

## Minute adenocarcinoma on Barrett's esophagus: the importance of directed biopsy sampling

Key words: Barrett. Acetic acid. Adenocarcinoma.

Dear Editor,

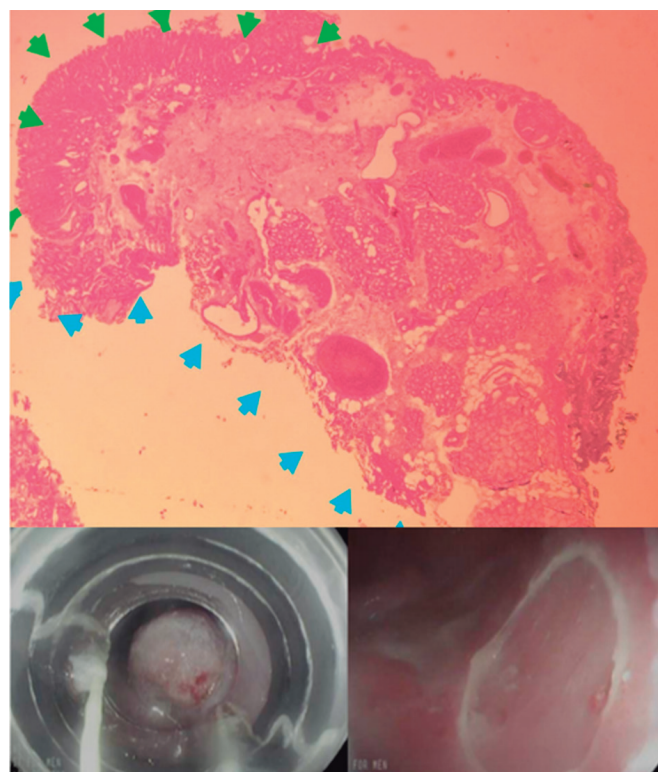
Patients with Barrett's esophagus (BE) have a risk of esophageal cancer thirty times higher than the general population. The grade of dysplasia must be established during endoscopic follow-up (1). The effectiveness of endoscopic surveillance programs for the diagnosis of advanced esophageal adenocarcinoma has been questioned.

Several techniques are available for the early identification of high-grade dysplasia and biopsy sampling in all four quadrants every 2 cm is the most common procedure (2). However, accurate protocol compliance is challenging for some conditions, including long BE, due to the excessive number of biopsies that may be required (3).

### Case report

The case was a 53-year-old male in follow-up due to long BE with low-grade dysplasia that was diagnosed 5 years previously. He was under surveillance every 2-3 years with nonsystematic, random biopsy sampling. During the most recent visit, acetic acid was instilled into the BE mucosa in order to obtain acetowhite staining, which revealed a 4-mm nodule that was subsequently biopsied. The histological analysis revealed high-grade dysplasia and adenocarcinoma.

Endoscopic therapy was performed with a second instillation of acetic acid, nodule excision and an endoscopic mucosal resection (EMR) following band placement using a diathermy snare. This ensures the complete excision without submucosal invasion in the pathology specimen, according to study by Espinel et al. previously reported in this present journal (4) (Fig. 1). Radiofrequency ablation (HALO) was subsequently used.



**Fig. 1.** The two lower images illustrate the endoscopic mucosal resection (EMR) technique. The upper histological image shows both free resection margins (blue arrows) and the adenocarcinoma (green arrows).

### Discussion

Recently, the importance of directed biopsy sampling has been highlighted due to the higher diagnostic yield as compared to "random" biopsy sampling (5). Acetic acid increases the detection of premalignant lesions and initial adenocarcinomas that are otherwise non-assessable via endoscopy. EMR is a curative technique with a low rate of complications in smaller, advanced esophageal lesions (4).

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