Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia

Description of Procedure or Service

Esophageal achalasia is characterized by reduced numbers of neurons in the esophageal myenteric plexuses and reduced peristaltic activity, that can make it difficult for individuals to swallow and possibly leading to complications such as regurgitation, coughing, choking, aspiration pneumonia, esophagitis, ulceration, and weight loss. The 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

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 standard treatments because of higher success rates and relative long-term efficacy compared with pharmacotherapy and botulinum toxin injections, they 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 rates of major mucosal tears requiring 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. An incision is made in the distal esophagus and a submucosal tunnel is created with the endoscope. The circular smooth muscle is then cut extending to the proximal stomach. POEM differs from laparoscopic surgery, which involves complete division of both circular and longitudinal 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).

Related Policies

Gastroesophageal Reflux Disease, Transendoscopic Therapies
Magnetic Esophageal Sphincter Augmentation to Treat Gastroesophageal Reflux Disease (GERD)
Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia

***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 of observational studies, nonrandomized comparative studies, and case series. Relevant outcomes are symptoms, functional outcomes, health status measures, resource utilization, and treatment-related morbidity. The comparative studies primarily showed similar outcomes with peroral endoscopic myotomy (POEM) versus Heller myotomy in symptom relief, as assessed by the Eckardt score. Some studies showed shorter length of stay and less postoperative pain with POEM. However, potential imbalances 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 gastroesophageal reflux disease and 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

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.
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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

Specialty Matched Consultant Advisory Panel 5/2017
Medical Director review 5/2018

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)
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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)


12/30/16 References updated. Medical Director review. (jd)


12/31/19 Minor revisions and references updated. Medical Director review 11/2019. (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.