



Surgical Treatment for Gastro-Esophageal Reflux (G-E Reflux)

Origination: 5/10/16	Revised: 8/03/21	Annual Review: 11/05/20
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Purpose:

To provide surgical treatment for Gastro-Esophageal Reflux guidelines for Population Health and Provider Alliances associates to reference when making benefit determinations.

Definitions

There are several procedures for the treatment of Gastro-Esophageal Reflux (G-E Reflux) in addition to the gold standard Nissen Fundoplication procedure (Laparoscopic Fundoplication).

- The Stretta Procedure is an endoscopic treatment of the lower esophageal sphincter that delivers radiofrequency energy to the valve between the stomach and esophagus reducing GERD.
- The LINX Reflux Management System consists of a small band of magnetized titanium beads wrapped around the lower esophageal sphincter (LES) located at the base of the esophagus. This band helps prevent gastric acids from pushing back up into the esophagus from the stomach, yet also safely allows the LES to open when required to allow for easy swallowing.

Coverage Guidelines

- Currently the only trans-esophageal procedure that is covered or that is not considered to be experimental is the LINX procedure.
- Member must be between ages 21-75 with typical symptoms of GERD for six months taking daily proton pump inhibitors (PPI) and continue to have symptoms. Diagnosis of GERD must be documented by abnormal pH testing.
- Precaution should be used in the following patients as safety and effectiveness haven't been evaluated:
 - hiatal hernia (<3cm),
 - erosive esophagitis grades B, C, or D,
 - BMI > 35
 - Electrical implants or metallic abdominal implants
 - Major motility disorders
 - Scleroderma
 - Esophageal or gastric cancer
 - Distal amplitude < 35 mmHg or < 70% peristaltic sequences
 - Esophageal stricture or gross anatomic abnormality

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Exclusion Criteria

- The following procedures are considered investigational and experimental for the treatment of G-E Reflux and are not covered:
 1. Esophyx/TIF
 2. Bard Endocinch
 3. Angelchik
 4. Enteryx
 5. Durosphere
 6. Stretta

Reference(s):

1. Hai-Feng Liu, et al. Improvement of Clinical Parameters in Patients with Gastroesophageal Reflux Disease After Radiofrequency Energy Delivery: World J Gastroenterol. 2011 October 21; 17(39): 4429–4433.
2. Michael Parker, et al. Comparing Effectiveness of Endoscopic Full Thickness Plication and Endoscopic Radiofrequency Treatments for Patients with GERD. Expert Review of Gastroenterology & Hepatology August 2010, Vol 4, No 4, Pages 387-390.
3. Lipham JC, DeMeester TR, Ganz RA, et al. The LINX® reflux management system: Confirmed safety and efficacy now at 4 years. Surgical Endoscopy 2012; 26(10):2944-2949. National Institute for Health and Clinical Excellence (NICE). Laparoscopic insertion of a magnetic bead band for gastro- oesophageal reflux disease. Interventional Procedures Guidance 431. London, UK: NICE; September 2012.
4. Bonavina L, Saino G, Lipham JC, Demeester TR. LINX(®) Reflux Management System in chronic gastroesophageal reflux: A novel effective technology for restoring the natural barrier to reflux. Therap Adv Gastroenterol. 2013a; 6(4):261-268.
5. Bonavina L, Saino G, Bona D, et al. One hundred consecutive patients treated with magnetic sphincter augmentation for gastroesophageal reflux disease: 6 years of clinical experience from a single center. J Am Coll Surg. 2013b; 217(4):577-585.
6. Yew KC, Chuah SK. Antireflux endoluminal therapies: Past and present. Gastroenterol Res Pract. 2013; 2013:481417.



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7. Forel D. LINX Reflux Management System for the treatment of gastro-oesophageal reflux. Technology Brief. Health Policy Advisory Committee on Technology. HealthPACT Emerging Health Technology. Brisbane, QLD: Australian Safety and Efficacy Register of New Interventional Procedures- Surgical (ASERNIP-S); August 2013.
8. Louie BE, Farivar AS, Shultz D, et al. Short-term outcomes using magnetic sphincter augmentation versus Nissen fundoplication for medically resistant gastroesophageal reflux disease. *Ann Thorac Surg.* 2014;98(2):498-504; discussion 504-505.
9. Loh Y, McGlone ER, Reddy M, Khan OA. Is the LINX reflux management system an effective treatment for gastro-oesophageal reflux disease? *Int J Surg.* 2014; 12(9):994-997.

Disclaimer Information:

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed to determine coverage for AvMed benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. AvMed makes coverage decisions using these guidelines, along with the Member's benefit document. The use of this guideline is neither a guarantee of payment nor a final prediction of how specific claim(s) will be adjudicated.

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed for selected therapeutic or diagnostic services found to be safe, but proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the AvMed service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations.

Treating providers are solely responsible for the medical advice and treatment of Members. This guideline may be updated and therefore is subject to change.