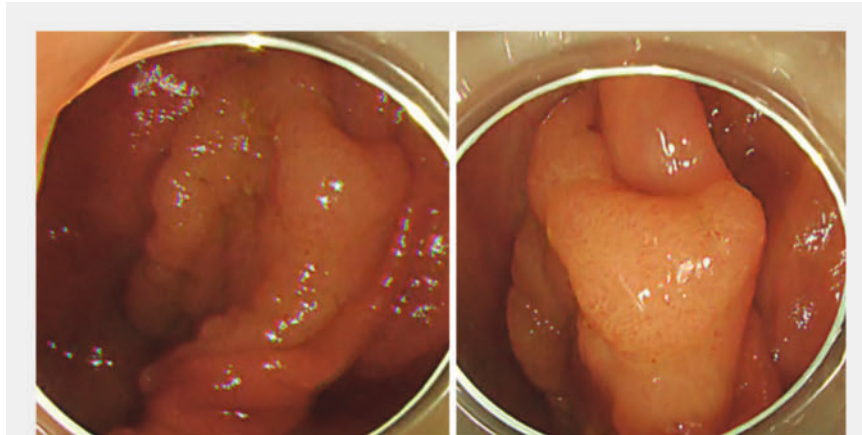


Mucosal flap creation in colorectal endoscopic submucosal dissection using a V-shaped incision

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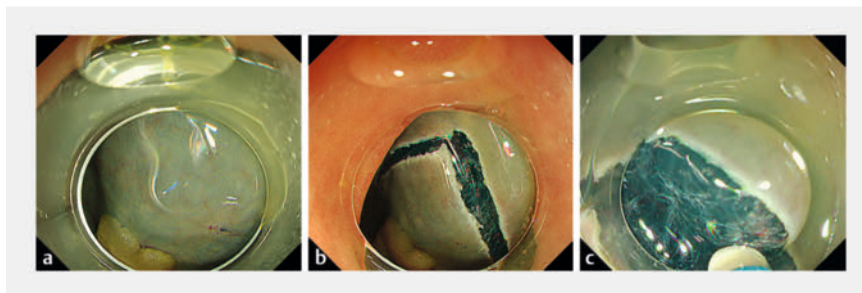
▶ **Video 1** Mucosal flap creation using a V-shaped incision in colorectal endoscopic submucosal dissection.



▶ **Fig. 1** White light image of a 38-mm type 0-IIa colonic adenocarcinoma located on the fold of the cecum in a 70-year-old man.

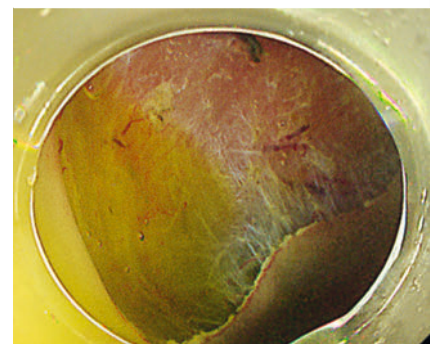
The creation of a flap at the beginning of colorectal endoscopic submucosal dissection (ESD) of lesions on the semilunar fold or in the cecum is challenging because the knife is at right angles to the muscle layer. Thus, several innovations in flap creation have been reported [1,2]. The usefulness of traction-assisted ESD has been reported, including the clip-with-line [3] and the S-O clip [4] methods, which require a clip to be attached to the flap. Underwater ESD has also been reported to be helpful [5]; however, it first requires the creation of a flap. The advantage of being able to create a flap safely and quickly, even in areas that are difficult to treat, is significant. Here, we report the successful creation of a mucosal flap using a V-shaped incision.

A 70-year-old man presented with a 38-mm type 0-IIa colonic adenocarcinoma of the cecum (▶ **Fig. 1**). ESD was performed using a DualKnife J (KD-655Q; Olympus, Tokyo, Japan) (▶ **Video 1**). The lesion was located where the knife encounters the muscle layer, and we anticipated that it would be challenging to create a flap and insert a hood between



▶ **Fig. 2** The V-shaped flap. **a** Determination of the apex of the V-shaped incision after submucosal injection. **b** Creation of the V-shaped incision. **c** A V-shaped incision has created a narrow flap, allowing the hood to be inserted under the mucosa after only two dissection attempts.

the mucosa and muscle layers. Furthermore, when the colon is dilated by insufflation, it is difficult for the endoscope to reach the lesion, and it is necessary to deflate in order to approach the lesion. After local injection of fluid into the submucosa, a V-shaped flap was created by means of a V-shaped incision (▶ **Fig. 2**). The sharp angle of the V was on the anorectal side, where it is easier to enter. The V-shaped incision created a narrow flap that allowed insertion of the hood under the mucosa after only two dissection attempts (▶ **Fig. 3**). Once the hood has



▶ **Fig. 3** The ulcer without muscle damage observed after complete en bloc resection.

been inserted, ESD can be performed safely using underwater or traction-assisted ESD, as appropriate. In conclusion, we have demonstrated how a V-shaped incision can create a narrow flap for colorectal ESD.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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References

- [1] Abiko S, Nakajima K, Ishibe E et al. Successful creation of the mucosal flap in the colorectal endoscopic submucosal dissection using a push-up, grasp, and cutting technique. *ACG Case Rep J* 2023; 10: e01146. doi:10.14309/crj.0000000000001146
- [2] Yamamoto K, Hayashi S, Saiki H et al. Endoscopic submucosal dissection for large superficial colorectal tumors using the “clip-flap method”. *Endoscopy* 2015; 47: 262–265
- [3] Yamasaki Y, Takeuchi Y, Uedo N et al. Traction-assisted colonic endoscopic submucosal dissection using clip and line: a feasibility study. *Endosc Int Open* 2016; 4: E51–E55. doi:10.1055/s-0041-107779
- [4] Ritsuno H, Sakamoto N, Osada T et al. Prospective clinical trial of traction device-assisted endoscopic submucosal dissection of large superficial colorectal tumors using the S-O clip. *Surg Endosc* 2014; 28: 3143–3149. doi:10.1007/s00464-014-3572-0
- [5] Cecinato P, Lucarini M, Campanale C et al. Underwater endoscopic submucosal dissection and hybrid endoscopic submucosal dissection as rescue therapy in difficult colorectal cases. *Endosc Int Open* 2022; 10: E1225–E1232. doi:10.1055/a-1882-4306

Bibliography

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