References

1. Rice TW, Ishwaran H, Blackstone EH, Hofstetter WL, Kelsen DP, Apperson-Hansen C, Worldwide Esophageal Cancer Collaboration Investigators. Recommendations for clinical staging (cTNM) of cancer of the esophagus and esophagogastric junction for the 8th edition AJCC/UICC staging manuals. *Dis Esophagus*. 2016;29:913-9.
2. Rice TW, Rusch VW, Apperson-Hansen C, Allen MS, Chen LQ, Hunter JG, et al. Worldwide esophageal cancer collaboration. *Dis Esophagus*. 2009;22:1-8.
3. Ruffini E, Fang W, Guerrero F, Huang J, Okumura M, Kim DK, et al. Staging and Prognostic Factors Committee, Staging and Prognostic Factors-Thymic Domain Subcommittee, Staging and Prognostic Factors Subcommittees, Members of the Advisory Boards. The International Association for the Study of Lung Cancer Thymic Tumors Staging Project. The impact of the eighth edition of the Union for International Cancer Control and American Joint Committee on cancer TNM stage classification of thymic tumors. *J Thorac Oncol*. 2020;15:436-47.
4. Sadowski DC, Ackah F, Jiang B, Svenson LW. Achalasia: incidence, prevalence and survival. A population-based study. *Neurogastroenterol Motil*. 2010;22:e256-61.
5. Sudarshan M, Raja S, Adhikari S, Murthy S, Thota PN, Gabbard S, et al. Peroral endoscopic myotomy provided effective palliation in type III achalasia. *J Thorac Cardiovasc Surg*. 2022;163:512-9.e1.
6. Inoue H, Sato H, Ikeda H, Onimaru M, Sato C, Minami H, et al. Per-oral endoscopic myotomy: a series of 500 patients. *J Am Coll Surg*. 2015;221:256-64.

See Article page 512.

Commentary: A nice beginning to this POEM, but the ending has yet to be written

Michael Keirse, MD, and Thomas Ng, MD

Achalasia is a primary disorder of esophageal motility involving the absence of esophageal peristalsis and impaired relaxation of the lower esophageal sphincter in response to swallowing. It can be subcategorized into 3 types based on manometric findings. Type III, the most difficult subtype of achalasia to treat, is characterized by premature or spastic esophageal contractions, which can extend much more proximal to the gastroesophageal junction than the other subtypes. Therefore, peroral endoscopic myotomy (POEM), which allows for a longer myotomy, may be the more effective treatment modality for type III achalasia symptoms compared with other therapies that target only the lower esophagus.

In their article in this month's *Journal*, Sudarshan and colleagues¹ report a retrospective analysis of 36 patients undergoing POEM for type III achalasia at their tertiary care

Michael Keirse, MD, and Thomas Ng, MD

CENTRAL MESSAGE

POEM appears to be a safe and effective treatment for the symptoms of type III achalasia, but current data has yet to adequately address the long-term implications of the resultant reflux.

institution between 2014 and 2019. The median procedure time was 85 minutes, the median hospital length of stay was 1 day, and complications were few and not severe. At a 1-year follow-up, patients showed significant improvement in symptoms as measured by the Eckardt score, improvement in timed barium column height and width study, and improvement in lower esophageal sphincter (LES) integrated resting pressure (IRP). Overall, for the treatment of type III achalasia, POEM was successful, as defined by an Eckardt score of ≤ 3 , in 94% of the patients.

The authors then compared this POEM cohort with 35 patients who underwent laparoscopic Heller myotomy (LHM) with Dor fundoplication between 2006 and 2019

From the Division of Thoracic Surgery, University of Tennessee Health Science Center, College of Medicine, Memphis, Tenn.

Disclosures: The authors reported no conflicts of interest.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

Received for publication March 5, 2021; revisions received March 5, 2021; accepted for publication March 8, 2021; available ahead of print March 11, 2021.

Address for reprints: Thomas Ng, MD, Division of Thoracic Surgery, University of Tennessee Health Science Center, College of Medicine, 1325 Eastmoreland Ave, Suite 460, Memphis, TN 38104 (E-mail: tng4@uthsc.edu).

J Thorac Cardiovasc Surg 2022;163:521-2

0022-5223/\$36.00

Copyright © 2021 by The American Association for Thoracic Surgery

<https://doi.org/10.1016/j.jtcvs.2021.03.026>

for type III achalasia and found no difference in Eckardt score and in timed barium swallow study, higher LES IRP with LHM (but still within the normal range of <15 mm Hg), and a higher incidence of an abnormal pH study with POEM, as defined by a DeMeester score >14.72 (61% with POEM vs 24% with LHM). However, the comparison lacked scientific strength, as no adjustments were made to account for the differences between the 2 groups.

Sudarshan and colleagues have shown that in experienced hands, POEM is a safe and highly successful treatment for the symptoms of type III achalasia, but their data also exposes reflux as a major side effect of this treatment. The higher incidence of reflux after POEM compared with LHM for achalasia was also found in a randomized trial reported by Werner and colleagues.² This is somewhat expected, as reflux is often addressed by fundoplication during LHM. Unfortunately, the incidence and impact of long-term sequelae of this reflux (eg, severe esophagitis, Barrett's

epithelium with dysplasia, stricture formation, development of malignancy, long-term effects of proton pump inhibitor use) are not yet known, as both studies had short follow-up times, of 1 year and 2 years, respectively.

Initial data would suggest that POEM has the highest success rate for the treatment of type III achalasia, but before deeming POEM superior, long-term implications of the resulting reflux must be established. Admittedly, owing to the rarity of this disease and patient/physician bias, a randomized study with long-term follow-up comparing POEM and LHM would be difficult, but it will be necessary to determine the ideal management for type III achalasia.

References

1. Sudarshan M, Raja S, Adhikari S, Murthy S, Thota P, Gabbard S, et al. Peroral endoscopic myotomy provides effective palliation in type III achalasia. *J Thorac Cardiovasc Surg*. 2022;163:512-9.e1.
2. Werner YB, Hakanson B, Martinek J, Repici A, von Rahden BHA, Bredenoord AJ, et al. Endoscopic or surgical myotomy in patients with idiopathic achalasia. *N Engl J Med*. 2019;381:2219-29.

See Article page 512.

Commentary: Peroral endoscopic myotomy, the poetic remedy for type III achalasia

Abbas E. Abbas, MD

Achalasia, or lack of relaxation, was offhandedly coined by Cooper Perry for his friend Arthur Hertz, who first used the name in 1914.¹ Incidentally, that same year, Ernst Heller published his report on esophagocardiomyotomy for "cardiospasm."² Ironically, despite being among the most recognized ailments of the foregut, achalasia remains a disease with no identifiable etiology or cure. Pathologically, there

Abbas E. Abbas, MD

CENTRAL MESSAGE

Peroral endoscopic myotomy (POEM) may be preferable when a long myotomy is indicated. Type III achalasia is one such condition for which POEM may become the standard of care. Careful follow-up for gastroesophageal reflux is necessary after this procedure.

From the Division of Thoracic Surgery, Department of Thoracic Medicine and Surgery, Temple University Hospital and Fox Chase Comprehensive Cancer Center, Philadelphia, Pa.

Disclosures: The author reported no conflicts of interest.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

Received for publication March 10, 2021; revisions received March 10, 2021; accepted for publication March 10, 2021; available ahead of print March 15, 2021.

Address for reprints: Abbas E. Abbas, MD, Department of Thoracic Medicine and Surgery, Lewis Katz School of Medicine, Temple University, 3401 N Broad St, Suite C-501, Philadelphia, PA 19140 (E-mail: abbas.abbas@temple.edu).

J Thorac Cardiovasc Surg 2022;163:522-3

0022-5223/\$36.00

Copyright © 2021 by The American Association for Thoracic Surgery

<https://doi.org/10.1016/j.jtcvs.2021.03.038>