

Surgical Treatment for Achalasia

Date of Origin: 08/2015

Last Review Date: 04/28/2021

Effective Date: 05/01/2021

Dates Reviewed: 08/2016, 08/2017, 04/2019, 04/2020, 04/2021

Developed By: Medical Necessity Criteria Committee

I. Description

For a diagnosis of achalasia confirmed by esophageal manometry, evidence demonstrates at least moderate certainty of at least moderate net benefit. Esophageal manometry is the gold standard for diagnosis of achalasia.

An evidence-based specialty society guideline supports treatment of achalasia with botulinum toxin injections, pneumatic dilation of the esophagus, esophageal myotomy with fundoplication, or, in rare cases, esophagectomy.

Prior to laparoscopic lower esophageal myotomy, of 262 patients with achalasia, 79% received botulinum toxin injections or pneumatic dilations, and 36% had both. At a mean follow-up of 32 months, 80% of patients indicated that their symptoms were greatly improved or resolved with myotomy, and 90% were satisfied with their outcome.

A meta-analysis of 17 studies (with a total of 761 patients) that compared botulinum toxin injection, pneumatic dilation, and surgical myotomy concluded that, based upon symptom recurrence rates, myotomy was the most effective alternative for the management of achalasia.

Myotomy of the lower esophageal sphincter consists of an external lengthwise incision of the muscular ring surrounding the sphincter. Myotomy can be performed either laparoscopically or as an open procedure and may be performed in conjunction with esophagogastric fundoplasty to reduce the incidence of postoperative gastric reflux. Less invasive techniques such as peroral endoscopic myotomy and self-expanding stents are in development.

II. Criteria: CWQI HCS-0127

- A. Moda Health covers surgical treatment for achalasia with **ALL** of the following;
 - a. Open or laparoscopic lower esophageal sphincter myotomy may be indicated when **ALL** of the following conditions are present:
 - i. Diagnosis of achalasia confirmed by esophageal manometry
 - ii. Failure of botulinum toxin to provide relief beyond 6 to 12 months

- iii. Other causes of dysphagia (e.g. peptic stricture, carcinoma, lower esophageal ring or extrinsic compression) ruled out by upper gastrointestinal endoscopy
 - iv. Progressive dysphagia for liquids and solids
 - v. Recurrent or persistent symptoms despite pharmacological therapy (e.g. calcium channel blockers, long-acting nitrates)
 - vi. Relative contraindications to pneumatic dilation, as indicated by **1 or more** of the following:
 - 1. Patient at high risk for pneumatic dilation procedure (e.g. previous gastroesophageal junction surgery, esophageal diverticula, distorted lower esophageal anatomy)
 - 2. Patient younger than 40 years facing lifelong dilation procedures
- b. Request is **Not** for the Per-oral Endoscopic Myotomy (POEM) procedure as it is considered experimental and investigational. No controlled studies have been performed to determine efficacy and safety. The POEM procedure is considered investigational until further randomized controlled studies have been performed and demonstrate efficacy and safety over the standard procedures.

III. Information Submitted with the Prior Authorization Request:

1. Chart notes documenting diagnosis and all current and past procedure/treatments.
2. The requested procedure description.

IV. CPT or HCPC codes covered:

| Codes | Description |
|-------|--|
| 43279 | Laparoscopy, surgical, esophagomyotomy (Heller type), with fundoplasty, when performed |
| 43330 | Esophagomyotomy (Heller type); abdominal approach |
| 43331 | Esophagomyotomy (Heller type); thoracic approach |
| 43499 | Unlisted procedure, esophagus (if NOT for the POEM procedure) |
| S2079 | Laparoscopic esophagomyotomy (Heller type) |

V. CPT or HCPC codes NOT covered:

| Codes | Description |
|-------|---|
| 43499 | Unlisted procedure, esophagus (when used with POEM procedure) |

VI. Annual Review History

| Review Date | Revisions | Effective Date |
|-------------|---|----------------|
| 08/2015 | New Criteria developed | 08/26/2015 |
| 08/2016 | Annual Review: No changes | 08/31/2016 |
| 08/2017 | Annual Review: Updated to new template and minor format changes | 08/23/2017 |
| 04/2019 | Annual Review: No changes | 05/01/2019 |
| 04/2020 | Annual Review: No changes | 05/01/2020 |
| 04/2021 | Annual Review: No changes | 05/01/2021 |

VII. References

1. Vaezi MF, Pandolfino JE, Vela MF. ACG clinical guideline: diagnosis and management of achalasia. *American Journal of Gastroenterology* 2013;108(8):1238-49; quiz 1250. DOI: 10.1038/ajg.2013.196. (Reaffirmed 2014 Oct)
2. Boeckstaens GE, Zaninotto G, Richter JE. Achalasia. *Lancet* 2014;383(9911):83-93. DOI: 10.1016/S0140-6736(13)60651-0.
3. Rosemurgy AS, Morton CA, Rosas M, Albrink M, Ross SB. A single institution's experience with more than 500 laparoscopic Heller myotomies for achalasia. *Journal of the American College of Surgeons* 2010;210(5):637-45, 645-7. DOI: 10.1016/j.jamcollsurg.2010.01.035.
4. Zaninotto G, et al. Randomized controlled trial of botulinum toxin versus laparoscopic Heller myotomy for esophageal achalasia. *Annals of Surgery* 2004;239(3):364-70.
5. Paidas C, Cowgill SM, Boyle R, Al-Saadi S, Villadolid D, Rosemurgy AS. Laparoscopic Heller myotomy with anterior fundoplication ameliorates symptoms of achalasia in pediatric patients. *Journal of the American College of Surgeons* 2007;204(5):977-83; discussion 983-6. DOI: 10.1016/j.jamcollsurg.2006.12.046.
6. Roll GR, Ma S, Gasper WJ, Patti M, Way LW, Carter J. Excellent outcomes of laparoscopic esophagomyotomy for achalasia in patients older than 60 years of age. *Surgical Endoscopy* 2010;24(10):2562-6. DOI: 10.1007/s00464-010-1003-4.
7. Abir F, Modlin I, Kidd M, Bell R. Surgical treatment of achalasia: current status and controversies. *Digestive Surgery* 2004;21(3):165-76. DOI: 10.1159/000079341.
8. Mayo D, Griffiths EA, Khan OA, Szymankiewicz MA, Wakefield CW, Thompson SK. Does the addition of a fundoplication improve outcomes for patients undergoing laparoscopic Heller's cardiomyotomy? *International Journal of Surgery* 2012;10(6):301-4. DOI: 10.1016/j.ijsu.2012.04.002.
9. Kurian AA, Bhayani N, Sharata A, Reavis K, Dunst CM, Swanstrom LL. Partial anterior vs partial posterior fundoplication following transabdominal esophagocardiomyotomy for achalasia of the esophagus: meta-regression of objective postoperative gastroesophageal reflux and dysphagia. *JAMA Surgery* 2013;148(1):85-90. DOI: 10.1001/jamasurgery.2013.409.
10. Swanstrom LL, Kurian A, Dunst CM, Sharata A, Bhayani N, Rieder E. Long-term outcomes of an endoscopic myotomy for achalasia: the POEM procedure. *Annals of Surgery* 2012;256(4):659-67. DOI: 10.1097/SLA.0b013e31826b5212.
11. Achem SR, Gerson LB. Distal esophageal spasm: an update. *Current Gastroenterology Reports* 2013;15(9):325. DOI: 10.1007/s11894-013-0325-5.

12. Maish MS. Esophagus. In: Townsend CM, Beauchamp RD, Evers BM, Mattox KL, editors. Sabiston Textbook of Surgery. 19th ed. Philadelphia, PA: Elsevier Saunders; 2012:1012-66.
13. Patti MG, Herbella FA. Fundoplication after laparoscopic Heller myotomy for esophageal achalasia: what type? Journal of Gastrointestinal Surgery 2010;14(9):1453-8. DOI: 10.1007/s11605-010-1188-9. [Context Link 1]
14. Rosemurgy A, et al. Laparoscopic Heller myotomy provides durable relief from achalasia and salvages failures after botox or dilation. Annals of Surgery 2005;241(5):725-33; discussion 733-5.
15. Wang L, Li YM, Li L. Meta-analysis of randomized and controlled treatment trials for achalasia. Digestive Diseases and Sciences 2009;54(11):2303-11. DOI: 10.1007/s10620-008-0637-8. [Context Link 1] View abstract...
16. Cheatham JG, Wong RK. Current approach to the treatment of achalasia. Current Gastroenterology Reports 2011;13(3):219-25. DOI: 10.1007/s11894-011-0190-z. [Context Link 1, 2, 3] View abstract...
17. Richter JE, Boeckstaens GE. Management of achalasia: surgery or pneumatic dilation. Gut 2011;60(6):869-76. DOI: 10.1136/gut.2010.212423. [Context Link 1, 2] View abstract...
18. Weber CE, Davis CS, Kramer HJ, Gibbs JT, Robles L, Fisichella PM. Medium and long-term outcomes after pneumatic dilation or laparoscopic Heller myotomy for achalasia: a meta-analysis. Surgical Laparoscopy, Endoscopy & Percutaneous Techniques 2012;22(4):289-96. DOI: 10.1097/SLE.0b013e31825a2478. [Context Link 1] View abstract...
19. Chuah SK, Wu KL, Hu TH, Tai WC, Changchien CS. Endoscope-guided pneumatic dilation for treatment of esophageal achalasia. World Journal of Gastroenterology 2010;16(4):411-7. [Context Link 1] View abstract...

Appendix 1 – Applicable Diagnosis Codes:

| Codes | Description |
|--------|-------------------------------------|
| K22.0 | Achalasia of cardia |
| K22.2 | Esophageal obstruction |
| K22.4 | Dyskinesia of esophagus |
| R13.0 | Aphagia |
| R13.10 | Dysphagia, unspecified |
| R13.11 | Dysphagia, oral phase |
| R13.12 | Dysphagia, oropharyngeal phase |
| R13.13 | Dysphagia, pharyngeal phase |
| R13.14 | Dysphagia, pharyngoesophageal phase |
| R13.19 | Other dysphagia |

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

| Jurisdiction(s): 5, 8 | NCD/LCD Document (s): |
|-----------------------|-----------------------|
| Not applicable | |
| | |

| NCD/LCD Document (s): |
|-----------------------|
| |

| Medicare Part B Administrative Contractor (MAC) Jurisdictions | | |
|---|--|------------------------------------|
| Jurisdiction | Applicable State/US Territory | Contractor |
| F (2 & 3) | AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ | Noridian Healthcare Solutions, LLC |