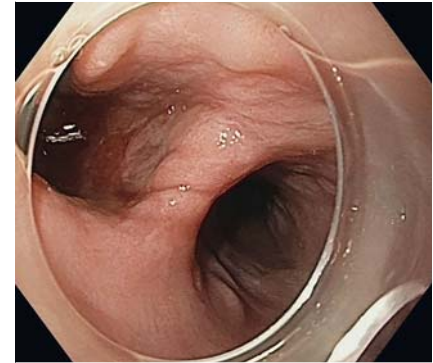
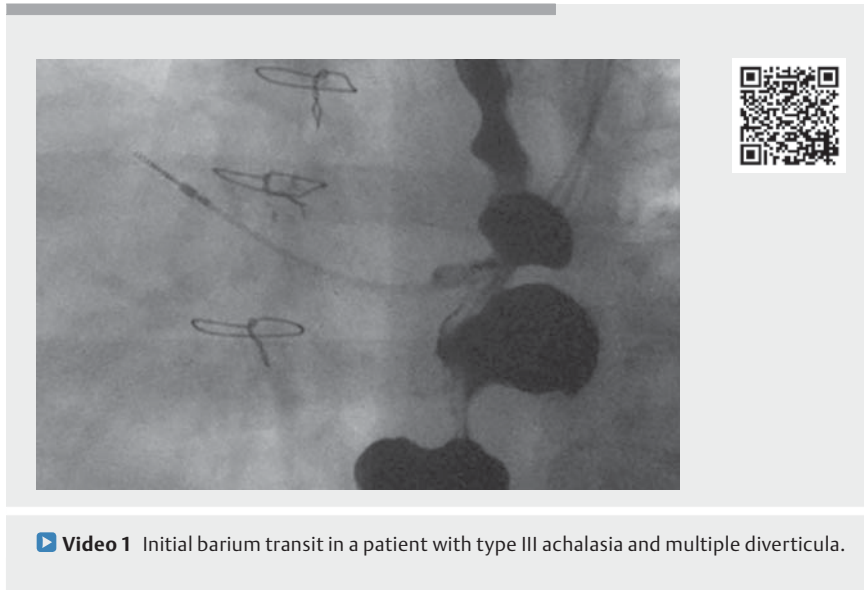


Peroral endoscopic myotomy, septotomy, and restoration of esophageal lumen with over-the-scope clips: closing the circle of esophageal diverticula management



Peroral endoscopic myotomy (POEM) is an option for esophageal diverticula treatment based on septum myotomy. However, a significant number of patients continue to be symptomatic owing to the pouch persistence [1–4].

A 66-year-old man with significant weight loss, dysphagia, and chest pain was referred to our unit. Preoperative workup included: a) endoscopy of large diverticulum above the esophagogastric junction (EGJ); b) barium swallow with dilatation of distal esophagus with two diverticula, contrast hold-up, and tertiary contractions (video image); c) high-resolution impedance manometry indicating type 3 achalasia with a premature contractile segment starting 11 cm above the EGJ; and d) CT scan showing absence of extrinsic lesions.

A POEM was performed. Initial evaluation showed one 2-cm diameter diverticulum without a septum at 29 cm and the 12 o'clock position. Two large diverticula with defined septa were found at 32 cm and 3 o'clock, and 3 cm distally at 9 o'clock (▶ **Fig. 1**). A wide 16-cm long submucosal tunnel exposing 50% of the esophageal circumference was initiated

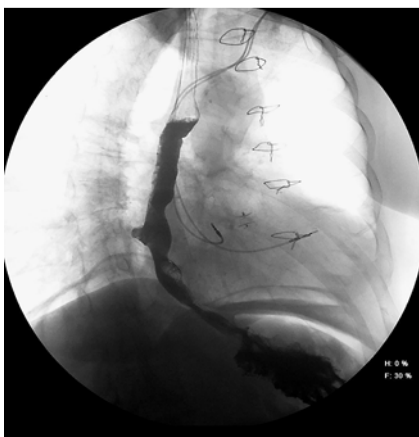
at 26 cm and extended to 2 cm below the EGJ (▶ **Fig. 2**). An uninterrupted posterior myotomy was started 12 cm above the EGJ to ensure complete dissection of the spastic segment (▶ **Fig. 3**). Then, the myotomy was directed right to dissect the 3 o'clock diverticulum septum; afterwards, it was directed left to the 9 o'clock diverticulum septum and finally to the cardia and fundus, following the direction of the sling fibers. Both diverticulum pouches were everted towards the esophageal lumen and grasped with over-the-scope (OTS) clips (▶ **Fig. 4**). The mucosotomy was closed with through-the-scope (TTS) clips. An early barium swallow demonstrated a restored esophageal anatomy with normal contrast flow (▶ **Fig. 5**). The patient was discharged without complications and remains asymptomatic on a regular diet.

We conclude that a multimodal one-session endoscopic procedure treating both the underlying motility disorder and the diverticula, with restoration of the lumen mechanically (OTS clips), will lead to better rates of therapeutic success.

Endoscopy_UCTN_Code_TTT_1AO_2AN



► **Fig. 4** Diverticulum pouch everted towards the esophageal lumen with an over-the-scope clip.



► **Fig. 5** Restored esophageal anatomy and normal contrast flow after multimodal treatment.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Eduardo Albéniz¹, **Fermín Estremera-Arévalo**¹, **Marta Gómez Alonso**¹, **Pedro J. Rosón**², **Francisco J. Gallego Rojo**³, **Juan Vila**¹, **Sheyla Montori**⁴

- 1 Endoscopy Unit, Gastroenterology Dept., Hospital Universitario de Navarra (HUN), Navarrabiomed Biomedical Research Center, Universidad Pública de Navarra (UPNA), IdiSNA, Navarra, Spain
- 2 Hospital Quirón Salud Málaga, Gastroenterology Endoscopy Unit, Málaga, Spain
- 3 Hospital de Poniente-El Ejido, Almería, Gastroenterology Department, Almería, Spain
- 4 Gastrointestinal Endoscopy Research Unit, Navarrabiomed, Hospital Universitario de Navarra (HUN), Universidad Pública de Navarra (UPNA), IdiSNA, Navarra, Spain

Corresponding author

Eduardo Albéniz, MD

Endoscopy Unit, Gastroenterology Department, Complejo Hospitalario de Navarra, Navarrabiomed Biomedical Research Center, Public University of Navarra (UPNA), Navarra Health Research Institute (IdiSNA), Irunlarrea 3, 31008, Navarra, Spain
 edualbeniz@hotmail.com

References

- [1] Miutescu BP, Khan S, Mony S et al. Role of peroral endoscopic myotomy (POEM) in the management of esophageal diverticula. *Clin Endosc* 2020; 53: 646–651
- [2] Kamal F, Khan MA, Lee-Smith W et al. Peroral endoscopic myotomy is a safe and feasible option in management of esophageal diverticula: systematic review and meta-analysis. *Dig Dis Sci* 2021; 66: 3242–3249
- [3] Ishaq S, Siau K, Kuwai T et al. Zenker's peroral endoscopic myotomy (Z-POEM) for recurrent Zenker diverticulum: not so fast! *Endoscopy* 2021; 53: 767
- [4] Nishikawa Y, Inoue H, Abad MRA et al. Peroral endoscopic myotomy with diverticulum resection. *VideoGIE* 2020; 5: 534–538

Bibliography

Endoscopy 2022; 54: E666–E667
 DOI 10.1055/a-1724-6801
 ISSN 0013-726X
 published online 11.2.2022
 © 2022. Thieme. All rights reserved.
 Georg Thieme Verlag KG, Rüdigerstraße 14,
 70469 Stuttgart, Germany

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



Endoscopy E-Videos is an open 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. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

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