Endoscopic Radiofrequency Ablation for Barrett’s Esophagus

I. Description

Barrett’s Esophagus and the Risk of Esophageal Carcinoma

The esophagus is normally lined by squamous epithelium. 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, 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.

The HALO System from BÂRRX Medical, Inc. uses radiofrequency energy and consists of two components: an energy generator and an ablation catheter. The generator provides rapid (i.e., less than 1 second) delivery of a predetermined amount of radiofrequency energy to the catheter. Both the HALO90 and HALO360 are inserted into the esophagus with an endoscope, using standard endoscopic techniques. The HALO90 catheter is plate-based and used for focal ablation of areas of Barrett’s esophagus up to 3 cm. The HALO360 uses a balloon catheter that is sized to fit the individual esophagus, and is inflated to allow for circumferential ablation.

Ablation with radiofrequency affects only the most superficial layer of the esophagus (the mucosa), leaving the underlying tissues unharmed. Efficacy measures of the procedure include eradication of intestinal metaplasia without leaving behind microscopic (or “buried”) foci and post-ablation regrowth of the normal squamous epithelium. Reports of the efficacy of the HALO system in ablating Barrett’s esophagus have been as high as 70% (comparable to alternative methods of ablation [e.g., APC and MPEC]), and even higher in some reports. The incidence of leaving behind “buried” foci of intestinal metaplasia has been reported to be 20%–44% with APC and 7% with MPEC; reports using the HALO system have been 0%. Another potential advantage to the HALO system is that because it is automated, it eliminates operator-dependent error that may be seen with APC and MPEC.
II. **Criteria/Guidelines**

Radiofrequency ablation is covered (subject to Limitations and Administrative Guidelines) for the treatment of Barrett’s esophagus with high or low-grade dysplasia confirmed by two pathologists prior to the procedure.

III. **Limitations**

A. Radiofrequency ablation is not covered for the treatment of Barrett’s esophagus in the absence of dysplasia.

B. Cryoablation is not covered for the treatment of Barrett’s esophagus, with or without dysplasia.

IV. **Administrative Guidelines**

A. Precertification is not required. The following documentation must be kept in the patient’s medical record and made available upon request:

1. Current history and physical documenting the patient's condition
2. Pathology reports confirming the diagnosis of either high-grade dysplasia or low-grade dysplasia by at least two pathologists.

B. There are no CPT codes specific to radiofrequency ablation for Barrett’s esophagus. The procedure would likely be coded using one of the following CPT codes:

<table>
<thead>
<tr>
<th>CPT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>43228 (cancelled 12/31/2013)</td>
<td>Esophagoscopy, rigid or flexible; with ablation of tumor(s), polyp(s), or other lesion(s), not amenable to removal by hot biopsy forceps, bipolar cautery or snare techniques</td>
</tr>
<tr>
<td>43229 (effective 01/01/2014)</td>
<td>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)</td>
</tr>
<tr>
<td>43270 (effective 01/01/2014)</td>
<td>Esophagogastrroduodenoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)</td>
</tr>
</tbody>
</table>

V. **Important Reminder**

The purpose of this Medical Policy is to provide a guide to coverage. This Medical Policy is not intended to dictate to providers how to practice medicine. Nothing in this Medical Policy is intended to discourage or prohibit providing other medical advice or treatment deemed appropriate by the treating physician.

Benefit determinations are subject to applicable member contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control.
This Medical Policy has been developed through consideration of the medical necessity criteria under Hawaii’s Patients’ Bill of Rights and Responsibilities Act (Hawaii Revised Statutes §432E-1.4), generally accepted standards of medical practice and review of medical literature and government approval status. HMSA has determined that services not covered under this Medical Policy will not be medically necessary under Hawaii law in most cases. If a treating physician disagrees with HMSA’s determination as to medical necessity in a given case, the physician may request that HMSA reconsider the application of the medical necessity criteria to the case at issue in light of any supporting documentation.

VI. References

Endoscopic Radiofrequency ablation for Barrett’s Esophagus


22. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Radiofrequency ablation of nondysplastic or low-grade dysplastic Barrett’s esophagus. TEC Assessments 2010; Volume 25, No. 5.


