Acetic acid-assisted underwater endoscopic mucosal resection for successful resection of sessile serrated lesions

Underwater endoscopic mucosal resection (UEMR) has become the new standard of endoscopic resection of ≥10-mm non-pedunculated colonic polyps [1–4]. It is particularly difficult to delineate the margins of sessile serrated lesions (SSLs). Though submucosal injection of a blue-colored dye mixture (e.g., indigo carmine or methylene blue) is used to enhance these lesions, SSLs tend to expand owing to the injection of the dye. Hence, bigger snare is utilized or more pieces of resection are needed, resulting in bigger defects after removal or non-en bloc resection.

We present two endoscopic resection cases using a new acetic acid-assisted underwater technique for two SSLs. The lesions were both classified as Paris-IIa; they demonstrated Kudo type II open pits and were located in the right-side colon. The first and second lesions were 12 mm and 15 mm in diameter, respectively. In both cases, 10 mL of 1.5 % acetic acid was applied over the lesion using a syringe. We confirmed the margin of the polyps easily by observing the acetowhiten reaction [5]. The lumen was then filled with saline using the water-jet function of the scope. In contrast to the approach using carbon dioxide, the persistent effect of acetic acid and the lack of mucus production were observed under the water. Thus, the margins of the lesions were clearly delineated throughout the snaring process (▶Fig. 1, ▶Fig. 2). Furthermore, the color change remained evident despite direct strong application of water onto the polyp. En bloc resection was achieved for both lesions. The persistence of the acetowhitenning effect post-resection aided in ensuring no tissues from the lesion were left at the margin of the defect (▶Video 1).

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Competing interests

The authors declare that they have no conflict of interest.

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