

## Full-thickness septotomy of Zenker's diverticulum

A 92-year-old woman with a past medical history of moderate-to-severe mitral regurgitation, chronic obstructive pulmonary disease, and Zenker's diverticulum presented with chronic dysphagia and weight loss. Her condition warranted a minimally invasive intervention. Thus, the decision was made to perform an endoscopic septotomy to treat the Zenker's diverticulum. This procedure has been described for decades and has been proven to be efficacious [1–3]. We describe a full-thickness resection of this procedure.

On esophagram, a diverticulum with a large opening was found in the upper third of the esophagus. A GIF-H180 endoscope (Olympus, Tokyo, Japan) with a transparent cap fitted onto the tip was inserted through the mouth and advanced to just below the upper esophageal sphincter. Just below the upper esophageal sphincter, a large diverticulum was noted (► **Fig. 1**). The septum of the diverticulum was seen with mild collapse of the esophageal lumen.

At the center of the septum, a septotomy was performed from the esophageal lumen into the diverticular space using a HybridKnife T type (Erbe Elektromedizin GmbH, Tübingen, Germany) (► **Video 1**). An insulated-tip type 2 needle-knife was also used to complete the septotomy and to prevent any damage or injury to the mediastinum. The diverticulum disappeared following completion of the dissection. After dissection, eight hemoclips were attached to the base of the incision to avoid any small defect.

The full-thickness endoscopic septotomy was performed without difficulty and the patient tolerated the procedure well. An esophagram performed 1 day post-procedure showed no evidence of leakage, with contrast flowing freely into the stomach. The patient was discharged in good clinical condition, and the diet was advanced.



► **Video 1** A diverticulum with a large opening was found in the upper third of the esophagus, just below the upper esophageal sphincter.

This case demonstrates the successful management of Zenker's diverticulum using a full-thickness endoscopic septotomy.

Endoscopy\_UCTN\_Code\_TTT\_1AO\_2AD

### Competing interests

Michel Kahaleh has done consulting work for Boston Scientific, Interscope Med, and Abbvie. He has received research grants from Boston Scientific, Emcision, Conmed, Pinnacle, Cook, Gore, Merit, and Olympus. His current research support is from Boston Scientific, Interscope, and Ninepoint Medical. He is the CEO and Founder of Innovative Digestive Health Education & Research Inc. and Therapeutic Endoscopic Ultrasound Society.

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► **Fig. 1** The completely dissected septum resulted in full resolution of the diverticulum.

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## Bibliography

DOI <https://doi.org/10.1055/a-1024-3343>  
Published online: 7.11.2019  
*Endoscopy* 2020; 52: 308–309  
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Stuttgart · New York  
ISSN 0013-726X

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