Easy and effective counter-traction using a clip with a looped thread for colorectal endoscopic submucosal dissection

Colorectal endoscopic submucosal dissection (ESD) remains a difficult endoscopic procedure. Several traction methods have been reported that enable an appropriate view of the submucosal layer; however, almost all of these methods have some problems regarding preparation, delivery, ease or cost [1–4]. We have concluded that “ring-shaped thread counter-traction” is the most effective

method to overcome some of these problems [5]. Here, we report a treatment strategy for colorectal ESD using a clip with a looped thread, which has been developed to resemble a ring-shaped thread.

A 3-0 nylon suture and a clip (HX-610-135; Olympus, Tokyo, Japan) are used as the material. After making two loops with the 3-0 nylon suture, one of the

two loops of thread is tied to the arm part of the clip (► **Fig. 1**).

First, a mucosal circumferential incision and submucosal dissection are made (► **Fig. 2 a, b**). Next, a clip with a looped thread is placed at the proximal end of the lesion (► **Fig. 1 c**). A second clip is then placed into the loop of thread, and the clip is placed on the contralateral side of the lesion (► **Fig. 2 d**).

By elevating the mucosa, we can maintain good visibility of the submucosal layer, allowing for a safe and speedy dissection. Upon ESD completion, the loop of thread is cut and recovered with the lesion.

This counter-traction method has many advantages. No special tools or devices are necessary, and the procedure can be carried out without the removal and reinsertion of a scope. Additionally, this method is inexpensive, easy, and only requires 30 seconds to make one looped thread. The length of the thread can be adjusted according to the circumstances, and more clips or looped thread can be added as needed. We suggest that this counter-traction method may be one of the best traction methods for colorectal ESD.

► **Video 1** How to prepare a clip with a looped thread, and colorectal endoscopic submucosal dissection using the clip with looped thread method.

► **Fig. 1** A clip with a looped thread. **a** A looped thread. **b** Tying the looped thread to a clip. **c** The clip with the looped thread.

► **Fig. 2** Colorectal endoscopic submucosal dissection using a clip with a looped thread. **a** A granular laterally spreading tumor, 30 mm in size, in the sigmoid colon. **b** Circumferential mucosal incision and submucosal dissection. **c** The first clip with the looped thread is placed at the proximal end of the lesion. **d** A second clip is placed on the contralateral side of the lesion.

References

- [1] Kobayashi T, Gotohda T, Tamakawa K et al. Magnetic anchor for more effective endoscopic mucosal resection. *Jpn J Clin Oncol* 2004; 34: 118–123
- [2] Sakamoto N, Osada T, Shibuya T et al. The facilitation of a new traction device (S-O clip) assisting endoscopic submucosal dissection for superficial colorectal neoplasms. *Endoscopy* 2008; 40 (Suppl. 02): E94–E95
- [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
- [4] Miura Y, Shinozaki S, Hayashi Y et al. Duodenal endoscopic submucosal dissection is feasible using the pocket-creation method. *Endoscopy* 2017; 49: 8–14
- [5] Mori H, Kobara H, Nishiyama N et al. Novel effective and repeatedly available ring-thread counter traction for safer colorectal endoscopic submucosal dissection. *Surg Endosc* 2017; 31: 3040–3047

Bibliography

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Competing interests

None

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