrosternal route of the coloplasty, a left cervicotomy was considered to be the best choice for the retrograde access below the anastomosis.

The procedure was performed by two endoscopists and a thoracic surgeon (▶ **Fig. 1**; ▶ **Video 1**). The cervical colon was mobilized through a left cervicotomy, paying particular attention not to compromise its vascular pedicle. A 2-cm colotomy was performed on the tenia coli, allowing antegrade introduction of the endoscope (▶ **Fig. 2**). The complete obstruction was identified with the two endoscopes by transillumination. Antegrade puncture using a 19-gauge needle was directed by the retrograde endoscope. After the obstruction had been successfully punctured, a Fil-guide Hydra Jagwire (0.035 inch) was introduced through the obstruction (▶ **Fig. 3**). Dilation up to 15 mm was performed using a balloon from the antegrade side, and this was followed by insertion of a nasogastric tube to maintain the patency. The outcome was uneventful. Repeated dilations were required to achieve definitive re-sizing of the anastomosis.

Treatment of cervical anastomotic obstruction after coloplasty for caustic injury is challenging [1–3]. The endoscopic antegrade–retrograde technique appears to be an effective salvage therapy in complete anastomotic obstruction [4]. The most difficult part of the rendezvous procedure is gaining access to the colon below the anastomosis. Normally, a previous percutaneous endoscopic gastrostomy (PEG) is an easy route for the retrograde endoscopy [5]. Our case shows that a cervicotomy could be a simple option to gain access to the retrograde colon below the cervical anastomosis and avoid complex re-intervention in the abdomen.



▶ **Fig. 1** Illustration of the antegrade–retrograde rendezvous procedure that was jointly performed by two experienced endoscopists and a thoracic surgeon with the patient under general anesthesia. Two endoscopes with large single channels were introduced through the cervical colon and through the mouth to gain access to the pharyngocolonic anastomosis.

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Competing interests

The authors declare that they have no conflict of interest.

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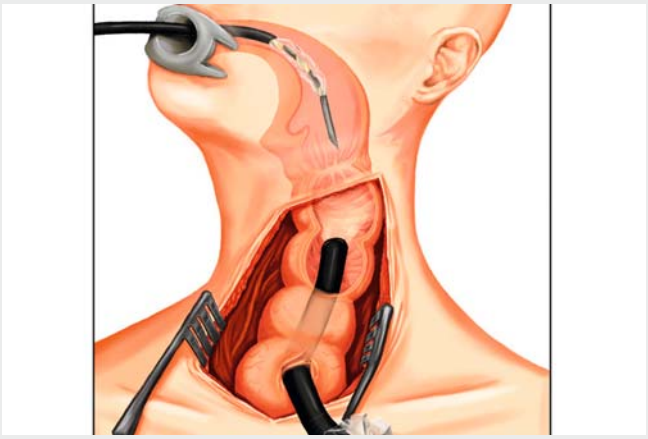
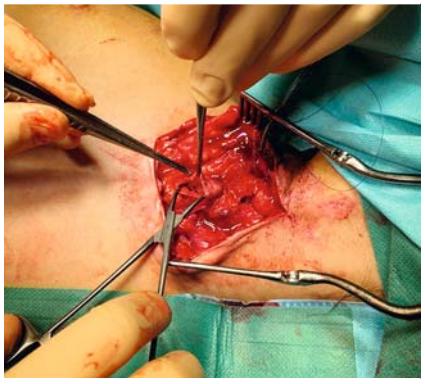
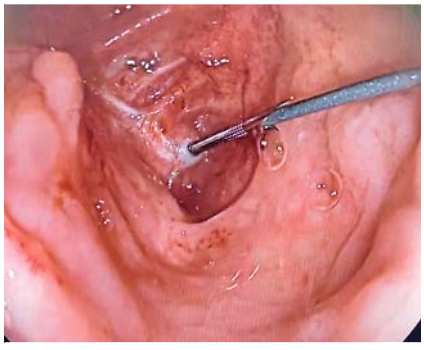


Video 1 Video showing rendezvous recanalization of a completely obstructed pharyngocolonic anastomosis. A cervicotomy was performed to allow access for the retrograde endoscope, which was then used to direct antegrade puncture. After insertion of a guidewire, balloon dilation was performed, with a nasogastric tube inserted once the rendezvous had been achieved.



▶ **Fig. 2** Photograph of the left cervicotomy, which allowed access to the 10-cm proximal part of the coloplasty just below the anastomosis. After careful mobilization of the cervical colon, a 2-cm colotomy was performed, so allowing antegrade introduction of a flexible endoscope.



▶ **Fig. 3** Endoscopic view of the proximal part of the disrupted esophagus showing the rendezvous between the retrograde endoscope and a catheter with a hydrophilic guidewire that had been passed through the obstructed pharyngocolonic anastomosis from the antegrade endoscope.

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Endoscopy 2020; 52: E428–E429
DOI 10.1055/a-1158-8682
ISSN 0013-726X
published online 6.5.2020

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Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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