
4.29. Early experience with radiofrequency energy ablation therapy for Barrett's esophagus with and without dysplasia

A.K. Roorda, S.N. Marcus, G. Triadafilopoulos

Dis Esophagus 2007;20:516-22

Background: Radiofrequency (RF) ablation using the HALO360 system combined with proton pump inhibitor (PPI) therapy is a new treatment for Barrett's esophagus (BE).

Methods: We assessed the safety and effectiveness of this combination therapy at a community-based, BE referral center. After symptom evaluation, endoscopy and histologic assessment, esophageal motility, pH monitoring on PPI, computed tomography, endoscopic ultrasonography and mucosal resection for nodules, we performed HALO360 ablation followed by twice daily PPI and 3-monthly surveillance for up to 12 months. If metaplasia or dysplasia were present at follow-up, the patients received a second ablation.

Results: Thirteen patients (12 male) were treated, three with high-grade dysplasia, four with low-grade and six with non-dysplastic intestinal metaplasia. The mean baseline BE length was 6 cm (range 2–12); nine patients had a hiatal hernia and two had a prior fundoplication. Esophageal pH < 4.0 for < 4% of time was achieved only in 5/13 patients. A mean of 1.4 ablation sessions were performed, without serious adverse events or strictures. Complete eradication of BE was achieved in 6/13 (46%) patients. The mean endoscopic surface regression was 84% (from a mean length of 6 ± 1 cm to 1.2 ± 0.5 cm, $P < 0.001$). Complete elimination of dysplasia was achieved in 5/7 (71%) patients.

Conclusions: Ablation efficacy was better in those patients who had maximal pH control ($P < 0.05$). HALO360 ablation of BE with or without dysplasia is safe, well-tolerated and effective in the community setting. Follow-up ablation further reverses residual BE or dysplasia.