

01-91000-10

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## Subject: Endoscopic Radiofrequency Ablation or Cryosurgical Ablation for Barrett's Esophagus

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

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### DESCRIPTION:

Barrett's esophagus is a condition in which the normal squamous epithelium is replaced by specialized columnar-type epithelium, known as intestinal metaplasia, in response to irritation and injury caused by gastroesophageal reflux disease (GERD). Barrett's esophagus occurs in the distal esophagus, may be of any length, may be focal or circumferential, and can be visualized by the endoscopist as being a different color than the background squamous mucosa. Confirmation of Barrett's esophagus requires biopsy of the columnar epithelium and microscopic identification of intestinal metaplasia. Intestinal metaplasia is a precursor to esophageal adenocarcinoma, and esophageal adenocarcinoma is thought to result from a stepwise accumulation of genetic abnormalities in the specialized epithelium, which results in the phenotypic expression of histologic features of low-grade dysplasia (LGD) to high-grade [dysplasia](#) (HGD) to carcinoma.

The U.S. Food and Drug Administration (FDA) has approved several devices for use in the gastrointestinal tract, endoscopic and cryosurgical applications (e.g., HALO 360 Coagulation Catheter, CryoSpray Ablation System, Polar Wand Cryotherapy System, Cryo Balloon Ablation System).

### POSITION STATEMENT:

Radiofrequency ablation **meets the definition of medical necessity** when performed for the treatment of Barrett's esophagus with high-grade dysplasia.

Radiofrequency ablation **meets the definition of medical necessity** when performed for the treatment of Barrett's esophagus with low-grade dysplasia, when the initial diagnosis of low-grade dysplasia is confirmed by two pathologists.

Radiofrequency ablation is considered **experimental or investigational** for the treatment of Barrett's esophagus in the absence of dysplasia. The evidence is insufficient to determine the effects of radiofrequency ablation on health outcomes.

Cryosurgical ablation is considered **experimental or investigational** for the treatment of Barrett's esophagus with or without dysplasia. The evidence is insufficient to determine the effects of cryosurgical ablation on health outcomes.

### **BILLING/CODING INFORMATION:**

There is no CPT procedure code specific to radiofrequency or cryoablation of tissue in the esophagus. These procedures would likely be coded using one of the following CPT codes.

#### **CPT Coding:**

43229	Esophagoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)
43270	Esophagogastroduodenoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)

#### **ICD-10 Diagnosis Codes That Support Medical Necessity:**

D13.0	Benign neoplasm of esophagus
K22.710	Barrett's esophagus with low grade dysplasia
K22.711	Barrett's esophagus with high grade dysplasia
K22.719	Barrett's esophagus with dysplasia, unspecified

### **REIMBURSEMENT INFORMATION:**

Refer to section entitled [POSITION STATEMENT](#).

### **PROGRAM EXCEPTIONS:**

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

#### **Medicare Advantage products:**

No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline reviewed date.

### **DEFINITIONS:**

**Dysplasia:** in pathology, abnormal cell growth or growth patterns in tissues or organs

### **RELATED GUIDELINES:**

[Cryosurgical Ablation of Solid Tumors Other Than Liver or Prostate Tumors, 02-99221-12](#)

[Esophageal pH Monitoring, 01-91000-01](#)

[Radiofrequency Ablation of Solid Tumors Other Than Liver Tumors, 02-99221-13](#)

[Transendoscopic Therapies for Gastroesophageal Reflux Disease \(GERD\), 01-91000-03](#)

## OTHER:

None applicable.

## REFERENCES:

1. American Gastroenterological Association, Spechler SJ, Sharma P, et al. American Gastroenterological Association medical position statement on the management of Barrett's esophagus. *Gastroenterology*. 2011; 140(3):1084-1091.
2. American Society for Gastrointestinal Endoscopy. Technology status evaluation report: Mucosal ablation devices. 2008.
3. Blue Cross Blue Shield Association Evidence Positioning System®. 2.01.80 80 Endoscopic Radiofrequency Ablation or Cryoablation for Barrett's Esophagus, 12/20.
4. Blue Cross and Blue Shield Association TEC Assessment 2010. "Radiofrequency Ablation of Nondysplastic or Low-Grade Dysplastic Barrett's Esophagus." BlueCross BlueShield Association Technology Evaluation Center, Vol. 25, Tab 5.
5. Comparative Effectiveness of Management Strategies for Gastroesophageal Reflux Disease: Update, Comparative Effectiveness Review Number 29. AHRQ Publication No. 11-EHC049-EF. September 2011.
6. Fleischer DE, Sharma VK. Endoscopic ablation of Barrett's esophagus using the Halo system. *Dig Dis*. 2008;26(4):280-4. Epub 2009 Jan 30.
7. Garman KS, Shaheen NJ. Ablative therapies for Barrett's esophagus. *Curr Gastroenterol Rep*. 2011 Jun;13(3):226-39.
8. Gray NA, Odze RD, Spechler SJ. Buried metaplasia after endoscopic ablation of Barrett's esophagus: a systematic review. *Am J Gastroenterol*. 2011 Nov;106(11):1899-908; quiz 1909. doi: 10.1038/ajg.2011.255. Epub 2011 Aug 9.
9. Greenwald BD, Dumot JA, Horwhat JD, Lightdale CJ, Abrams JA. Safety, tolerability, and efficacy of endoscopic low-pressure liquid nitrogen spray cryotherapy in the esophagus. *Dis Esophagus*. 2010 Jan;23(1):13-9. Epub 2009 Jun 9.
10. Ip S, Chung M, Moorthy D, Yu WW, Lee J, Chan JA, Bonis PA, Lau J. Comparative Effectiveness of Management Strategies for Gastroesophageal Reflux Disease: Update. Comparative Effectiveness Review No. 29. (Prepared by Tufts Medical Center Evidence-based Practice Center under Contract No. HHS 290-2007-10055-1.) AHRQ Publication No. 11-EHC049-EF. Rockville, MD: Agency for Healthcare Research and Quality. September 2011.
11. National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Esophageal and Esophagogastric Junction Cancers, Version 2.2018-May 22, 2018.
12. Peery AF, Shaheen NJ. Esophagus: Endoscopic therapy for flat, dysplastic Barrett esophagus. *Nat Rev Gastroenterol Hepatol*. 2011 Apr;8(4):186-7. Epub 2011 Mar 8.
13. Shaheen NJ, Falk GW, Iyer PG et al. ACG Clinical Guideline: Diagnosis and Management of Barrett's Esophagus. *American Journal of Gastroenterology*. 2016 Jan;111(1):30-50.
14. Shaheen NJ, Greenwald BD, Peery AF, et al. Safety and efficacy of endoscopic spray cryotherapy for Barrett's esophagus with high-grade dysplasia. *Gastrointest Endosc*. 2010 Apr;71(4):680-5.
15. Shaheen NJ, Overholt BF, Sampliner RE, et al. Durability of radiofrequency ablation in Barrett's esophagus with dysplasia. *Gastroenterology*. 2011 Aug;141(2):460-8. Epub 2011 May 6.
16. Shaheen NJ, Peery AF, Hawes RH, Rothstein RI, et al. Quality of life following radiofrequency ablation of dysplastic Barrett's esophagus. *Endoscopy*. 2010 Oct;42(10):790-9. Epub 2010 Sep 30.
17. Shaheen NJ, Peery AF, Overholt BF, et al. Biopsy depth after radiofrequency ablation of dysplastic Barrett's esophagus. *Gastrointest Endosc*. 2010 Sep;72(3):490-496.e1. Epub 2010 Jul 3.

18. Shaheen NJ, Sharma P, Overholt BF, Wolfsen HC, et al. Radiofrequency ablation in Barrett's esophagus with dysplasia. N Engl J Med. 2009 May 28;360(22):2277-88.
19. Shaheen NJ, Falk GW, Iyer PG et al. American College of Gastroenterology. ACG Clinical Guideline: Diagnosis and Management of Barrett's Esophagus. Am J Gastroenterol. 2016 Jan;111(1):30-50.
20. Sharma P, Katzka DA, Gupta N et al. Quality indicators for the management of Barrett's esophagus, dysplasia, and esophageal adenocarcinoma: international consensus recommendations from the American Gastroenterological Association Symposium. Gastroenterology. 2015 Nov;149(6):1599-1606.
21. Sharma P, Shaheen NJ, Katzka D et al. . AGA Clinical Practice Update on Endoscopic Treatment of Barrett's Esophagus With Dysplasia and/or Early Cancer: Expert Review. Gastroenterology 2020 Feb;158(3):760-769.Society of the American Gastrointestinal and Endoscopic Surgeons (SAGES) Guidelines for Surgical Treatment of Gastroesophageal Reflux Disease (GERD). Practice/Clinical Guidelines published 02/2010.
22. Standards of Practice Committee, Wani S, Qumseya B, Sultan S et al. Endoscopic eradication therapy for patients with Barrett's esophagus-associated dysplasia and intramucosal cancer. Gastrointest Endosc 2018 Apr;87(4):907-931.e9
23. Stefanidis D, Hope WW, Kohn GP et al. Guidelines for surgical treatment of gastroesophageal reflux disease. Surg. Endosc. 2010; 24(11):2647-69.
24. US Food and Drug Administration. CryoSpray Ablation System. No. K072651. 510(k) Premarket Notification Database. 2007.
25. US Food and Drug Administration. BARRX MODELS HALO360 AND HALO360+ COAGULATION CAT. No. K080557. 510(k) Premarket Notification Database. 2008.
26. Wang KK, Sampliner RE; Practice Parameters Committee of the American College of Gastroenterology. Updated guidelines 2008 for the diagnosis, surveillance and therapy of Barrett's esophagus. Am J Gastroenterol. 2008; 103(3):788-797.

### **COMMITTEE APPROVAL:**

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy & Coverage Committee on 03/25/21.

### **GUIDELINE UPDATE INFORMATION:**

01/15/13	New Medical Coverage Guideline.
12/15/13	Annual review; position statements unchanged; Program Exceptions section updated; references updated.
01/01/14	Annual HCPCS coding update: added 43229 and 43270; deleted 43228 and 43258; revised 43257.
01/15/15	Annual review; position statement unchanged; references updated.
10/01/15	Revision; updated ICD10 coding section.
11/01/15	Revision: ICD-9 Codes deleted.
02/15/19	Review; updated description and references. Revised position statement.

04/15/21	Review; revised experimental or investigational position statement: radiofrequency ablation; added when the above criteria are not met, including but not limited to Barrett's esophagus. Updated references.
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