

Hybrid peroral endoscopic myotomy for large Zenker's diverticulum

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Zenker's diverticulum is considered a pulsation diverticulum developed in an area of weakness, known as the Killian's triangle. Flexible endoscopic treatment of Zenker's diverticulum was first introduced in 1982 and is now the first line of treatment [1, 2]. It consists of complete section of the abnormal septum by diverticulotomy, using an over-the-scope plastic diverticuloscope that allows stabilization and better exposure. However, this technique does not allow for the accurate estimation of complete myotomy and has a higher risk of perforation, mainly related to the blind introduction of the diverticuloscope [3].

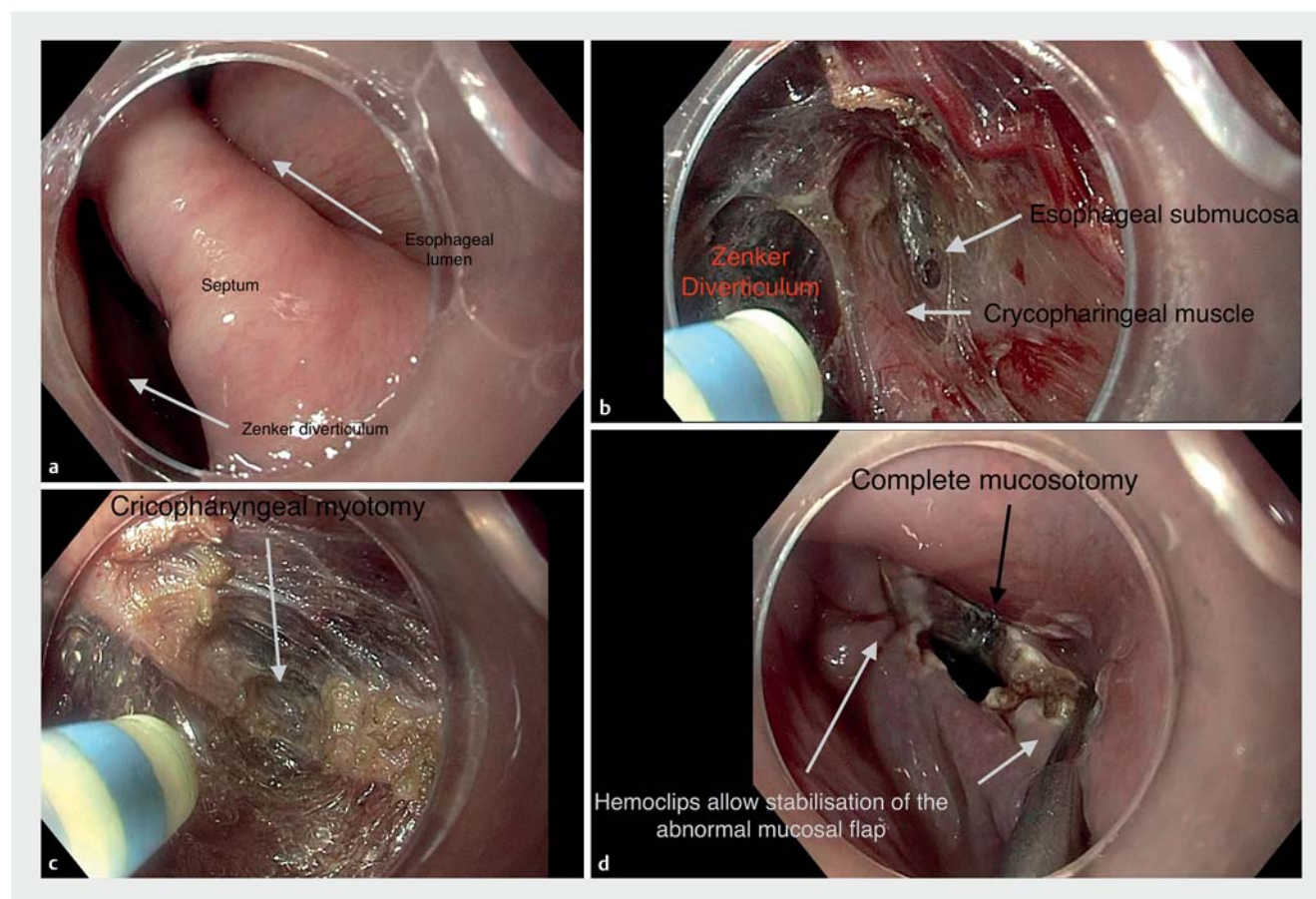
Peroral endoscopic myotomy for Zenker's diverticulum (zPOEM) was first described by Li et al. in 2016 and involves the same technique as the endoscopic myotomy used in the treatment of achalasia [4].

We report here the case of a 73-year-old patient with a large symptomatic Zenker's diverticulum (►Fig. 1 a). Owing to the size of the diverticulum, we decided to perform a modified hybrid zPOEM technique that comprises two steps: first the mucosal incision and submucosal tunneling followed by complete cricopharyngeal myotomy (►Fig. 1 b, c). Secondly, we stabilized the residual mucosal flap with two clips, and performed a

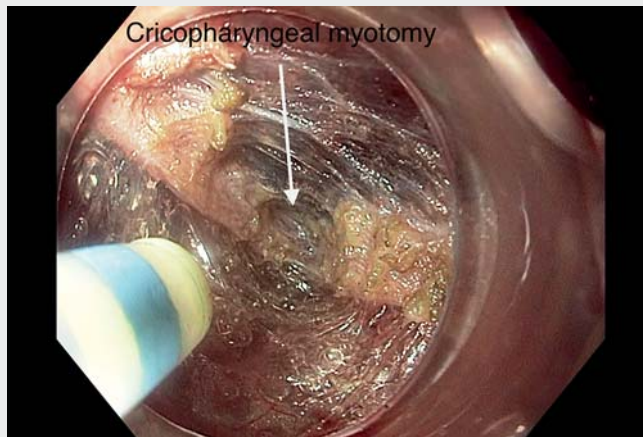
complete mucosotomy between the two clips (►Fig. 1 d, ►Video 1). This technique was recently published by Zhang et al. in a small case series [5].

To our knowledge, this is one of the first video reports of this hybrid zPOEM technique. It can be useful in cases of large Zenker's diverticula, without any additional risks; however, this may be difficult to prove as the pathology remains rare and current flexible endoscopic strategies are already very effective. The size of the diverticulum should be taken into consideration when choosing the best endoscopic strategy.

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► **Fig. 1** Hybrid peroral endoscopic myotomy for Zenker's diverticulum. **a** The large Zenker's diverticulum. **b** Submucosal tunnelling. **c** Endoscopic myotomy. **d** Endoscopic mucosotomy and closure with clips.



Video 1 Hybrid peroral endoscopic myotomy for Zenker's diverticulum.

Bibliography

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Competing interests

The authors declare that they have no conflict of interest.

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