Submucosal tunneling endoscopic septum division for Zenker’s diverticulum: a reproducible procedure for endoscopists who perform peroral endoscopic myotomy

Zenker’s diverticulum is a rare disease occurring in less than 0.5% of the global population. Currently, the diverticuloscope-assisted diverticulotomy represents the traditional procedure, the diverticuloscope enabling better exposure of the muscular fibers. Although effective and safer than surgery, this technique could be complicated by perforation, which is reported in as many as 6.5% of patients [1]. Recently, Li et al. reported a novel technique called the submucosal tunneling endoscopic septum division (STESD) [2], inspired by the peroral endoscopic myotomy (POEM) technique [3]. The theoretical advantage is to completely dissect the muscular septum without mucosal opening. This video case reports the second successful treatment of Zenker’s diverticulum using this new procedure.

A 72-year-old woman underwent upper endoscopy for dysphagia, revealing a Zenker’s diverticulum 20 cm from the incisors (Fig. 1), which was confirmed by esophagogram (Fig. 2). We performed the diverticulotomy using the STESD technique (Video 1) and a gastroscope (Fujinon, Tokyo, Japan) with cap.

Submucosal incision was performed after submucosal injection, 3 cm above the diverticular septum. A tunnel was made using a 1.5 mm FlushKnife (Erbe Elektromedizin, Tübingen, Germany) between the muscular layers and the mucosa until the muscular septum was reached, and then continued along both sides of the septum, to create a large endoscopic window. Thereafter, the diverticular septum was completely dissected (with spread coagulation) along its entire length. Finally, after hemostasis, the mucosal incision was closed by four clips.

Intravenous antibiotics were continued for 2 days postoperatively, and the patient was discharged at Day 3. Symptoms had totally resolved 15 days later.

In summary, STESD is a reproducible technique that is easily accessible to endoscopists who perform peroral endoscopic myotomy.
doscopists who have experience of the POEM procedure. Further studies are required to validate this technique and compare it with classic diverticuloscope-assisted diverticulotomy.

Endoscopy_UCTN_Code_TTT_1AO_2AG

Competing interests

None

The Authors

Bertrand Brieau¹, Sarah Leblanc¹, Benoît Bordacahar¹, Maximilien Barret¹,², Romain Coriat¹,², Frédéric Prat¹,², Stanislas Chaussade¹
¹ Service de gastro-entérologie et oncologie digestive, Hôpital Cochin, Université Paris Descartes, Paris, France
² Unité INSERM U1016, Paris, France

Corresponding author

Bertrand Brieau, MD
Service de gastro-entérologie et oncologie digestive, Hôpital Cochin, 27 rue du Faubourg Saint Jacques, 75014 Paris, France
Fax: +33-1-58411952
bertrand.brieau@aphp.fr

References


Bibliography

DOI https://doi.org/10.1055/s-0043-105574
Endoscopy 2017; 49: 613–614
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

Fig. 2 Zenker’s diverticulum in an esophagogram in sagittal plan.