

Acetic acid spray contribution in the endoscopic diagnosis of serrated polyposis syndrome

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A 61-year-old woman with no personal or family history of colorectal cancer underwent screening colonoscopy. During the inspection of the ascending colon, at least 3 pale, slightly elevated, mucus-covered lesions 6 mm to 8 mm in diameter with indistinct borders were visualized and suspected to be neoplastic lesions. A cloudlike surface with dark spots inside its crypts was demonstrated with narrow-band imaging (NBI-Evis Exera III CF-H190, Olympus Medical Systems, Tokyo, Japan) after the mucus was washed (Fig. 1).

Chromoendoscopy was performed with a 2% acetic acid solution sprayed through the endoscopic working channel on suggestive lesions, allowing detailed examination (Video 1, available online at www.VideoGIE.org). The boundaries of the lesions and a type II-O (open) pit pattern¹ were characterized by Near Focus magnification (NearFocus-Evis Exera III CF-H190, Olympus Medical Systems) 15 seconds after the acetic acid spray (Fig. 2). Two other granular-type laterally spreading tumors measuring approximately 20 mm

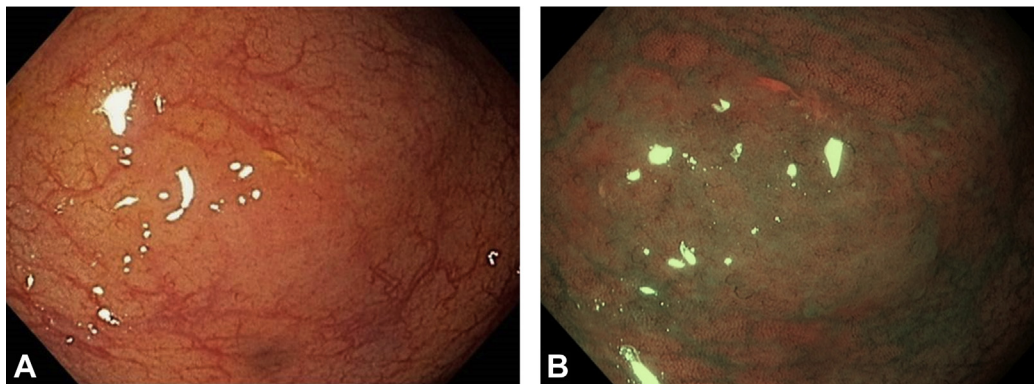


Figure 1. **A**, Suspected neoplastic lesion with cloudlike surface and erasure of submucosal vessel pattern. **B**, After chromoendoscopy with narrow-band imaging.

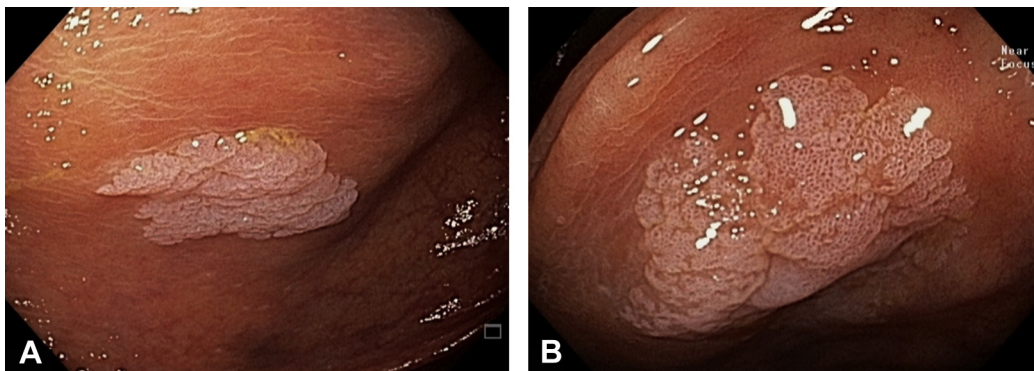


Figure 2. **A**, Definition of lesion's boundaries after 2% acetic acid spray. **B**, Pit pattern evaluation after 2% acetic acid spray and Near Focus magnification.

Written transcript of the video audio is available online at www.VideoGIE.org.

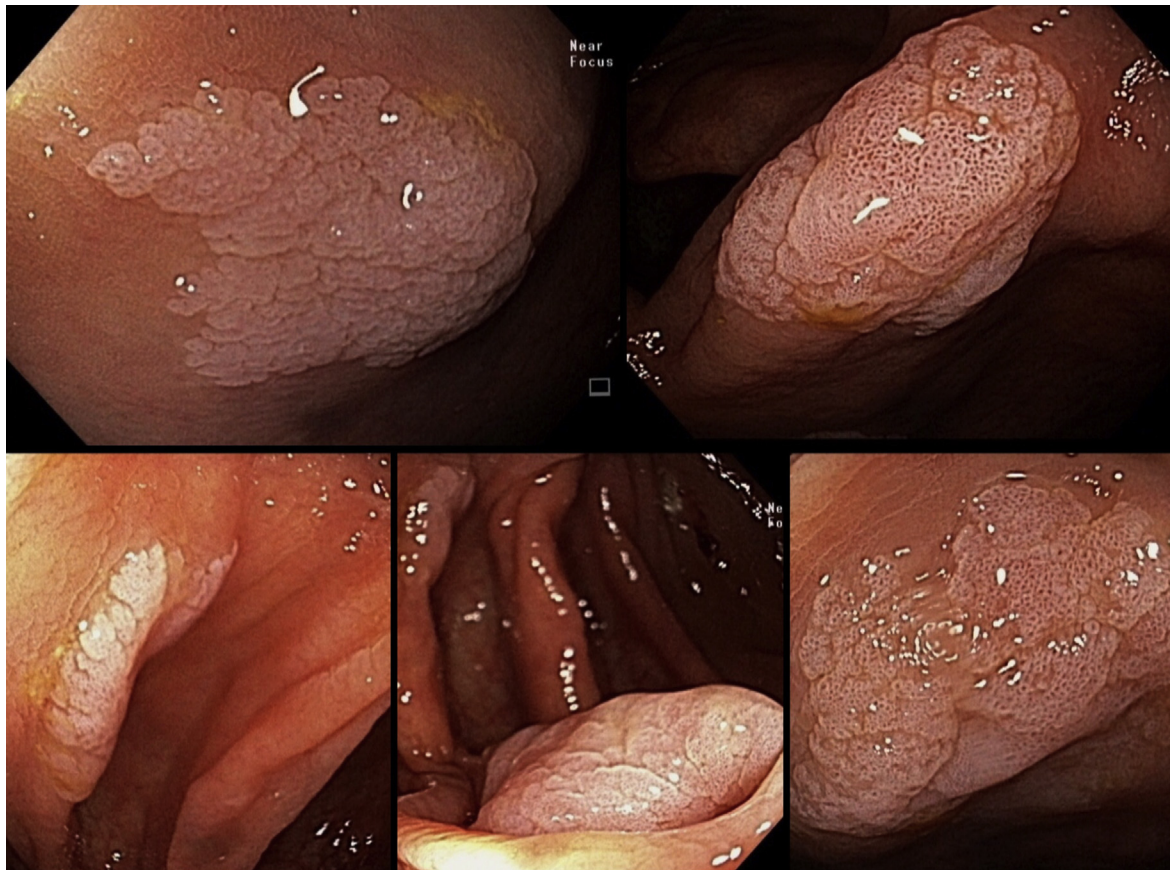


Figure 3. Endoscopic appearance of all lesions diagnosed after 2% acetic acid solution spray.

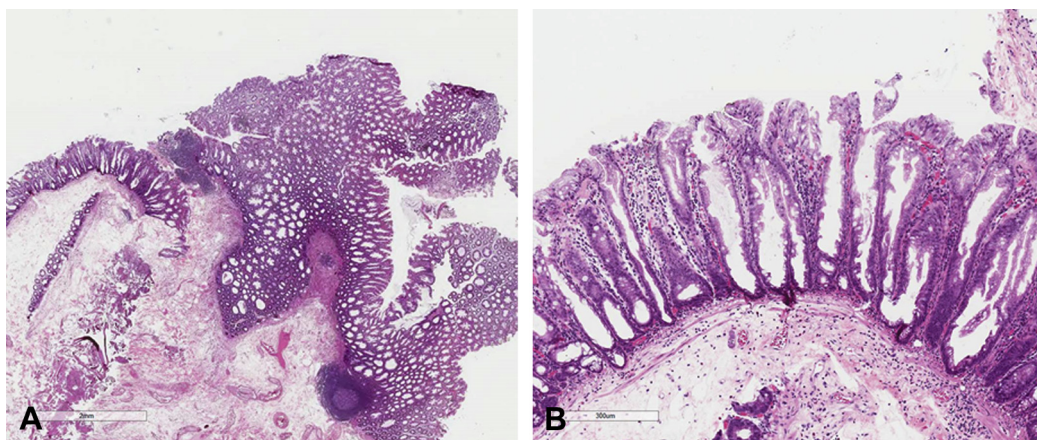


Figure 4. Low-power and high-power views of sessile serrated adenoma. **A**, Crypts are serrated from their base to the surface (H&E, orig. mag. $\times 20$ with $\times 2.6$ digital zoom). **B**, Tufted surface and dilatation of the crypts on the base with focal lateralization are evident (H&E, orig. mag. $\times 20$ with $\times 4.6$ digital zoom).

each were found, showing the same endoscopic characteristics. In all, 5 lesions were diagnosed (Fig. 3) and treated with standard EMR. Anatomopathologic analysis confirmed sessile serrated histologic features in all specimens (Fig. 4).

Acetic acid is widely used for the diagnosis of Barrett's esophagus and early gastric cancer.² The mucolytic effect shown in colonic chromoendoscopy was

described one decade ago,³ but despite the low cost and easy application, its use is not as widespread as that of other dyes. Recently, an acetic acid—indigo carmine mixture was reported for evaluating the margins of sessile serrated lesions.⁴

The World Health Organization criteria for clinical diagnosis of serrated polyposis syndrome include at least 5

serrated polyps proximal to the sigmoid colon, with 2 or more of them being larger than 10 mm; or any number of serrated polyps proximal to the sigmoid colon in an individual with a first-degree relative with serrated polyposis syndrome; or more than 20 serrated polyps distributed throughout the colon.^{5,6} Sessile serrated adenomas have a high risk of incomplete resection.⁷ Therefore, the resection site should be carefully evaluated with narrow-band imaging, chromoendoscopy, and magnification if available. We recommend the use of acetic acid for the evaluation of serrated lesions borders and pit pattern, contributing to the diagnosis and treatment.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

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