01-91000-10

Original Effective Date: 01/15/13

Reviewed: 01/25/24

Revised: 02/15/24

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

DESCRIPTION:

Barrett's esophagus (BE) is a condition in which the normal squamous epithelium is replaced by specialized columnar-type epithelium, known as intestinal metaplasia. Barrett's esophagus occurs in the distal esophagus. BE may be of any length, may be focal or circumferential, and can be seen on endoscopy 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).

Summary and Analysis of Evidence: An UpToDate review on "Barrett's esophagus: Treatment with radiofrequency ablation (Bergman, 2022)" states that **"**Barrett's esophagus (BE) occurs when an abnormal, intestinal-type epithelium called "specialized intestinal metaplasia [IM]" replaces the stratified squamous epithelium that normally lines the distal esophagus. The condition develops as a consequence of chronic gastroesophageal reflux disease and predisposes to the development of adenocarcinoma of the esophagus. Traditionally, high-grade dysplasia (HGD) and intramucosal cancer arising from BE were treated with esophagectomy, while nondysplastic BE and BE with low-grade dysplasia (LGD) were managed with endoscopic surveillance. Problems associated with these approaches included significant morbidity and mortality from esophagectomy and the risk of missed or interval development of cancer in patients undergoing surveillance. To address these issues, less invasive endoscopic treatments have been developed. Radiofrequency ablation (RFA) is an endoscopic

treatment modality for eradication of BE. Primary circumferential ablation is performed using a balloon-based bipolar electrode, while secondary treatment of residual BE is performed using an endoscope-mounted bipolar electrode on an articulated platform. Studies suggest that this ablation technique is highly effective in removing Barrett's mucosa and associated dysplasia and in preventing progression of disease, while minimizing the known drawbacks of photodynamic therapy and argon plasma coagulation, such as esophageal stenosis and subsquamous foci of BE ("buried Barrett's").”

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 specific code for radiofrequency or cryoablation for Barrett’s esophagus, the following may be used.

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) was found at the time of the last guideline reviewed date.

The following Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Diagnostic and therapeutic Esophagogastroduodenoscopy, (210.3) located at medicare.fcso.com.

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.

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COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 01/25/24.

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 statement. Updated references.
07/15/23	Review; no change in position statement. Revised description. Updated references.
02/15/24	Review; maintain position statements. Updated program exception and references.