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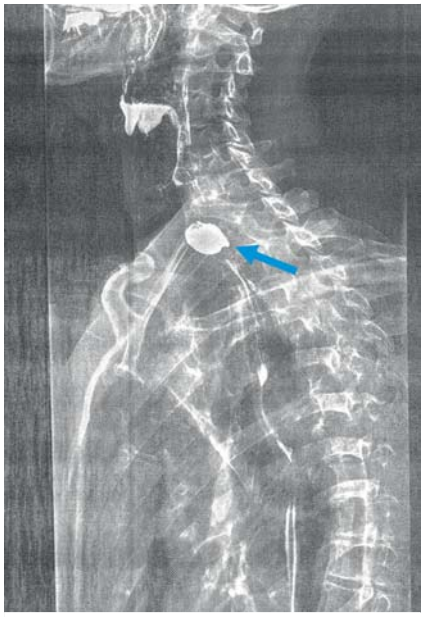
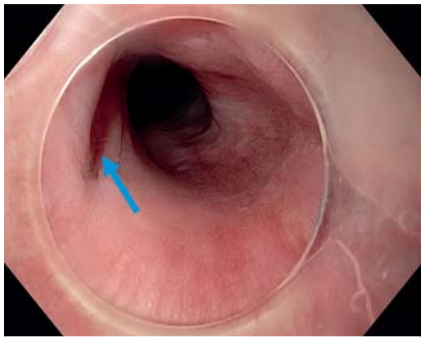
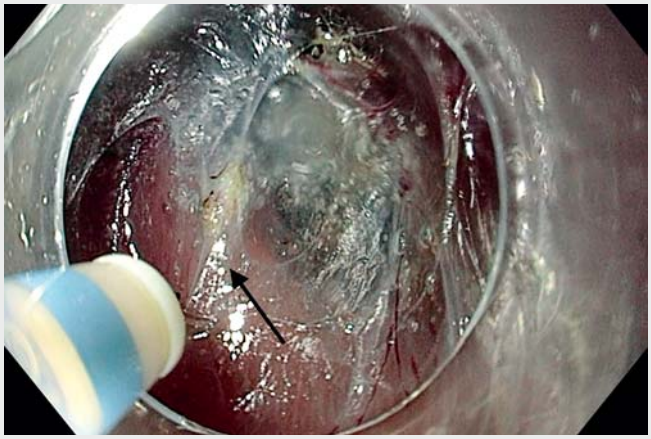
Zenker's diverticulum peroral endoscopic myotomy is effective in the case of an incipient Zenker's diverticulum



▶ **Fig. 1** Barium swallow; black arrow indicates notch.



▶ **Fig. 2** Endoscopic aspect; black arrow shows the abnormal septum.



Video 1 Effective treatment of incipient Zenker's diverticulum using Zenker's diverticulum peroral endoscopic myotomy.

Zenker's diverticulum is a pulsion diverticulum developed in an area of weakness known as the Killian's triangle. Flexible endoscopic treatment of this condition was first introduced in 1982 and is now the first line of treatment [1]. This technique involves the division of the septum of the diverticulum, by incision with a cutting device, in order to achieve the cricopharyngeal myotomy, with the objective to reduce the size of the diverticulum and improve the symptoms (dysphagia, regurgitation, and respiratory symptoms).

Li and colleagues first described a novel endoscopic cricopharyngeal myotomy using the same principle as peroral endoscopic myotomy (POEM) for achalasia [2, 3]. This technique called Zenker's diverticulum peroral myotomy (zPOEM) is aimed to reduce the risk of perforation, previously reported as high as 6.5 % [4]. We previously showed that zPOEM is also available as a rescue treatment after classical diverticulotomy [5].

We present here the case of a 61-year-old patient with a chronic history of proximal dysphagia. Under barium swallow we can see a notch (▶ **Fig. 1**) that could be mistaken for a larger Zenker's diverticulum. In fact, the endoscopic examination showed a small proximal esophageal diverticulum (▶ **Fig. 2**, ▶ **Video 1**). We decided to perform zPOEM because our patient had severe chronic dysphagia that was affecting his quality of life. The mucosal incision was performed proximal to the septum followed by submucosal tunneling. An obvious cricopharyngeal septum was identified and completely sectioned. In the end, the mucosal incision was closed with endoclips. There were no complications. He reported complete symptom resolution 2 months later. Our case is particularly interesting because, even though the endoscopic examination shows a very small diverticulum, we can see an abnormally thick septum represented by the cricopharyngeal muscle, which needs to be sectioned in order to alleviate the patient's symptoms and prevent future enlargement of the diverticulum.

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Competing interests

The authors declare that they have no conflict of interest.

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The authors

Alexandru Lupu, Clara Yzet, Pierre Lafeuille, Louis-Jean Masgnaux, Thomas Lambin, Jérôme Rivory, Mathieu Pioche
Gastroenterology and Endoscopy Unit, Edouard Herriot Hospital, Lyon, France

Corresponding author

Alexandru Lupu, MD
Gastroenterology and Endoscopy Unit, Edouard Herriot Hospital, 5 Pl d'Arsonval, 29003 Lyon, France
alexandru.c.lupu@gmail.com

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