
5.2. What are the outcomes of endoscopic radiofrequency ablation for very long segments of Barrett esophagus containing neoplasia?

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Background: Radiofrequency ablation (RFA) is safe and effective for eradicating Barrett esophagus (BE) and neoplasia. Most studies have limited the baseline length of BE (<10cm) and little is therefore known about RFA for very long BE segments.

Aim: Assess the safety and efficacy of RFA for BE \geq 10cm containing neoplasia.

Methods: Eligible patients (pts) had BE \geq 10cm with LGD, HGD or early cancer (EC). Pts underwent focal endoscopic resection (ER) for visible lesions, followed by circumferential (C-RFA) and focal RFA (F-RFA) every 2-3 mo until complete remission achieved (CR, defined as endoscopic resolution of BE and no evidence of intestinal metaplasia (IM) or neoplasia on biopsy). Follow-up (FU) endoscopy with 4Q/2cm biopsies was performed at 2, 6, and 12 mo.

Results: 26 consecutive pts were included (21 M, age 66 yrs, median BE length 11cm, range 10-20). Baseline ER was performed in 18/26 pts: EC (11), HGD (6), LGD (1). Worst grade of residual BE prior to RFA (and after ER as applicable): HGD (16), LGD (10). At entry, 13 pts (50%) had a proximal reflux stenosis (3 required dilation). After circumferential RFA, 7/26 (27%) had a non-transmural laceration (4 at the reflux stenosis, 3 at the prior ER). All were able to complete RFA. One pt with a relative stenosis after ER, developed dysphagia after RFA and required dilatation. By Nov'08, 9 pts are still under treatment (median regression: 95%), in 3 pts (12%) treatment was discontinued due to poor neosquamous regeneration. 14 pts have completed treatment with CR-IM and CR-neoplasia achieved after a median of 1(IQR 1-1) C-RFA and 2(IQR 1-3) F-RFA sessions. Two pts had a focal ER for small persisting islands after RFA. After a median FU of 9 mo, no recurrence of neoplasia was found. In 1 pt a 0.5 mm island was found during FU, distal to a reflux stenosis at the upper end of the initial BE. One pt had focal IM detected at the neo-z-line at a single FU endoscopy. No buried BE was found in 752 neosquamous biopsies.

Conclusion: Pts having very long segments of BE (10-20cm in this evaluation) present challenges that we have not observed in our more typical BE pts: 12% of our pts with BE \geq 10cm showed poor healing after RFA, probably reflecting the severity of the underlying reflux disease. Reflux stenoses and scarring after ER resulted in superficial laceration after circumferential RFA in 27% of pts, but these events were manageable. Overall we were able to achieve a CR in 14/17 who have completed therapy in a similar number of RFA sessions as required in shorter segment BE cohorts. Aside from the challenges noted, very long segments of BE can be treated safely and effectively with RFA.