Dual flexible endoscopic rendezvous approach for management of a Zenker’s diverticulum with complete esophageal obstruction

Therapy for symptomatic Zenker’s diverticulum has evolved from an open surgical approach to transoral endoscopic techniques using rigid instruments or flexible endoscopes. A recent meta-analysis confirmed that flexible endoscopic myotomy for Zenker’s diverticulum is effective and safe [1]. Complete esophageal obstruction is a rare complication that is caused by fusion of the proximal esophageal lumen with the septum of the Zenker’s diverticulum [2, 3].

We present a case of a 59-year-old man who presented with aphagia with a 7-year history of progressive dysphagia due to a Zenker’s diverticulum. A surgical gastrostomy had been created 1 year previously and the patient had been maintained exclusively on enteral nutrition. Esophagogastroduodenoscopy (EGD) and a computed tomography (CT) scan demonstrated a large Zenker’s diverticulum with complete esophageal obstruction at the level of the cricopharyngeal muscle suggesting fusion of the esophageal lumen (Fig. 1 and Fig. 2). A dual endoscopic retrograde–antegrade approach was planned (Fig. 3).

An ultraslim endoscope (5.9-mm diameter; endoscope 1) was introduced through the percutaneous gastrostomy site. A tight distal esophageal stricture was encountered as a consequence of the defunctionalized esophagus, there-
fore a pneumatic dilation up to 10 mm was performed (▶Video 1). Subsequently, the endoscope was further advanced in a retrograde fashion up to the proximal esophagus, where a complete esophageal obstruction was confirmed. A peroral endoscope (9.9-mm diameter; endoscope 2) was advanced into the hypopharynx and both endoscopes were aligned by transillumination (▶Fig. 4a). Subsequently, retrograde puncture with an injection needle was performed, followed by insertion of a guidewire into the hypopharynx. After capture of the guidewire, a mechanical dilation was performed and a nasogastric tube placed. A flexible endoscopic septotomy was performed 1 week later using a hook knife (▶Fig. 4b).

After 6 weeks, the patient had gained weight and was eating a regular diet. A barium esophagram and an EGD showed the diverticular pouch was in complete connection with the esophageal lumen. To our knowledge, this is the first reported case of flexible endoscopic septotomy for the management of a Zenker’s diverticulum after recanalization of complete esophageal obstruction using a dual endoscopic retrograde–antegrade approach. This technique appears to be a promising alternative to surgery in such a complex condition.

Competing interests
None

The authors
Alessandro Fugazza1, Annalisa Cappello1, Roberta Maselli1, Paul Bellettrutti2, Alessia Galtieri1, Gaia Pellegatta1, Alessandro Repici1,2
1 Digestive Endoscopy Unit, Division of Gastroenterology, Humanitas Research Hospital, Rozzano, Milan, Italy
2 Humanitas University, Rozzano, Milan, Italy

Corresponding author
Alessandro Fugazza, MD
Digestive Endoscopy Unit, Division of Gastroenterology, Humanitas Research Hospital, Via Manzoni 56, 20089 Rozzano (Milano), Italy
alessandro.fugazza@humanitas.it

References

Bibliography
DOI https://doi.org/10.1055/a-0894-4324
Published online: 9.5.2019
Endoscopy 2019; S1: E259–E260
© 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

E260 Fugazza Alessandro et al. Rendezvous approach for obstructed Zenker’s diverticulum... Endoscopy 2019; S1: E259–E260