

A rare case of bilateral Killian-Jamieson diverticula treated endoscopically

A 68-year-old man presented with progressive dysphagia to solids and liquids, regurgitation of undigested food, and weight loss for the past three years. Upper gastrointestinal endoscopy followed by a barium esophagram revealed two contralateral diverticula in the cervical esophagus just below the cricopharyngeus. They measured 2 cm and 4 cm and were filled with food debris, consistent with two synchronous Killian-Jamieson diverticula (► **Fig. 1**). After multidisciplinary evaluation, endoscopic treatment was proposed.

The procedure was performed under general anesthesia with endotracheal intubation. A submucosal bleb was created proximal to the diverticula in the posterior wall, followed by a 1.5-cm mucosal incision (► **Video 1**). A submucosal tunnel was created, which was then extended to both the end of the larger diverticulum and the proximal esophagus (► **Fig. 2**). Tunneling was continued until the bottom of the diverticulum was reached. The septum was thus entirely exposed and a complete septotomy was performed (► **Fig. 3**, ► **Fig. 4**). Finally, the mucosal incision was closed using six clips. The procedure took 60 minutes and there were no complications.

The patient progressed well and a post-procedural barium esophagram confirmed the absence of any extraluminal oral contrast leak. At 4 months after the procedure, the patient remains asymptomatic on a regular diet.

A Killian-Jamieson diverticulum is an unusual form of esophageal diverticulum arising from a muscular gap in the anterolateral wall of the proximal cervical esophagus [1]. It can present with symptoms similar to those of a Zenker's diverticulum and presents anatomic challenges for any intervention, particularly owing to the high risk of injury to the recurrent laryngeal nerve [1]. Because of its rare incidence, treatment remains controversial [1]. Endoscopic therapies



► **Fig. 1** Endoscopic view of the two Killian-Jamieson diverticula.



► **Fig. 2** Tunneling was performed along both sides of the septum to allow septum isolation.



► **Fig. 3** Complete septotomy was performed.



► **Fig. 4** Endoscopic view of the septum post-septotomy.



► **Video 1** Diverticular peroral endoscopic myotomy technique for the treatment of two Killian-Jamieson diverticula.

have been reported as safe and effective [1–3]. To the best of our knowledge, this is the first case of the use of the peroral endoscopic myotomy technique for the treatment of two Killian–Jamieson diverticula.

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Competing interests

The authors declare that they have no conflict of interest.

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