

Peroral submucosal endoscopic stricturotomy - a novel third-space approach for a complex anastomotic stricture

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There are various options for the endoscopic treatment of benign anastomotic strictures of the esophagus, including balloon dilation or self-expanding metal stents. For complex refractory strictures, endoscopic radial incision (ERI) has been proposed [1].

In our video case, we demonstrate the third-space endoscopic treatment of a complex, angulated, and subtotal anastomotic stricture in a 67-year-old patient following neoadjuvant radiochemotherapy and total esophagectomy due to squamous cell carcinoma (SCC, pT1b). Recurrent balloon dilations had been unsuccessful and placement of a fully covered metal stent did not retain luminal restoration. He was referred to our unit for further treatment, but because of the complex nature of the stricture, ERI was deemed not feasible. A third-space approach, per-oral submucosal endoscopic stricturotomy, to enhance stricturotomy was performed (► **Video 1**).

First, a short submucosal tunnel was dissected adjacent to the stricture. After tunnel dissection, a complete stricturotomy, including the mucosa and the fibromuscular bridge, was done. Finally, a wide opening of the anastomotic stricture with endoscopic passage towards the gastric pull-up was achieved. Initial tunneling made the depth and extent of stricturotomy more visible. Third-space endoscopic techniques have been successfully implemented to treat endoluminal obstruction, including peroral endoscopic tunneling for restoration of the esophagus (POETRE) and endoscopic tunneled stricturotomy [2, 3]. Peroral submucosal endoscopic stricturotomy, as proposed here, may be a safe and effective approach for treating subtotal anastomotic strictures of the esophagus.

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► **Video 1** Peroral submucosal endoscopic stricturotomy for endoscopic treatment of a complex anastomotic stricture.

Competing interests

The authors declare that they have no conflict of interest.

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