Effective use of image-enhanced endoscopy and endoscopic submucosal dissection for multiple flat non-polypoid colorectal neoplasms

Non-polypoid colorectal neoplasms are the precursors of post-colonoscopy colorectal cancers (PCCRCs) [1], but can easily be overlooked because of their appearance. Therefore, early detection and treatment of laterally spreading tumors, non-granular type (LST-NGs) and 0-IIb lesions are important for preventing PCCRC. We report the case of a patient with multiple flat non-polypoid colorectal neoplasms, among which a 0-IIb (LST-NG) lesion was appropriately diagnosed with image-enhanced endoscopy and treated with endoscopic submucosal dissection (ESD) [2].

A 58-year-old woman whose mother and uncle had a history of CRC had a positive fecal occult blood test result. Multiple flat non-polypoid colorectal neoplasms with diverse morphologies, including a type 2 lesion, were detected by subsequent colonoscopy (▶ Fig.1). Right hemicolectomy was scheduled for the type 2 lesion in the transverse colon. Another colonoscopy was performed for close examination before surgery.

A 35-mm 0-IIb (LST-NG) lesion, which had an unclear margin on white-light imaging, was detected in the descending colon. The lesion was clearly visualized using narrow-band imaging (NBI) and indigo carmine dye. Magnifying NBI showed a Japan NBI Expert Team (JNET) type 2B pattern [3], and crystal violet staining indicated a type Vı (non-invasive) pit pattern (▶ Fig.2). The preoperative diagnosis was intramucosal or submucosal superficial invasive cancer (<1000 µm), and the lesion was located outside the right hemicolectomy area. It was therefore resected via ESD, and curative resection was achieved (▶ Fig.3; ▶ Video 1). The tumor was intact for the two mismatch repair proteins (MSH6, PMS2) by immunohistochemical staining. No germline pathogenic variant was found in the cancer predisposition genes, including MLH1, MSH2, MSH6, PMS2, PTEN, and TP53 by multigene panel test.
In the above-mentioned article, the classification of tumors has been corrected to 0-IIb. This was corrected in the online version on March 24, 2022.