E-Videos

Anterior pouch flexible endoscopic septal division: an alternative therapy for patients with a neopharyngeal pseudodiverticulum





▶ Fig. 1 Radiographic image during a contrast swallow showing a blind-ending tract (red arrow) in the anterior esophagus, in keeping with a neopharyngeal pseudodiverticulum.

Oropharyngeal dysphagia secondary to a neopharyngeal pseudodiverticulum can occur in up to 60% of patients who undergo total laryngectomy [1]. At least nine studies have reported on these symptomatic patients [2]. We describe the first case of anterior pouch flexible endoscopic septal division (FESD) in a patient with a neopharyngeal pseudodiverticulum.

A 61-year-old man was referred to our outpatient gastroenterology clinic for evaluation of dysphagia and regurgitation of solids and liquids following a complex total laryngectomy for squamous cell carcinoma of the glottis. The surgery had been complicated by an anastomotic leak and pharyngocutaneous fistula that required surgical revision, and he had been commenced on oral feeds after the leak had resolved. A contrast swallow showed pooling of contrast in a blindending tract in the anterior esophagus, in keeping with a neopharyngeal pseudodiverticulum (> Fig. 1). A possible endoscopic management option was considered.



Fig.2 Gastroscopy images showing: **a** an anterior neopharyngeal pseudodiverticulum, with the site of the incision indicated by a red arrow; **b** the incision site post-septal myotomy.





Video 1 Video showing anterior pouch flexible endoscopic septal division being performed.

At gastroscopy, a shallow 10-mm pouch was identified anteriorly (► Fig. 2 a). Anterior pouch FESD was performed using the standard technique of FESD previously described for the endoscopic management of Zenker's diverticulum [3]. The procedure was performed with the patient under conscious sedation using a high definition gastroscope (GIF-HQ190; Olympus). A septal myotomy was performed, using a 5-Fr, 4-mm Huibregtse needle-knife papillotome (Cook Medical), to the depth of the pseudodiverticulum (▶ Fig. 2 b). The incision was closed with three endoscopic clips (Resolution 360 clips; Boston Scientific) (▶ Video 1). Post-procedure, the patient was observed overnight on a liquid diet, then graduated to a soft diet for 48 hours. On follow-up at 1 and 8 weeks, he was tolerating a normal diet and reported near-complete resolution of his symptoms. This is the first reported case to have used this technique [4] for the manage-

ment of an anterior neopharyngeal pseudodiverticulum; it is an appealing and less invasive alternative to surgery. The use of the flexible instrument reduces the risk of dental injury and neck extension trauma, which had been previously reported [5].

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Competing interests

The authors declare that they have no conflict of interest.

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