

# Barrett's esophagus: Treatment with radiofrequency ablation - UpToDate

## Barrett's esophagus: Treatment with radiofrequency ablation

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### INTRODUCTION

Barrett's esophagus (BE) occurs when an abnormal, intestinal-type epithelium called "specialized intestinal metaplasia" 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 and intramucosal cancer arising from BE were treated with esophagectomy, while non-dysplastic BE and BE with low-grade dysplasia 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 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").

This topic will review the use of radiofrequency ablation for the treatment of Barrett's esophagus. Other issues related to Barrett's esophagus, including alternative treatments, are discussed separately.

•(See "Barrett's esophagus: Epidemiology, clinical manifestations, and diagnosis".)

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