A modification of the clip-flap technique: the clip-band-flap technique

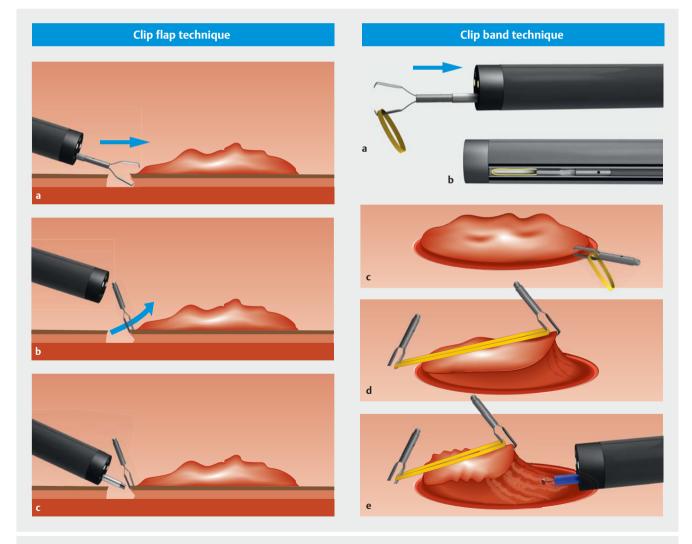
The clip-flap technique was described to facilitate creating a mucosal flap at the beginning of colorectal endoscopic submucosal dissection (ESD) [1-4]. The creation of the mucosal flap is a critical step in colorectal ESD, with a high risk of perforation especially for beginners. The clip-band technique has been used in gastric and colorectal ESD. The second clip is used to clamp the band, and it is attached to the normal mucosa distal or

opposite to the resection site after the circumferential incision is complete [5] (**> Fig. 1**).

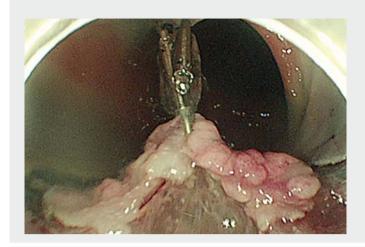
However, the first clip and the band (not only the clip) could be applied using the clip-flap technique to help create a mucosal flap, and then at some point the second clip could be applied at the discretion of the endoscopist.

In this case, a nongranular pseudodepressed laterally spreading tumor (LST) in the

ascending colon was assessed with narrow-band imaging (NBI) magnification, classified as type 2B per the Japan NBI Expert Team, and treated by ESD with an SB Junior knife (Sumitomo Bakelite Co., Ltd., Tokyo, Japan). The clip-band-flap technique was applied. By pushing the endoscope and cap against the base of the clip, the submucosal layer became exposed. Later, the second clip was applied after the circumferential incision was



▶ Fig. 1 Clip-flap technique. a A clip is placed in the edge of the target mucosa. b, c The endoscope with distal attachment is slipped under the endoclip, facilitating submucosal access and creating the mucosal flap. Clip-band technique. a, b, c The clip-band is applied in the inner margin of the resected mucosa. d, e The second clip is attached to the normal distal mucosa, exerting traction and facilitating submucosal layer visualization during dissection.





▶ Video 1 "Clip-flap-band technique" is applied at the beginning of the endoscopic submucosal dissection, facilitating initial access to the submucosa. To facilitate dissection, the initial positioning of the band is used later to apply traction using the clip-band.

completed. For placement of the second clip, we always perform a submucosal injection with dye in the target area to prevent any injuries to the muscle layer when the second clip is pulled and detached with a snare. The dissection was completed uneventfully. Histology showed slight submucosal invasion (900 μ m) with no high risk factors, although the distance to the vertical margin was only $100 \, \mu$ m (ν Video 1).

In summary, we propose a slight and simple modification of the clip-flap technique by also applying a band. In this way, two-stage traction can be applied in a sequential fashion.

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Competing interests

The authors declare they have no conflict of interest.

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