Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia

Description of Procedure or Service

Esophageal achalasia is characterized by a hypertensive lower esophageal sphincter (LES). There is also aperistalsis with incomplete relaxation of the LES making it difficult for food to empy from the esophagus into the stomach and possibly leading to complications such as regurgitation, coughing, choking, aspiration pneumonia, esophagitis, ulceration, and weight loss. Peroral endoscopic myotomy (POEM) is a novel endoscopic procedure that uses the oral cavity as a natural orifice entry point to perform myotomy of the LES. This procedure has the intent of reducing the total number of incisions needed and, thus, reducing the overall invasiveness of surgery.

Background

Achalasia has an estimated prevalence in the United States of 10 cases per 100,000 with an incidence of 0.6 cases per 100,000 per year. Treatment options for achalasia have traditionally included pharmacotherapy such as injections with botulinum toxin, pneumatic dilation, and laparoscopic Heller myotomy. Although the last two are considered the mainstay of treatment because of higher success rates and relative long-term efficacy compared to pharmacotherapy and botulinum toxin injections, they both are associated with a perforation risk of about 1%. Laparoscopic 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 rates of major mucosal tears requiring subsequent intervention of 0.6% have been reported.

Peroral endoscopic myotomy (POEM) is a novel endoscopic procedure developed by a Japanese surgeon, Dr. Haruhiro Inoue and colleagues. 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 (LES) muscles through a submucosal tunnel created in the proximal esophageal mucosa. POEM differs from laparoscopic surgery, which involves complete division of both circular and longitudinal LES muscle layers. Cutting the dysfunctional muscle fibers that prevent the LES from opening allows food to enter the stomach more easily.

Please note that the acronym POEM in this policy refers to peroral endoscopic myotomy. POEMS syndrome, which uses a similar acronym, is discussed in the policy Hematopoietic 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).
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Related Policies

Gastroesophageal Reflux Disease, Transendoscopic Therapies
Magnetic Esophageal Augmentation to Treat Gastroesophageal Reflux Disease (GERD)

***Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.

Policy

Peroral endoscopic myotomy is considered investigational as a treatment for esophageal achalasia. BCBSNC does not provide coverage for investigational services or procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member’s Benefit Booklet for availability of benefits. Member’s benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia is covered

Not applicable.

When Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia is not covered

Peroral endoscopic myotomy is considered investigational as a treatment for esophageal achalasia.

Policy Guidelines

The evidence for peroral endoscopic myotomy in patients who have achalasia includes systematic reviews, nonrandomized comparative studies, and case series. Relevant outcomes are symptoms, functional outcomes, health status measures, resource utilization, and treatment-related morbidity. The comparative studies showed mostly similar outcomes with peroral endoscopic myotomy (POEM) versus Heller myotomy for the outcome of symptom relief as assessed by the Eckardt score. Some studies showed shorter length of stay and less postoperative pain with POEM. However, potential imbalance in patient characteristics in these nonrandomized studies may bias the comparisons between treatments. In the case series studies, treatment success at short follow-up periods was reported for a high proportion of patients treated with POEM. However, 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 esophagitis requiring treatment. The case series studies do not allow conclusions about the efficacy of POEM relative to established treatment. 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.

Billing/Coding/Physician Documentation Information
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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: There are no specific CPT codes for this procedure. It would likely be reported with the unlisted procedure, esophagus code 43499.

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

Medical Director review--5/2015
Medical Director review--5/2016
Medical Director review - 11/2016
Specialty Matched Consultant Advisory Panel 5/2017
Medical Director review 5/2017

Policy Implementation/Update Information

11/12/13 New policy developed. Peroral endoscopic myotomy for treatment of esophageal achalasia is considered investigational. Medical Director review 9/2013. (sk)
11/11/14 Reference added. Description section updated. Policy Guidelines section updated. No change to Policy statement. (td)
1/26/16 Policy Guidelines section revised. References updated. (td)
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12/30/16  References updated. Medical Director review. (jd)


Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.