

Acetic acid for subtle serrated lesions of the right colon: does it facilitate diagnosis?

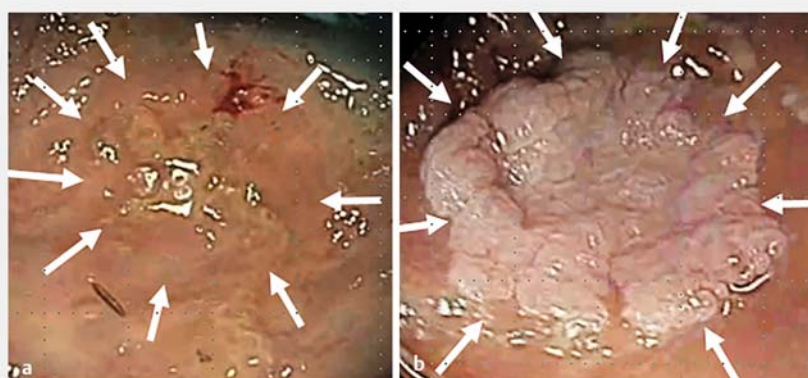
Sessile serrated adenomas/polyps (SSA/Ps) have a well-established malignant potential. Because of their subtle appearance, they pose a special diagnostic challenge for the endoscopist [1, 2].

Improving SSA/P detection and characterization during routine colonoscopy is crucial to prevent right colon cancer [3]. Acetic acid is a fatty acid. When sprayed on a mucosal surface, it alters the structure of the glycoproteins and the nuclear and cytoplasmatic proteins of the cells [4]. This process changes the optical properties of these areas and results in acetowhitening. Positive acetowhitening could occur in SSA/Ps owing to their high number of goblet cells with high mucous content (glycoproteins).

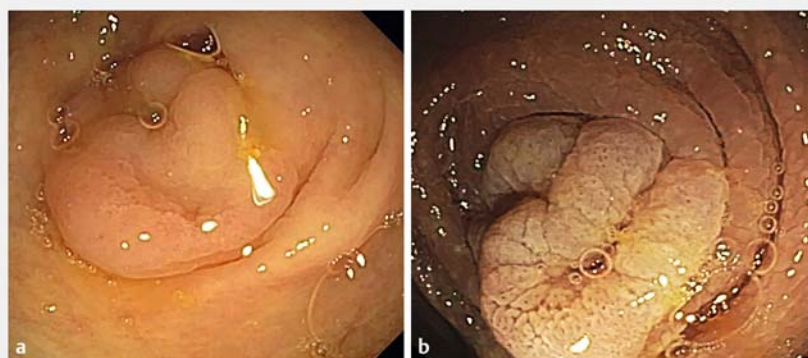
We present three cases illustrating the usefulness of acetic acid in the detection and characterization of subtle right colonic lesions in patients undergoing screening colonoscopy using a standard definition scope (CF-Q150L colonoscope; Olympus Medical, Tokyo, Japan). In the first patient, the lesion was almost invisible, except for the presence of vessel amputation. Acetic acid instillation clearly showed a well-defined polyp (►Fig. 1 a, b). In the two other patients, 0-IIa type subtle lesions with unclear, blurry limits were identified. Acetowhitening not only allowed better definition of the margins (and pit pattern), but in one case also revealed that an edematous-looking adjacent area was also part of the polyp (►Fig. 2 a, b, ►Fig. 3).

Acetic acid chromoendoscopy is inexpensive and easy to perform. We highly recommend its use to help evaluate subtle serrated lesions and optimize their management.

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► **Fig. 1** Colonic lesion area (inside white arrows) before and after acetic acid instillation. **a** Vessel amputation without visible polyp. **b** Clear polyp identification after acetowhitening.



► **Fig. 2** Lesion before and after acetic acid instillation. **a** Subtle lesion without clear margins. **b** Clear margin delimitation after acetowhitening.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Martin Miguel Galvarini Recabarren, Lisandro Pereyra, Cristian Ahumada, Federico Bentolila, Pablo Luna, Daniel Cimmino, Luis Boerr

Endoscopy Unit, Hospital Aleman, Buenos Aires, Argentina



► **Fig. 3** Pit pattern identification after acetic acid instillation.



Video 1 Usefulness of acetic acid chromoendoscopy in the detection and characterization of subtle right colonic lesions found during routine screening colonoscopy.

Corresponding author

Lisandro Pereyra, MD

Endoscopy Unit, Hospital Alemán, Av
Pueyrredon 1640, Buenos Aires CABA 1118,
Argentina

Fax: +54-11-48277000

Lisandro_pereyra@hotmail.com

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