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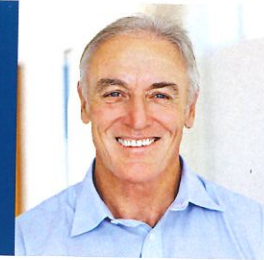
Risk Information: The following are transient side effects that may be expected after treatment: chest pain, difficulty swallowing, painful swallowing, throat pain and/or fever. Complications observed at a very low frequency include: mucosal laceration, minor and major acute bleeding, stricture, perforation, cardiac arrhythmia, pleural effusion, aspiration, and infection. Potential complications that have not been observed include: death. Please refer to the product user manual or medtronic.com/gi for detailed information.

References: 1. Wani S, Pulli SR, Shaheen NJ, et al. Esophageal adenocarcinoma in Barrett's esophagus after endoscopic ablation therapy: a meta-analysis and systematic review. *Am J Gastroenterol*. 2009 Feb;104(2):502-13. 2. de Jonge PJ, van Blankenstein M, Looman CW, et al. Risk of malignant progression in patients with Barrett's oesophagus: a Dutch nationwide cohort study. *Gut*. 2010 Aug;59(8):1030-6. 3. Wani S, Falk G, Hall M, et al. Patients with nondysplastic Barrett's esophagus have low risks for developing dysplasia or esophageal adenocarcinoma. *Clin Gastroenterol Hepatol*. 2011;9(3):220-7. 4. Jung KW, Talley NJ, Romero Y, et al. Epidemiology and natural history of intestinal metaplasia of the gastroesophageal junction and Barrett's esophagus: a population-based study. *Am J Gastroenterol*. 2011 Aug;106(8):1447-55. 5. Shaheen NJ, Sharma P, Overholt BF, et al. Radiofrequency ablation in Barrett's esophagus with dysplasia. *N Engl J Med*. 2009;360:2277-88. 6. Phoa KY, va Vilsteren FG, Pouw RE, et al. Radiofrequency Ablation in Barrett's Esophagus With Confirmed Low-Grade Dysplasia: Interim Results of a European Multicenter Randomized Controlled Trial (SURF). *Gastroenterology*. 2013;144(5):S-187. 7. Small AJ, Araujo JL, Leggett CL, et al. Radiofrequency Ablation Associated with Decreased Neoplastic Progression in Patients with Barrett's Esophagus and Confirmed Low-Grade Dysplasia. *Gastroenterology*. 2015;149(3):567-576 e3. 8. Duits LC, Phoa KN, Curvers WL, et al. Barrett's oesophagus patients with low-grade dysplasia can be accurately risk-stratified after histological review by an expert pathology panel. *Gut*. 2014 Jul 17; Epub ahead of print. 9. Curvers WL, ten Kate FJ, Krishnadath KK, et al. Low-grade dysplasia in Barrett's esophagus: overdiagnosed and underestimated. *Am J Gastroenterol*. 2010;105:1523-30. 10. Eherman C, Henley SJ, Ballard-Barbash R, et al. Annual Report to the Nation on the status of cancer, 1975-2008, featuring cancers associated with excess weight and lack of sufficient physical activity. *Cancer*. 2012;118(9):2338-66. 11. SEER Cancer Statistics Factsheets: Esophageal Cancer. National Cancer Institute, Bethesda, MD. <http://seer.cancer.gov/statfacts/html/esoph.html> (Accessed June 2016). 12. Sharma P, Falk GW, Weston AP, et al. Dysplasia and cancer in a large multicenter cohort of patients with Barrett's esophagus. *Clin Gastroenterol Hepatol*. 2006;4(5):566-72. 13. ASGE Standards of Practice Committee. The role of endoscopy in Barrett's esophagus and other premalignant conditions of the esophagus. *Gastrointest Endosc*. 2012 Dec;76(6):1087-94. 14. American Gastroenterological Association Medical Position Statement on the Management of Barrett's Esophagus. *Gastroenterology*. 1 March 2011;140(3):1084-1091. DOI:10.1053/j.gastro.2011.01.030. 15. Wolf WA, Pasricha S, Cotton C, et al. Incidence of esophageal adenocarcinoma and causes of mortality after radiofrequency ablation of Barrett's esophagus. *Gastroenterology*. 2015;149:1752-61. 16. FDA MAUDE website reported number of adverse events divided by the current number of catheters sold. As of September 2015 the rate is 0.12% based on 216 adverse events recorded on the FDA website divided by the 200K+ of catheters sold to date. 17. Orman ES, Li N, Shaheen NJ. Efficacy and Durability of Radiofrequency Ablation for Barrett's Esophagus: Systematic Review and Meta-analysis. *Clin Gastroenterol Hepatol*. 2013 May 2 (Epub ahead of print). 18. Fleischer DE, Overholt BF, Sharma VK, et al. Endoscopic radiofrequency ablation for Barrett's esophagus: 5-year outcomes from a prospective multicenter trial. *Endoscopy*. 2010;42:781-9. 19. See Instructions For Use. 20. Clark LL, Richardson G, Paterson S. Progression of low grade dysplasia to high grade dysplasia in Barrett's esophagus in a single center (abstract). *Gut*. 2014;63(suppl 1):A1-A288. 21. Turati F, Tramacere I, et al. A meta-analysis of body mass index in esophageal and gastric cardia adenocarcinoma. *Ann Oncol*. 2013 Mar;24(3):609-17. 22. Anaparthi R, et al. Association between length of Barrett's esophagus and risk of high-grade dysplasia or adenocarcinoma in patients without dysplasia. *Clinical Gastro and Hepato*. 2013;11(11):1430-6.

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BARRETT'S ESOPHAGUS PATIENT DISCUSSION REFERENCE GUIDE



About Barrett's Esophagus

Barrett's esophagus (BE) patients have approximately a 0.3% to 0.6% chance of disease progression to cancer each year.¹⁻⁴ while Barrett's esophagus patients with low-grade dysplasia (LGD) have a 6.6% to 13.6% per year chance of progressing to high-grade dysplasia (HGD) or cancer.⁵⁻⁹ In addition, studies suggest progression risk is cumulative over time, reporting progression to HGD or cancer in 7% of BE patients at 10 years.⁴

Barrett's esophagus puts patients 50 times or more at risk of developing cancer of the esophagus than the general population.^{3,10}

Esophageal cancer is one of the most aggressive cancers^{11,12} with only an 18% chance of surviving 5 years after diagnosis.¹¹

Treatment of Barrett's Esophagus: Medical Society Statements and Other Facts

GI society guidelines suggest that patients with HGD and LGD should not just be watched.^{13,14} Data supports that radiofrequency ablation (RFA) significantly reduces progression to cancer in HGD,⁵ LGD,^{5,6,7} and non-dysplastic Barrett's esophagus (NDBE) patients.¹⁵

NDBE patients who have factors that could place them at higher risk of disease progression should be considered for intervention.^{13,14}

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About RFA Therapy

The Barrx™ radiofrequency ablation (RFA) system has been used in over 216,000 procedures and more than 70,000 patients worldwide since it was made available to patients in 2005.¹⁶ RFA restores the natural esophageal squamous epithelium in the majority of patients.^{5,17}

Over 200 peer-reviewed publications have documented the technology's ability to remove Barrett's esophagus with a very low complication rate. One study showed that among patients with non-dysplastic Barrett's esophagus, complete response to therapy was seen in 98% of patients at 2.5 years and 92% of those patients remained disease free after 5 years.¹⁸

RFA is effective at reducing risk for esophageal adenocarcinoma (EAC), even when applied outside tertiary care centers.¹⁵

About the Procedure¹⁹

This is an outpatient procedure with prep similar to an upper endoscopy. Most patients recover 1 hour after the procedure and are discharged.

Complete eradication of Barrett's esophagus usually takes 3 to 4 treatments, which are done 2-3 months apart.

Discomfort: You may experience one or more of the following symptoms after treatment:

- Chest discomfort
- Sore throat
- Difficulty or pain with swallowing
- Nausea/vomiting

These symptoms should improve with each day. You will be provided with several medications and specific instructions to make you as comfortable as possible.

Diet: Full liquid diet for 24 hours, then advancing to soft diet for 7 days.

Risks of Progression for Non-dysplastic Barrett's Esophagus

IM advancing to high-grade dysplasia or esophageal cancer	7.3%/10 yrs ¹
IM advancing to esophageal cancer	2.9%/10 yrs ¹

Risks of Progression of Confirmed Low-Grade Dysplasia Barrett's Esophagus

LGD advancing to esophageal cancer	8.8%/3 yrs ⁸
LGD advancing to high-grade dysplasia or esophageal cancer	26.5%/3 yrs ⁶ 6.6%-13.6%/year ^{5-9,20}

Risk Factors Associated with Esophageal Adenocarcinoma

Risk Factor	Relative Risk (RR) or Odds Ratio (OR) Impact of Risk	Source
Male	Relative risk (RR) ¹ of 7.1 as compared to women	<i>Cancer</i> 2012;118:2338
Caucasian	RR of 1.65-5.5 as compared to other racial groups	<i>Cancer</i> 2012;118:2338
Obesity ²¹	RR of 1.71 for BMI ²² 25-30 RR of 2.34 for BMI ≥ 30 for esophageal and gastric cardia adenocarcinoma RR of 2.73 for BMI ≥ 30 for esophageal adenocarcinoma	<i>Ann Oncol.</i> 2013 Mar;24(3):609-17
Smoking	RR of 2.32 for current and 1.62 for former smokers	<i>Epidemiology</i> 2011;22:344
Hiatal hernia ≥ 4 cm	OR ²³ of 10.63	<i>Cancer</i> 2007;109:668
Barrett's segment ²² ≥ 3 cm	OR of 3.72 for BE length 4-6 cm OR of 5.96 for BE length 7-9 cm OR of 6.97 for BE length 10-12 cm OR of 10.27 for BE length ≥ 13 cm Increasing segment length appeared to be associated with increased risk of EAC.	<i>Clin Gastroenterol Hepatol.</i> 2013;11(11):1430-6
Family history	RR of 6.2 in familial as compared to sporadic BE	<i>Dis Esophagus</i> 2007;20:53
Duration of BE	RR of 3.2 for a duration of BE > 10 years	<i>Am J Gastroenterol</i> 2011;106:1231

¹ Relative Risk: A measure of the risk of a certain event happening in one group compared to the risk of the same event happening in another group. <http://www.cancer.gov/dictionary?Cdrid=618613>

²³ Odds Ratio: An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2938757/>

²² Body Mass Index (BMI): A measure of body fat based on height and weight. <http://www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm>