Medical Policy

PARAMOUNT

HMO AND PPO
ELITE (MEDICARE ADVANTAGE)
MARKETPLACE

Ablation Treatments for Barrett's Esophagus

Policy Number: PG0058
Last Review: 11/01/2022

GUIDELINES:

- **This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder terms, conditions, exclusions, and limitations contract. It does not constitute a contract or guarantee regarding coverage or reimbursement/payment. Self-Insured group specific policy will supersede this general policy when group supplementary plan document or individual plan decision directs otherwise.**
- **Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards.**
- **This medical policy is solely for guiding medical necessity and explaining correct procedure reporting used to assist in making coverage decisions and administering benefits.**

SCOPE:

X Professional
_ Facility

DESCRIPTION:

Barrett's esophagus is a condition of the esophagus caused by chronic acid reflux, a response to irritation and injury caused by gastroesophageal reflux disease (GERD). Barrett's esophagus is defined as metaplasia of the esophageal epithelium, with normal flat, fish-shaped epithelium cells replaced by columnar epithelium containing goblet cells, also known as intestinal metaplasia. Intestinal metaplasia is a precursor to esophageal adenocarcinoma, and patients with Barrett's esophagus are estimated to have a 10- to 40-fold increased risk for developing cancer compared to the general population and the primary reason for managing Barrett's esophagus. Confirmation of Barrett's esophagus requires biopsy of the columnar epithelium and microscopic identification of intestinal metaplasia. The length of the abnormal mucosa and the degree of dysplasia are the primary risk factors for development of cancer. The management of Barrett esophagus includes the treatment of GERD and surveillance endoscopy to detect progression to high-grade dysplasia (HGD) or adenocarcinoma.

The current management of Barrett's esophagus includes treatment of GERD and surveillance endoscopy to detect progression to HGD or adenocarcinoma. The finding of low-grade dysplasia (LGD) typically warrants only follow-up and surveillance biopsies, whereas the finding of HGD or early-stage adenocarcinoma warrants mucosal ablation or resection (either endoscopic mucosal resection or esophagectomy. There are several different procedures used to treat Barrett's esophagus.

Radiofrequency ablation is a procedure that uses radio waves and heat to destroy abnormal cells. During radiofrequency ablation, the physician uses a three-component system of a sizing balloon, an ablative energy generator and an ablation catheter. The balloon catheter is placed into the esophagus during endoscopy. After the balloon is inflated, radiofrequency energy is delivered, purportedly removing the diseased tissue lining the esophagus. The Barrx™ Ablation System (formerly the HALO System) is a less invasive treatment for Barrett's esophagus, providing uniform and controlled heat therapy to remove the thin layer of abnormal esophageal tissue. FDA-labeled indications are for use in coagulation of bleeding and nonbleeding sites in the gastrointestinal tract and include treatment of Barrett's esophagus.

The CryoSpray Ablation™ System (formerly the SprayGenix™ Cryo Ablation System) as another treatment for Barrett's esophagus. This involves the use of low-pressure liquid nitrogen spray being administered through a standard endoscopy to the diseased tissue. Cryotherapy allows for the treatment of uneven surfaces; however, a

disadvantage of the treatment is the uneven application inherent in spraying the cryogen. While cryoablation shows promise for the treatment of dysplasia and neoplasm of the esophagus, studies are limited to short-term follow-up and the evidence appears incomplete. Additional long-term studies are needed to determine the effectiveness, safety, and tolerability.

Laser ablation involves the use of high-intensity light to treat cancer. For the esophagus, Nd:YAG lasers are applied through an endoscope, the light is precisely aimed at the diseased tissue, which is destroyed. While treatment appears promising, there is a need for additional controlled trials with a larger number of patients and longer follow-up.

Argon plasma coagulation is a non-contact thermal method of delivering an electrical current by way of argon gas to the targeted tissue. The argon gas flows through a catheter that is passed through an endoscope. When the argon gas flows over the electrode it becomes ionized. A spark ionizes the argon gas as it is sprayed from the tip of the catheter in the direction of the targeted tissue and produces tissue coagulation. Argon plasma coagulation allows for treatment of a large surface area.

Electrocoagulation uses a fine wire probe to deliver radio waves to tissues near the probe. The radio waves cause the tissue to vibrate which increases temperature causing coagulation and leading to destruction of the tissue. Electrocoagulation can be either monopolar or bipolar. For individuals with an implantable device such as a pacemaker or automatic defibrillator, bipolar is the preferred method because the electrical current does not travel beyond the depth of thermal injury and disrupt the programming of these devices.

Currently, the key gastroenterological societies (American College of Gastroenterology, American Gastroenterological Association and American Society of Gastrointestinal Endoscopy) do not have any guidelines or position statements endorsing laser ablation, argon plasma ablation or electrocoagulation as a treatment for Barrett's esophagus. Current literature consists primarily of uncontrolled studies with small group sizes, with only a limited number of randomized controlled trials comparing treatments for Barrett's esophagus. Ablative therapies have a role in the management of Barrett's esophagus, however more clinical trial data and randomized controlled trials are required to assess whether or not the cancer risk is reduced in routine clinical practice.

POLICY:

Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans
Radiofrequency ablation for Barrett's esophagus does not require prior authorization.

These interventions for the treatment of Barrett's esophagus are non-covered:

- **Cryoablation**
- **Laser ablation**
- **Argon plasma coagulation**
- **Electrocoagulation**

COVERAGE CRITERIA:

Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans

Paramount considers radiofrequency ablation, as an alternative to esophagectomy, medically necessary when any of the following criteria are met:

- Barrett's esophagus with high-grade dysplasia or intramucosal cancer, as confirmed by endoscopy, and in the absence of comorbid conditions that indicate less than one year of life expectancy.
- Barrett's esophagus with low-grade dysplasia, with confirmation of the biopsy finding by two independent physicians,* and in the absence of comorbid conditions that indicate less than one year of life expectancy.

*Note: The American Gastroenterological Association recommends that LGD should be confirmed by two pathologists since published studies have reported higher rates of progression of LGD when initial readings have

been confirmed by expert pathologists, thereby eliminating, or minimizing the rate of false positive diagnoses of LGD.

The diagnosis of high-grade dysplasia should be confirmed by 2 pathologists before initiating radiofrequency ablation. The American Society for Gastrointestinal Endoscopy and the American Gastroenterological Association both recommend that a reading of HGD should be confirmed by an experienced gastrointestinal pathologist. It is important to rule out adenocarcinoma; referral to an expert center that can conduct high-definition white-light endoscopy and other diagnostic techniques has been found to increase the rate of adenocarcinoma detection and proper referral for endoscopic mucosal resection.

There is considerable interobserver variability in the diagnosis of low-grade dysplasia (LGD), and the potential exists for overdiagnosis of LGD by nonexpert pathologists (overdiagnosis is due primarily to the difficulty in distinguishing inflammatory changes from LGD). It is ideal that 2 experts in gastrointestinal pathology agree on the diagnosis to confirm LGD; this may result in greater than 75% of initial diagnoses of LGD being downgraded to non-dysplasia.

Limitations:
Paramount considers radiofrequency ablation for treatment of Barrett's esophagus in the absence of dysplasia is considered experimental/investigational due to a lack of evidence demonstrating its impact on improved health outcomes.

Paramount considers any of the following interventions for the treatment of Barrett's esophagus experimental/investigational due to the lack of evidence demonstrating its impact on improved health outcomes, may not be an all-inclusive listing:

- Cryoablation, with or without dysplasia
- Laser ablation
- Argon plasma coagulation
- Electrocoagulation

CODING/BILLING INFORMATION:
The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

CPT CODES	
There is no CPT code specific to radiofrequency or cryoablation of tissue in the esophagus. These procedures would likely be coded using one of the following CPT codes:	
43229	Esophagoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre-guide wire passage, when performed) [Not covered when specified as cryoablation, laser ablation, electrocoagulation, or coagulation]
43270	Esophagogastroduodenoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes dilation and guide wire passage, when performed) [Not covered when specified as cryoablation, laser ablation, electrocoagulation plasma coagulation]

REVISION HISTORY EXPLANATION: ORIGINAL EFFECTIVE DATE: 05/01/2012

Date	Explanation & Changes
01/01/14	• Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee.
03/08/16	• Title changed from Endoscopic Ablation Using the HALO System for Barrett's Esophagus to Ablation Treatments for Barrett's Esophagus • Removed effective 01/01/14 deleted codes 43228 and 43258 • Added effective new codes 43229 and 43270
12/14/2020	• Medical policy placed on the new Paramount Medical Policy Format
11/01/2022	• Policy review completed

	• Descriptions updated • Policy coverage statements unchanged
02/03/2023	• Medical Policy updated to reflect Medicaid coverage to Anthem as of 02/01/2023
02/01/2024	• Medical policy placed on the new Paramount Medical Policy format

Paramount reserves the right to review and revise our policies periodically when necessary. When there is an update, we will publish the most current policy to https://www.paramounthealthcare.com/providers/medical-policies/policy-library

REFERENCES/RESOURCES

Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs

American Medical Association, *Current Procedural Terminology (CPT®)* and associated publications and services https://www.ama-assn.org/amaone/cpt-current-procedural-terminology

Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/HCPCS-Quarterly-Update

U.S. Preventive Services Task Force, https://www.uspreventiveservicestaskforce.org/uspstf/
Industry Standard Review

Hayes, Inc., https://www.hayesinc.com/

Industry Standard Review