will question the need for Z-POEM. Because this is a rare condition, we need to have a general body of experience in the field and a good understanding of the pathophysiology of the underlying condition being treated irrespective of the specific technique. Solutions change (usually for the better) but the problem stays the same. As such, for optimal outcomes, experience matters!

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Commentary: Transoral endoscopic repair of Zenker's diverticulum by a thoracic surgical service

Xavier Benoit D'Journo, MD, PhD,
Alex Fourdrain, MD, and David Boulate, MD, PhD

Despite the lack of consensus on the treatment of Zenker's diverticulum (ZD), open surgery is being progressively replaced by endoluminal endoscopic surgery, which appears to allow for a lower rate of complications and lower hospital costs and provides satisfactory long-term outcomes with the possibility of redo endoluminal treatment.^{1,2}

In this issue of the *Journal*, Levy and colleagues³ provide early and late functional results after transoral stapling repair based on a consecutive series of 151 ZD patients. Based on a single-institution database, the authors report a low rate of conversion (10%), a low rate of complications (4%), and a median hospital stay of 2 days. With a median follow-up of 52 months, the estimated probability of freedom from failure was 96% at 2 years and 92% at 5 years.

Although most published series on endoscopic repair have been reported by otolaryngologists and gastroenterologists, the authors point out that endoluminal repair can be

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David Boulate, MD, PhD (left), Xavier Benoit D'Journo, MD, PhD (middle), and Alex Fourdrain, MD (right)

CENTRAL MESSAGE

Modern treatment of Zenker's diverticulum includes endoluminal surgery. This study confirms that experienced thoracic surgeons are appropriately proficient in performing such emerging techniques.

performed in a thoracic surgery department. This raises the question of placing endoluminal repair in the core competencies of thoracic surgeons. Even if UPMC staff surgeons are well known for their expertise in esophageal surgery, many thoracic surgeons worldwide do not routinely perform esophageal surgery. However, esophageal surgery is included in the scope of several national surgical thoracic societies in North America, Asia, and Europe. Acquisition of competencies in esophageal procedures is required to graduate from a complete training program in many of these societies. The available data confirm that in experienced centers, thoracic surgeons have appropriate proficiency in performing endoluminal surgery.

Levy and colleagues have reported only results of transoral stapling whereas peroral endoscopic myotomy (POEM) with

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flexible endoscope has been reported with promising results.⁴⁻⁷ Stapling methods seem to have a slight benefit compared with flexible techniques in terms of the risk of perforation or subcutaneous emphysema. However, flexible techniques do not require oral intubation, are more adaptable to cervical extension limitations, are known to provide fewer dental injuries, and are more likely suitable for repeat procedures in the event of failure. Ideal indications for flexible endoscopic therapy include patients with contraindications for open or rigid transoral approaches, those with ZD <3 cm, or those with a failure of previous repair. The main limitation of flexible endoscopic approach is the size of diverticula (>3 cm), resulting in high rates of recurrent dysphagia (10%-30%).^{6,7}

Despite intrinsic limits due to the study's retrospective and noncontrolled nature, the results of Levy and colleagues invite us to consider individualized treatment for ZD. Further studies should focus on comparisons between endoluminal techniques and an open approach. Currently, patient selection regarding the choice of endoluminal therapy compared to open surgery remains unclear owing to a lack of evidence-based recommendations. Future studies also could include the size of the diverticulum in a multivariate analysis of factors contributing to failure as

this is clearly the main reason for conversion and poor outcome. Finally, gathering information regarding the learning curve for oral stapling in thoracic surgery units may be valuable to strengthen the incorporation of this technique in the core competencies.

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Commentary: Zenker's diverticulum: One size does not fit all

Suha Kaaki, MD, and Matthew G. Hartwig, MD, MHS

In this Issue of the *Journal*, Levy and colleagues¹ reviewed their series of the transoral stapling approach performed by thoracic surgeons to treat Zenker's diverticulum (ZD). The

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CENTRAL MESSAGE

Incisionless techniques in treating Zenker's diverticulum by thoracic surgeons are a safe and feasible approach that strongly contribute to the advancement in management of this disease.

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