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Commentary: Peroral endoscopic myotomy (POEM)—Ready for the big screen

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Per-oral endoscopic myotomy (POEM) was first introduced and described in 2010 by Inoue and colleagues and has been touted to demonstrate similar efficacy and outcomes compared with the Heller myotomy. Indeed, Werner and colleagues¹ in their article, “Endoscopic or Surgical Myotomy in Patients With Idiopathic Achalasia,” which randomized 221 patients to POEM versus laparoscopic Heller myotomy, showed noninferiority of POEM compared with laparoscopic Heller myotomy in terms of symptom control at 2 years.

Raja and colleagues² in “Per-Oral Endoscopic Myotomy for Palliation of Achalasia: A Video Atlas” present POEM in a straightforward, concise, step-by-step description and provide valuable technical, safety, and precautionary tips along the way. Their video is accompanied by a manuscript describing these details. Viewers should note that the authors use a 2-person POEM technique, which may affect the generalizability to institutions in which staffing and resources may dictate that only one skilled practitioner is available for any given procedure. Nonetheless, their work can serve as a training model or framework for a simulation-based curriculum using ex vivo porcine models for trainees and for attending surgeons early in the process of developing POEM capability at their institutions. Indeed, it is a compliment to Raja and colleagues to say that they make POEM seem “easy” and accessible to less-experienced practitioners.

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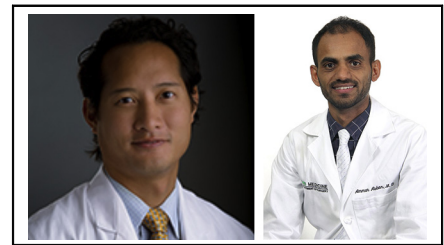
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CENTRAL MESSAGE

Peroral endoscopic myotomy (POEM) is a safe and effective treatment modality for achalasia. It has a steep learning curve and mastery requires advanced endoscopic skills.

It is important, however, to recognize that POEM is a technically challenging procedure, requiring advanced surgical and endoscopic skills. Mastering POEM harbors a significant learning curve, with most failed cases reported in the first 10 cases performed.³ Hernandez and colleagues³ defined learning curve as the ability to perform basic steps of POEM, and mastery as performance of POEM without any complications. Patel and colleagues⁴ defined efficiency as a skill level in which procedure time starts decreasing and mastery as a plateau in procedure time. The number of cases performed to achieve proficiency and mastery in performing POEM has also been studied.⁵ Few resources in the peer-reviewed literature exist that communicate the technical aspects of POEM in such a user-friendly and vivid format. This video atlas by Raja and colleagues cannot come at a better time, as the past few years have demonstrated a significant shift from Heller myotomy to POEM.⁶

References

1. Werner YB, Costamagna G, Swanström LL, von Renteln D, Familiari P, Sharata AM, et al. Clinical response to peroral endoscopic myotomy in patients with idiopathic achalasia at a minimum follow-up of 2 years. *Gut*. 2016;65:899-906.
2. Raja S, Adhikari S, Sanaka MR. Per-oral endoscopic myotomy for palliation of achalasia: a video atlas. *J Thorac Cardiovasc Surg Tech*. 2021;10:508-12.
3. Hernández Mondragón OV, Rascón Martínez DM, Muñoz Bautista A, Altamirano Castañeda ML, Blanco-Velasco G, Blancas Valencia JM. The per oral endoscopic myotomy (POEM) technique: how many preclinical procedures are needed to master it? *Endosc Int Open*. 2015;3:E559-65.
4. Patel KS, Calixte R, Modayil RJ, Friedel D, Brathwaite CE, Stavropoulos SN. The light at the end of the tunnel: a single-operator learning curve analysis for per oral endoscopic myotomy. *Gastrointest Endosc*. 2015;81:1181-7.

5. Kurian AA, Dunst CM, Sharata A, Bhayani NH, Reavis KM, Swanström LL. Peroral endoscopic esophageal myotomy: defining the learning curve. *Gastrointest Endosc*. 2013;77:719-25.
6. Tantau M, Crisan D. Peroral endoscopic myotomy: time to change our opinion regarding the treatment of achalasia? *World J Gastrointest Endosc*. 2015;7:237-46.