

Per-oral Endoscopic Myotomy (Z-POEM): An Effective Treatment for Zenker's Diverticulum with Long-Term Results

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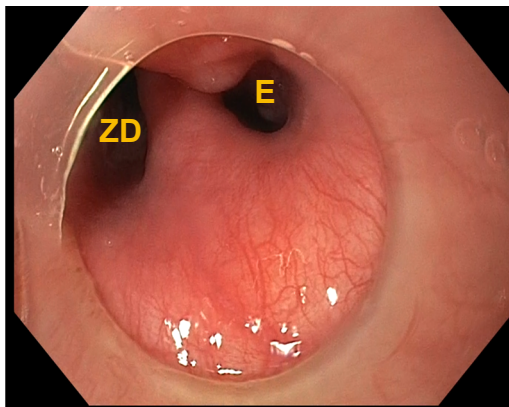


Figure 1. Zenker's diverticulum.

ZD: Zenker's diverticulum., E: esophageal lumen



Figure 2. Mucosal incision to make submucosal tunneling

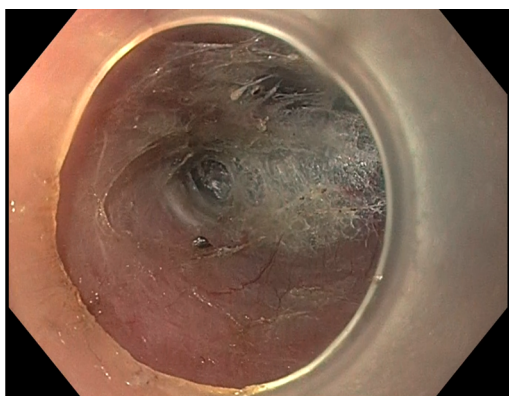


Figure 3. Myotomy of the septal muscle

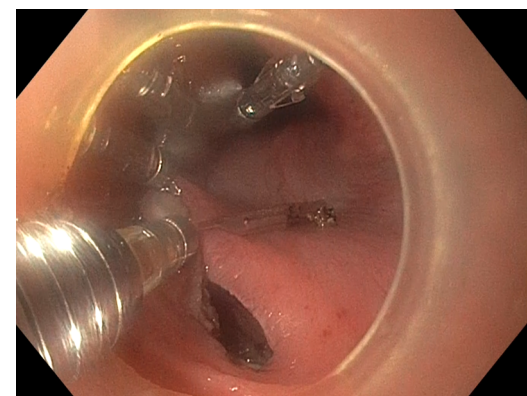


Figure 4. Closure of mucosal defect using hemoclips

Zenker's diverticulum (ZD) arises from impaired cricopharyngeal (CP) muscle distensibility during deglutition (swallowing), leading to a clinical presentation characterised by dysphagia, regurgitation, aspiration, cough,

and potential weight loss.^{1,2} The definitive treatment for ZD is a CP myotomy. Traditionally, open surgical approaches (transcervical diverticulectomy, diverticulopexy, or diverticular inversion) with or without concomitant CP

myotomy and rigid endoscopic techniques utilizing stapling or CO2 laser therapy have been employed. However, these interventions are often associated with significant morbidity and mortality, particularly in the elderly and comorbid ZD patient population.³

The advent of flexible endoscopic ZD treatment has revolutionized the therapeutic landscape, rapidly becoming the preferred first-line modality for the management of small to moderate-sized diverticula. The past decade has witnessed the emergence of a multitude of novel techniques within the realm of flexible endoscopic ZD treatment.⁴

In this medical illustration, we report a 64-year-old woman with Zenker's diverticulum treated with Z-POEM. She came to our clinic with dysphagia and regurgitation in the last 6 months prior. Diagnostic gastroscopy showed ZD of 3 cm, located 18 cm from incisors with a thick septal muscle. A triangle-shaped knife created a 2-cm mucosal incision, and submucosal tunneling was made by spray coagulation. The gastroscope was advanced through the submucosal space of the esophageal lumen and the diverticulum site until the bottom of the diverticulum. The septal muscle was completely cut, immediately allowing the gastroscope to pass through easily, and the mucosal defect was closed with hemostatic clips. Six months following the treatment, the patient no longer experienced dysphagia and regurgitation.

Z-POEM offers a precise approach to treating Zenker's diverticulum by providing a complete visualization of the entire septal muscle. This comprehensive view minimizes the risk of incomplete myotomy, ensuring a more effective treatment.^{5,6}

CONFLICT OF INTEREST

The author declares that he has no conflict of interest.

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