MEDICAL POLICY

POLICY TITLE	PERORAL ENDOSCOPIC MYOTOMY (POEM) FOR TREATMENT OF ESOPHAGEAL ACHALASIA
POLICY NUMBER	MP-1.143

Original Issue Date (Created):	**4/1/2014**	
Most Recent Review Date (Revised):	**2/1/2021**	
Effective Date:	**5/1/2021**	**RETIRED**

I. POLICY

Peroral endoscopic myotomy is considered **investigational** as a treatment for pediatric and adult esophageal achalasia as there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Cross-reference:

MP-2.053 Transesophageal Endoscopic Therapies for Gastroesophageal Reflux Disease

II. PRODUCT VARIATIONS

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This policy is only applicable to certain programs and products administered by Capital BlueCross please see additional information below, and subject to benefit variations as discussed in Section VI below.

FEP PPO - Refer to FEP Medical Policy Manual MP-2.01.91, Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia. The FEP Medical Policy Manual can be found at: https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies.

III. DESCRIPTION/BACKGROUND

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ESOPHAGEAL ACHALASIA

Esophageal achalasia is characterized by reduced numbers of neurons in the esophageal myenteric plexuses and reduced peristaltic activity, making it difficult for patients to swallow food and possibly leading to complications such as regurgitation, coughing, choking, aspiration pneumonia, esophagitis, ulceration, and weight loss. The estimated U.S. prevalence of achalasia is 10 cases per 100,000, and the estimated incidence is 0.6 cases per 100,000 per year.

Treatment

Treatment options for achalasia have included pharmacotherapy (eg, injections with botulinum toxin), pneumatic dilation, and laparoscopic Heller myotomy. Although the latter two are considered the standard treatments because of higher success rates and relatively long-term efficacy compared with pharmacotherapy, both are associated with a perforation risk of about 1%. Heller myotomy is the most invasive of the procedures, requiring laparoscopy and surgical dissection of the esophagogastric junction.One-year response rates of 86% and major mucosal tear rates requiring the subsequent intervention of 0.6% have been reported.

Peroral endoscopic myotomy (POEM) is a novel endoscopic procedure developed in Japan. POEM is performed with the patient under general anesthesia.After tunneling an endoscope down the esophagus toward the esophageal-gastric junction, a surgeon performs the myotomy by cutting only the inner, circular lower esophageal sphincter muscles through a submucosal tunnel created in the proximal esophageal mucosa. POEM differs from laparoscopic surgery, which involves the complete division of both circular and longitudinal lower esophageal sphincter muscle layers. Cutting the dysfunctional muscle fibers that prevent the lower esophageal sphincter from opening allows food to enter the stomach more easily

Note that the acronym POEM in this review refers to *peroral endoscopic myotomy*. POEMS syndrome, which uses a similar acronym, is discussed in MP 9.044 Hematopoietic Stem-Cell Transplantation for Plasma Cell Dyscrasias, Including Multiple Myeloma and POEMS Syndrome.

Regulatory Status

POEM uses available laparoscopic instrumentation and, as a surgical procedure, is not subject to regulation by the U.S. Food and Drug Administration (FDA).

IV. RATIONALE

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SUMMARY OF EVIDENCE

For adults who have achalasia who receive POEM, the evidence includes systematic reviews of observational studies, an RCT, nonrandomized comparative studies, and case series. The relevant outcomes are symptoms, functional outcomes, health status measures, resource utilization, and treatment-related morbidity. The comparative studies have primarily reported similar outcomes for POEM and for LHM in symptom relief, as assessed by the Eckardt score. Some studies have shown ashorter length of stay and less postoperative pain with POEM. However, potential imbalances in patient characteristics in these nonrandomized studies might have biased the treatment comparisons. In the case series, treatment success at short follow-up periods was reported for a high proportion of patients treated with POEM. However, the incidence of adverse events was relatively high, with POEM-specific complications, including subcutaneous

emphysema, pneumothorax, and thoracic effusion, reported across studies. Additionally, a substantial proportion of patients undergoing POEM developed gastroesophageal reflux disease and esophagitis and required treatment. Case series do not permit conclusions about the efficacy of POEM relative to established treatment, and long-term outcomes of the procedure are not well described in the literature. The evidence is insufficient to determine the effects of the technology on health outcomes.

For pediatric patients who have achalasia who receive POEM, the evidence includes several nonrandomized studies and a systematic review. The relevant outcomes are symptoms, functional outcomes, health status measures, resource utilization, and treatment-related morbidity. The studies reported treatment success for POEM based on decreases in Eckardt scores and LES pressure. No randomized clinical trials have been reported. The evidence is insufficient to determine the effects of the technology on health outcomes.

V. DEFINITIONS

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N/A

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's health benefit plan. Benefit determinations should be based in all cases on the applicable health benefit plan language. Medical policies do not constitute a description of benefits. A member's health benefit plan governs which services are covered, which are excluded, which are subject to benefit limits and which require preauthorization. There are different benefit plan designs in each product administered by Capital BlueCross. Members and providers should consult the member's health benefit plan for information or contact Capital BlueCross for benefit information.

VII. DISCLAIMER

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Capital BlueCross's medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. If a provider or a member has a question concerning the application of this medical policy to a specific member's plan of benefits, please contact Capital BlueCross' Provider Services or Member Services. Capital BlueCross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

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VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational when used to report: PERORAL ENDOSCOPIC MYOTOMY (POEM)

CPT Codes®								
43499								

IX. REFERENCES

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X. POLICY HISTORY

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MP-1.143	**CAC 11/26/13 New policy. BCBSA adopted.** Peroral endoscopic myotomy for the treatment of achalasia is considered investigational.
	CAC 11/25/14 Consensus. No change to policy statements. References and rationale updated. Coding Review 11/17/14.
	CAC 11/24/15 Consensus review. No changes to the policy statements. Reference update. Coding reviewed.
	Admin Update 11/11/16: Variation reformatting.
	CAC 1/31/17 Consensus review. No change to policy statements. References and rationale updated. Coding Reviewed
	12/11/17 Consensus review. No change to the policy statement. Rationale and references updated.
	10/10/18 Consensus review. No change to policy statements. References reviewed, Rationale condensed.
	8/2/19 Consensus review. No change to policy statements. Background, summary of evidence and references reviewed.
	7/8/20: Consensus Review. Added pediatric and adult to policy statement but intent unchanged, Background, summary of evidence and references updated.
	2/1/21: Retirement. Policy stance changing to MN. No longer an INV policy.

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