
4.15. Circumferential and focal ablation of Barrett's esophagus containing dysplasia

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Objectives: The finding of dysplasia in a Barrett's esophagus (BE) is associated with an increased risk for developing esophageal adenocarcinoma. Ablation using the HALO system has shown promise for the treatment of BE with dysplasia. The objective of this study was to assess the safety and efficacy of a stepwise regimen of circumferential and focal ablation using the HALO system for the treatment of BE with dysplasia.

Methods: Patients with BE containing low-grade dysplasia (LGD) or high-grade dysplasia (HGD) were enrolled. Primary circumferential ablation was followed every 3 months by further circumferential ablation or focal ablation until complete endoscopic eradication of BE was achieved. At 3- or 6-month intervals, depending on baseline grade, targeted and four quadrant random biopsies were obtained to assess the histological response to ablation. A complete response (CR) is defined as all biopsies negative for intestinal metaplasia (IM) (CR-IM) or dysplasia (CR-D) at last available follow-up.

Results: A total of 63 patients were treated (57 men; median age 71 years; median BE length 5 cm), with worst grade of dysplasia being LGD ($n=39$) and HGD ($n=24$). Follow-up is available for 62 patients (median 24 months). Overall, CR-IM is 79% and CR-D is 89%. For the LGD cohort, CR-IM is 87% and CR-D is 95%. For the HGD cohort, CR-IM is 67% and CR-D is 79%.

Conclusions: Stepwise circumferential and focal ablation of BE containing dysplasia appears to be a safe and effective intervention, achieving a CR for dysplasia in 95% and 79% of LGD and HGD patients, respectively.