GUIDELINES
This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder contract. Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards. This guideline is solely for explaining correct procedure reporting and does not imply coverage and reimbursement.

SCOPE
X Professional
_ Facility

DESCRIPTION
Barrett's esophagus is a precancerous condition of the esophagus caused by chronic acid reflux, chronic gastroesophageal reflux disease (GERD). Barrett's esophagus is defined as metaplasia of the esophageal epithelium, with normal squamous epithelium replaced by columnar epithelium containing goblet cells, also known as intestinal metaplasia. Confirmation of Barrett’s esophagus requires biopsy of the columnar epithelium and microscopic identification of intestinal metaplasia.

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 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.

Cryoablation is being investigated 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. 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.

At this time, 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 in particular randomized controlled trials are required to assess whether or not the cancer risk is reduced in routine clinical practice.

POLICY

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
HMO, PPO, Individual Marketplace, Elite/ProMedica Medicare Plan, Advantage

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

- Barrett's esophagus with high-grade dysplasia, as confirmed by endoscopy
- Life expectancy of one year or greater

Paramount considers radiofrequency ablation medically necessary in individuals with Barrett's esophagus with low-grade dysplasia (LGD) on biopsy with confirmation of the biopsy finding of LGD by two independent physicians.**

**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.

Paramount considers radiofrequency ablation as a treatment for Barrett's esophagus investigational and not medically necessary for all other indications.

Paramount considers any of the following interventions experimental and investigational for the treatment of Barrett's esophagus:
- Cryoablation
- 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>43229</td>
<td>Esophagoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes preguide wire passage, when performed) [when specified as cryoablation, laser ablation, electrocoagulation or coagulation]</td>
</tr>
<tr>
<td>43270</td>
<td>Esophagogastroduodenoscopy, flexible, transoral; with ablation of tumor(s), polyp(s) or other</td>
</tr>
</tbody>
</table>
lesion(s) (includes dilation and guide wire passage, when performed) [when specified as cryoablation, laser ablation, electrocoagulation plasma coagulation]

REVISION HISTORY EXPLANATION

ORIGINAL EFFECTIVE DATE: 05/01/2012

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 01/01/14: new codes 43229 and 43270. Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee.

12/14/2020: Medical policy placed on the new Paramount Medical Policy Format

REFERENCES/RESOURCES

Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services
Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets
Industry Standard Review
Hayes, Inc.