Endoscopic Treatment is Safe and Effective for High-Grade Dysplasia in Barrett's Esophagus

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Abstract

Background: Although the American College of Gastroenterologists no longer suggests reflex esophagectomy for high-grade dysplasia (HGD) in Barrett's esophagus, some institutions continue to offer esophagectomy as the primary treatment for HGD. At our large teaching center, endoscopic (rather than surgical) treatment has been the mainstay of treatment for many patients with HGD. We assessed outcomes on patients with HGD in Barrett's esophagus treated with endoscopic mucosal resection (EMR) with or without other mucosal ablation.

Design: Patients with an initial biopsy diagnosis of HGD in Barrett's esophagus treated with EMR were identified by searching clinical records of a large teaching hospital from 1/1/1999 to 9/30/2006 (to achieve a potential for minimum follow-up of 3 years). Patients with a prior biopsy showing intramucosal or deeper invasive carcinoma were excluded. Follow-up information was obtained from pathology and clinical records.

Result: Forty-three patients were identified, comprising 42 whites (97.7%) and 1 African-American (2.3%) with a male predominance [36 men (83.7%), 7 women (16.3%)] , a median age at the time of initial EMR of 62.2 years, and a median follow-up of 39.6 months. In addition to EMR, 23 patients (53.5%) received photodynamic therapy, 6 (14.0%) had other ablative therapy, and 5 (11.6%) received cryogenic therapy. 18 patients (41.9%) had one or more subsequent EMRs during the follow-up period. The initial EMR showed no Barrett's epithelium in 3 cases (6.98%), was negative for dysplasia in 2 cases (4.65%), indefinite for dysplasia in 2 cases (4.65%), had low grade dysplasia in 5 cases (11.63%), HGD in 24 cases (55.81%) and intramucosal carcinoma in 7 cases (16.28%). None of the EMR specimens had adenocarcinoma invading the submucosa. At the end of the follow-up interval, 36 (83.72%) patients showed improved pathology: 19 patients (44.19%) had no evidence of Barrett's epithelium, 13 patients (30.23%) had Barrett's mucosa without dysplasia, 2 patients (4.65%) had epithelial changes indefinite for dysplasia, and 2 patients (4.65%) had low grade dysplasia. 5 patients (11.6%) had residual high grade dysplasia at the end of the study, and 2 patients (4.6%) had progressed beyond high grade dysplasia: one underwent esophagectomy for esophageal carcinoma (T2a N1 M0) and is living, while the other is deceased from widely metastatic esophageal carcinoma.

Conclusion: Endoscopic mucosal resection is a safe and effective method for long term management of high grade dysplasia in Barrett's esophagus.