Endoscopic Killian–Jamieson diverticulotomy using a scissor-type electro-surgical knife

Killian–Jamieson diverticulum (KJD) is a rare, true esophageal diverticulum. Unlike the more common Zenker's diverticulum that arises on the posterior wall above the cricopharyngeus muscle, a KJD originates on the anterolateral wall of the cervical esophagus below the cricopharyngeal muscle [1]. The literature on endoscopic therapy for symptomatic KJD is limited [2–4].

We report a case of a 71-year-old woman who presented with a 6-month history of globus sensation, progressive dysphagia, and regurgitation of undigested food. A barium swallow revealed a 25-mm diverticulum on the anterolateral aspect of the esophagus, consistent with a KJD (► **Fig. 1**). The patient declined surgery and opted for endoscopic therapy.

During endoscopy, the KJD, with food debris within its lumen, was identified in the cervical esophagus. A transparent distal attachment cap (Olympus America, Center Valley, Pennsylvania, USA) was placed at the end of the endoscope and used to correctly identify the septum between the KJD and the true esophageal lumen. Next, a scissor-type endoscopic submucosal dissection (ESD) knife (Clutch Cutter; Fujifilm, Tokyo, Japan) was advanced through the working channel of the endoscope (► **Fig. 2a**). The septum was approached with the open serrated jaws of the scissor-type knife, which was then used to selectively grasp and cut the muscle fibers using electrocautery (Endocut Q mode [effect 2, duration 3, interval 1]; VIO 300D, ERBE, Tübingen, Germany) (► **Fig. 2b**; ► **Video 1**). There were no intra-procedural complications. The incision line was apposed by the placement of four endoscopic clips.

The patient progressed well following the procedure and was able to tolerate liquids within 24 hours. A post-procedural computed tomography (CT) esopha-

► **Fig. 1** Barium swallow showing retained oral contrast within the Killian–Jamieson diverticulum (arrows) on anteroposterior and lateral views.

► **Fig. 2** Endoscopic views showing: **a** the septum of the Killian–Jamieson diverticulum being approached by the scissor-type electro-surgical knife; **b** the appearance after completion of endoscopic diverticulotomy using the scissor-type electro-surgical knife.

gram confirmed the absence of any extraluminal oral contrast leak. The patient subsequently moved onto a regular diet and has remained asymptomatic for 10 weeks following the procedure.

A KJD is an unusual form of esophageal diverticulum that can present with symptoms similar to those of a Zenker's diverticulum. In this case, endoscopic

myotomy was safely and effectively completed with a scissor-type ESD knife.

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Competing interests

None

Video 1 Endoscopic Killian–Jamieson diverticulotomy using a scissor-type electro-surgical knife.

Bibliography

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