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# Peroral endoscopic myotomy approach to treating a Killian-Jamieson diverticulum

A 58-year-old man presented with dysphagia to pills, most solids, and some liquids. He also complained of regurgitation of food, either immediately or after 1-2 hours. He underwent a barium esophagram, which identified a cervical outpouching, which on further review was at the level of the upper esophageal sphincter, anterior and right lateral, suggesting that this was in fact a Killian-Jamieson (KI) diverticulum rather than the more common Zenker's diverticulum. KJ diverticula present anatomic challenges for any intervention, particularly because of the high risk of injury to the recurrent laryngeal nerve, which enters the neck at its base.

An upper gastrointestinal endoscopy was performed, during which a large anterolateral diverticulum was noted, consistent with the patient's esophagram. A wire was passed into the esophageal lumen to maintain orientation while the endoscope was reinserted with a clear distal cap alongside the wire. A transverse mucosal entry was created along the septum and the muscle was dissected and freed from both mucosal aspects of the diverticulum. A complete myotomy was created up to and beyond the apex to ensure complete resolution. Finally, the mucosal entry was closed with throughthe-scope clips (>Video 1). The patient did well and was able to be discharged on the same day. He has reported excellent symptomatic relief at follow-up visits.

The use of a peroral endoscopic myotomy (POEM) technique for the treatment of Killian–Jamieson and Zenker's diverticula represents a forward evolution of the endoscopic approach to these conditions. The main advantages of using the POEM technique over a traditional septotomy [1,2] are the safety and precision with which the muscle can be dissected away from the adjacent structures and the ability to provide safe closure for the myotomy, which in this case was 4–5 cm in length.





■ Video 1 Peroral endoscopic myotomy approach to treating a Killian – Jamieson diverticulum

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## Competing interests

P. C. Benias is a consultant for Medtronic, Boston Scientific, Apollo Endosurgical, and Olympus America. A. Trindade is a consultant for Pentax Medical and Olympus America. P. Wander declares no conflict of interest.

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