Priority Health

MEDICAL POLICY
No. 91616-R2

PERORAL ENDOSCOPIC MYOTOMY (POEM)

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Status: Current

Summary of Changes

- Deletion: I.1.c-e – Removed outdated criteria for esophageal manometry
- Addition: I.1.b – Specified high-resolution manometry as diagnostic test for achalasia.

I. POLICY/CRITERIA

POEM procedure for esophageal achalasia may be considered medically necessary when **all** of the following are met:

1. Diagnosis for esophageal achalasia confirmed by:
   a. Barium esophagram with fluoroscopy; ***AND***
   b. Esophageal high-resolution manometry
2. **One** of the following:
   a. Primary achalasia, ***OR***
   b. Failure of previous treatment of achalasia (e.g., Heller myotomy, botox, dilation)
3. **None** of the following:
   a. Severe pulmonary disease.
   b. Esophageal irradiation.
   c. Esophageal malignancy.
   d. Bleeding disorders, including coagulopathy.
   e. Recent esophageal surgery or endoscopic intervention, including. endoscopic mucosal resection and endoscopic submucosal dissection.
   f. Inability to tolerate general anesthesia.

II. MEDICAL NECESSITY REVIEW

Prior authorization for certain drug, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the Priority Health Provider Manual.

III. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- **HMO/EPO:** ***This policy applies to insured HMO/EPO plans.***
- **POS:** ***This policy applies to insured POS plans.***
- **PPO:** ***This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.***
- **ASO:** ***For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.***
- **INDIVIDUAL:** ***For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.***
- **MEDICARE:** ***Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.***
- **MEDICAID/HEALTHY MICHIGAN PLAN:** ***For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html, the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.***

IV. BACKGROUND

Esophageal achalasia (EA) is a rare motility disorder of unknown etiology that is characterized by increased lower esophageal sphincter (LES) pressures and esophageal aperistalsis. The most common presenting symptoms include dysphagia, regurgitation , weight los , chest pain , and heartburn . When achalasia is suspected, a barium esophagram with fluoroscopy and esophageal manometry are used to detect loss of peristalsis in the lower esophagus.. The condition is less common in children, with an incidence of 0.11 cases per 100,000 children (Vaezi and Richter, 1998; Eckardtand Eckardt, 2009; Moawad and Wong, 2010; Roll et al., 2010). Patients are frequently initially misdiagnosed as having gastroesophageal reflux disease (GERD).

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.

POEM is performed in a sterile environment under general anesthesia. Broadly speaking, the POEM procedure can be divided into 4 distinct and consecutive parts: (1) mucosal incision and entry into the submucosa; (2) creation of the submucosal tunnel; (3) myotomy; and (4) closure of the mucosal incision. It should be noted that individual POEM operators may vary in their technique; however, most operative techniques will closely follow that of Inoue and colleagues (Inoue et al., 2010).

Rationale for developing the POEM procedure includes the ability to combine the minimal invasiveness of endoscopic procedures such as pneumatic dilation with the therapeutic goal of a surgical myotomy. Natural orifice surgery, such as POEM, aims to reduce procedure-related pain and return patients to regular activities sooner than surgeries requiring external incisions.

Endoscopy, barium esophagram, and esophageal manometry are established and complementary tests in establishing the diagnosis of achalasia. High-resolution manometry (HRM) is the current gold standard test for the diagnosis of achalasia (Kahrilas, 2015). The American College of Gastroenterology (ACG) suggests classifying achalasia subtypes by the Chicago Classification (Vaezi, 2020). Achalasia presents with three manometric subtypes. All 3 subtypes have impaired esophagogastric junction relaxation, but the distinguishing features are the pattern of esophageal pressurization and contraction. Achalasia type I (second most common; 20%–40% of cases) is characterized by 100% failed peristalsis (aperistalsis) with the absence of panesophageal pressurization to more than 30mmHg, achalasia type II (most common; 50%–70% of cases) is characterized by 100% failed peristalsis (aperistalsis) with panesophageal pressurization to greater than 30 mm Hg, and achalasia type III (least common; 5%of cases) is characterized by spastic contractions because of abnormal lumen obliterating contractions with or without periods of panesophageal pressurization (Pandolfino, 2008).

The American College of Gastroenterology (Vaezi, 2020), American Gastrointestinal and Endoscopic Surgeons (Kohn, 2021), American Society for Gastrointestinal Endoscopy (Khashab, 2020), and the AGA Institute (Kahrilas, 2017) recommend POEM as the preferred treatment for management of patients with type III achalasia.

V. CODING INFORMATION

ICD-10 Diagnosis that may apply:
K22.0 Achalasia of cardia

CPT/HCPCS codes:
74246 Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon; with or without delayed images, without KUB
91010 Esophageal motility (manometric study of the esophagus and/or gastroesophageal junction) study with interpretation and report;
91013 Esophageal motility (manometric study of the esophagus and/or gastroesophageal junction) study with interpretation and report; with stimulation or perfusion (eg, stimulant, acid or alkali perfusion) (List separately in addition to code for primary procedure)
32665 Thoracoscopy, surgical; with esophagomyotomy (Heller type)
43279 Laparoscopy, surgical, esophagomyotomy (Heller type), with fundoplasty, when performed
43330 Esophagomyotomy (Heller type); abdominal approach
43497 Lower esophageal myotomy, transoral (ie, peroral endoscopic myotomy [POEM])

VI. REFERENCES

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