4.14. Radiofrequency ablation of Barrett's esophagus: Short-term results

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Background: The presence of Barrett's esophagus (BE) increases the risk of esophageal cancer. Total regression of BE is uncommon with medication or laparoscopic fundoplication, and endoscopic techniques to obliterate BE have varied results. This study evaluated the early results of a balloon-based catheter radiofrequency ablation (RFA) system in patients with medically refractory reflux symptoms and biopsyproven BE.

Methods: The medical records of 27 consecutive patients who underwent RFA for BE from March 2005 through January 2007 were reviewed. Esophagogastroduodenoscopy was performed before ablation to document presence of BE and no cancer and at 8 weeks after the RFA to assess the presence of residual BE.

Results: Mean patient age was 53.6 ± 12.5 years; 16 (59%) were men. The average length of the Barrett segment treated was 4.6 ± 4.7 cm. Two patients (7.4%) had low-grade dysplasia. No patient had high-grade dysplasia and cancer. There was no periprocedural morbidity or at follow-up, no postprocedure dysphagia or stricture. In all patients, the BE was completely replaced with normal squamous epithelium. Symptoms regressed in 16 patients (60%) with RFA and proton pump inhibitor therapy. Eleven required an anti-reflux procedure for persistent symptoms. **Conclusions:** Short-term results show that RFA for BE is safe and achieves 100% replacement of intestinal metaplasia. RFA of BE combined with fundoplication may be offered to patients with BE and medically refractory reflux symptoms. Long-term endoscopic surveillance is needed to determine if the risk of cancer is reduced with this bimodality therapy.