New-generation endocytoscopy with CM double staining for optical characterization of colon sessile serrated adenoma

New-generation endocytoscopy (single lens, continuous zoom) enables in vivo ultra-high magnification (520 ×) for visualization at the cellular level and allows a precise pathological prediction of gastrointestinal (GI) neoplasia [1].

A 60-year-old man received colonoscopy screening owing to a positive fecal immunochemical test. A 1.2-cm slightly whitish colon polyp was found at the sigmoid colon by white imaging and narrow-band imaging (▶ Fig. 1). Endocytoscopy (CF-H290ECI endocytoscope; Olympus, Tokyo, Japan) was performed after CM double staining (0.05 % crystal violet and 1 % methylene blue mixture) (▶ Fig. 2, ▶ Video 1). It showed dilated gland lumens, i.e., oval crypt openings with some small round nuclei (▶ Fig. 3) [2–4]. Polypectomy was done, and the histology revealed typical features of sessile serrated adenoma, with dilated and L-shaped crypts (▶ Fig. 4) [5]. Sessile serrated adenomas are precursors of colorectal cancers and must be distinguished from hyperplastic polyps and treated endoscopically. Endocytoscopy is a promising tool for optical characterization of sessile serrated adenoma to guide subsequent endoscopic management.

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Competing interests

The authors declare that they have no conflict of interest.

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