
4.22. Stepwise circumferential and focal ablation of Barrett’s esophagus with high-grade dysplasia: Results of the first prospective series of 11 patients

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Background & Study Aims: Stepwise circumferential and focal ablation of nondysplastic Barrett’s esophagus has proven safe and effective. This study assessed the efficacy and safety of ablation for Barrett’s esophagus with high-grade dysplasia (HGD), and residual Barrett’s esophagus with dysplasia after prior endoscopic resection for visible lesions.

Patients & Methods: This was a prospective cohort study. All visible abnormalities were resected prior to ablation. Persistence of dysplasia and absence of invasive cancer was confirmed with biopsies after endoscopic resection. A balloon-based electrode was used for primary circumferential ablation and an endoscope-mounted electrode was used for secondary focal ablation. Eradication of dysplasia and Barrett’s esophagus was the main outcome measure.

Results: Eleven patients (eight men; median age 60 years) were treated (median Barrett’s length 5 cm). Visible abnormalities were removed with endoscopic resection in six patients. The worst pathological grade of residual Barrett’s esophagus after endoscopic resection and prior to ablation was LGD (n = 2) and HGD (n = 9). Patients underwent a median of two circumferential and two focal ablation sessions. Complete remission of dysplasia and complete endoscopic and histological removal of Barrett’s esophagus was achieved in 11/11 patients (100 %). There were no adverse events or strictures, and in none of the 473 biopsies of neo-squamous mucosa was subsquamous Barrett’s esophagus (“buried Barrett’s”) observed. During a median follow-up period of 14 months after the last treatment session and a median number of two follow-up endoscopies, none of the patients showed recurrence of dysplasia or endoscopic signs of recurrent Barrett’s mucosa.

Conclusions: Stepwise circumferential and focal ablation appears to be a safe and effective treatment for complete removal of Barrett’s esophagus containing HGD, and can be safely performed after prior endoscopic resection for endoscopically visible abnormalities.