

MN.020.B Peroral Endoscopic Myotomy (POEM)

Original Implementation Date : 11/1/2019

Version [B] Date : 3/1/2022

Last Reviewed Date: 2/21/2024

PRODUCT VARIATIONS

This policy applies to all Jefferson Health Plans lines of business unless noted below.

POLICY STATEMENT

Peroral Endoscopic Myotomy (POEM) may be considered Medically Necessary when all the following criteria are met:

- 1) The diagnosis of esophageal achalasia must be established by both-Barium esophagogram with fluoroscopy and esophageal manometry with at least 2 of the following:
 - (a) Aperistalsis
 - (b) High lower esophageal sphincter (LES) pressure: 130-150 MmHg
 - (c) Non-relaxing LES
- 2) The member must have one of the following:
 - (a) Primary achalasia
 - (b) Failure of previous treatment of achalasia (e.g., Heller Myotomy, Botox, dilatation).
- 3) The member should not have a contraindication for this procedure, such as: severe pulmonary disease; esophageal irradiation; esophageal malignancy; bleeding disorders, including coagulopathy and recent esophageal surgery; and endoscopic intervention, including endoscopic mucosal resection and endoscopic submucosal dissection, and inability to tolerate general anesthesia.

POLICY GUIDELINES

Prior authorization is required.

In determining the need for achalasia therapy, patient-specific parameters (Chicago Classification subtype, comorbidities, early vs. late disease, primary or secondary causes) should be considered along with published efficacy data.

Given the complexity of this procedure, POEM should be performed by experienced physicians in high-volume centers because an estimated 20–40 procedures are needed to achieve competence.

If the expertise is available, **POEM** should be considered:

- (a) as primary therapy for type III achalasia.
- (b) as treatment option comparable with laparoscopic Heller myotomy for any of the achalasia syndromes.

Post-POEM patients should be:

- (a) considered at high risk to develop reflux esophagitis and advised of the management considerations (e.g., potential indefinite proton pump inhibitor therapy and/or surveillance endoscopy) before undergoing the procedure.
- (b) monitored periodically for development of short- and long-term complications, both clinically and endoscopically, by a designated expert in the facility where the procedure was performed.

Upon request, Physicians can obtain a copy of the applicable criteria and/or JHP policies associated with our determination.

CODING

Note: The Current Procedural Terminology (CPT®), Healthcare Common Procedure Coding System (HCPCS), and the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) codes that may be listed in this policy are for reference purposes only. Listing of a code in this policy does not imply that the service is covered and is not a guarantee of payment. Other policies and coverage guidelines may apply. When reporting services, providers/facilities should code to the highest level of specificity using the code that was in effect on the date the service was rendered. This list may not be all inclusive.

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CPT Code	Description
43497	Lower esophageal myotomy, transoral (i.e., peroral endoscopic myotomy [POEM])

HCPCS Code	Description
N/A	

ICD-10 Codes	Description
K22.0	Achalasia of cardia

BENEFIT APPLICATION

Medical policies do not constitute a description of benefits. This medical necessity policy assists in the administration of the member's benefits which may vary by line of business. Applicable benefit documents govern which services/items are eligible for coverage, subject to benefit limits, or excluded completely from coverage. This policy is invoked only when the requested service is an eligible benefit as defined in the Member's applicable benefit contract on the date the service was rendered. Services determined by the Plan to be investigational or experimental, cosmetic, or not medically necessary are excluded from coverage for all lines of business.

DESCRIPTION OF SERVICES

Esophageal achalasia (EA) is an uncommon motility disorder of unknown etiology that is characterized by increased lower esophageal sphincter (LES) pressure and esophageal aperistalsis.

The most common presenting symptoms include dysphagia (82% to 100% of patients), regurgitation (56% to 97%), weight loss (30% to 91%), chest pain (17% to 95%), and heartburn (27% to 42%).

Treatment: Treatment for EA includes both conservative treatment options such as pharmaceutical therapies or botulinum toxin injection, and invasive options such as pneumatic dilation or surgery.

Peroral endoscopic myotomy (POEM) is a less invasive alternative to laparoscopic Heller myotomy (LHM) for treatment of EA. POEM is a natural orifice transmural endoscopic surgery (NOTES) technique. It is done by guiding an endoscope through the esophagus, making an incision in the mucosa, creating a submucosal tunnel for access to the lower esophagus and gastroesophageal junction, and cutting the muscle fibers in the lower esophagus and proximal stomach. Internal incisions are closed with clips after myotomy is complete. POEM is performed in a sterile environment under general anesthesia.

According to the Chicago Classification (CC, version 3.0 [CC-3]) of patterns of esophageal pressurization on high resolution manometry (HRM) achalasia is subtyped into the following:

Type I (classic achalasia) – Swallowing results in no significant change in esophageal pressurization. By CC-3 criteria, type I achalasia has 100 percent failed peristalsis with a distal contractile integral (DCI, an index of the strength of distal esophageal contraction) <100 mmHg.

Type II – Swallowing results in simultaneous pressurization that spans the entire length of the esophagus. According to CC-3, type II achalasia has 100 percent failed peristalsis and pan-esophageal pressurization with ≥ 20 percent of swallows.

Type III (spastic achalasia) – Swallowing results in abnormal, lumen-obliterating contractions or spasms. By CC-3 criteria, type III achalasia has no normal peristalsis and premature (spastic) contractions with DCI > 450 Mm Hg·s·cm with ≥ 20 percent of swallows.

Treatment of achalasia is currently aimed at decreasing the resting pressure in the LES. Per-oral endoscopic myotomy is an emerging novel endoscopic procedure for the treatment of achalasia with initial data suggesting an acceptable safety profile, excellent short-term symptom resolution, and improvement in manometric outcomes.

Some studies have shown shorter length of stay and less postoperative pain with POEM.

POEM-specific complications include subcutaneous emphysema, pneumothorax, and thoracic effusion. Additionally, a substantial proportion of patients undergoing POEM develop esophagitis requiring treatment. The evidence for laparoscopic esophagomyotomy procedures in children is scant, with most of the evidence assessing the short-term safety and efficacy of laparoscopic Heller myotomy (LHM); the evidence for POEM in pediatric patients is limited to just 12 patients (Marano2016; Pandian2016).

POEM is a complex procedure for a relatively rare disease, which makes for a steep learning curve. The optimal training paradigm and benchmarks of proficiency have not been established. Establishing a POEM program requires multidisciplinary collaboration, and institutional administrative and review board approval are recommended.

CLINICAL EVIDENCE

N/A

DEFINITIONS

N/A

DISCLAIMER

Approval or denial of payment does not constitute medical advice and is neither intended to guide nor influence medical decision making.

Policy Bulletins are developed by Jefferson Health Plans (JHP) to assist in administering plan benefits and constitute neither offers of coverage nor medical advice.

This Policy Bulletin may be updated and therefore is subject to change.

Per DHS Medicaid and CHIP products: Any requests for services that do not meet criteria set in PARP will be evaluated on a case-by-case basis.

POLICY HISTORY

This section provides a high-level summary of changes to the policy since the previous version.

Summary	Version	Version Date
2024 Annual review. No changes to content. Reissue.	B	3/1/2022
2023 Annual review. The reference section updated.	B	3/1/2022
2022 Annual review. Code 43497 added to the coding section. Reference section updated.	B	3/1/2022
2021 Annual policy review. No revisions to this version. Reissue.	A	11/1/2019
2020 Annual policy review. No revisions to this version. Reissue.	A	11/1/2019
This is a new policy.	A	11/1/2019

REFERENCES

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3. American Society of Gastrointestina; Endoscopy-Technology Status Evaluation Report-Per Oral Endoscopic Myotomy-Volume 83, No.6:2016 Gastrointestinal Endoscopy 1051.
4. American College of Gastroenterology clinical guidelines on “Diagnosis and management of achalasia” (Vaezi et al, 2013).
5. Clinical Practice Update: The Use of Per-Oral Endoscopic Myotomy in Achalasia: Expert Review and Best Practice Advise from AGA Institute-Peter J Kahrilas, David Katzka, Joel E. Richter-October 06, 2017.
6. Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia-Hayes reviews - December30, 2015; December 8, 2017.

7. Costantini A, Familiari P, Costantini M, Salvador R, Valmasoni M, Capovilla G, et al. Poem Versus Laparoscopic Heller Myotomy in the Treatment of Esophageal Achalasia: A Case-Control Study From Two High Volume Centers Using the Propensity Score. *J Gastrointest Surg.* 2020 Mar;24(3):505-515.
8. Gong EJ, Park CH, Jung DH, Kang SH, Lee JY, Lim H, et al. Efficacy of Endoscopic and Surgical Treatments for Gastroesophageal Reflux Disease: A Systematic Review and Network Meta-Analysis. *J Pers Med.* 2022 Apr 12;12(4):621.
9. Kohn GP, Dirks RC, Ansari MT, Clay J, Dunst CM, Lundell L, et al. SAGES guidelines for the use of peroral endoscopic myotomy (POEM) for the treatment of achalasia. *Surg Endosc.* 2021 May;35(5):1931- 1948.