Colorectal endoscopic submucosal dissection using a clip-on-clip traction method

To safely and efficiently perform colorectal endoscopic submucosal dissection (ESD), clear visualization of the submucosal layer is important. Therefore, various traction methods have been developed to date [1–3]. However, there are few reports of using special devices other than clips, and traction methods that are generally used have not been reported. Recently, we developed a new clip-on-clip closure method to close the mucosal defect after ESD using clips only [4]. Here, we describe a new traction method: clip-on-clip traction method (CCTM).

The colorectal ESD method using CCTM is shown in ▶ **Video 1**. The patient had a nongranular laterally spreading tumor, 20 mm in size, in the rectosigmoid. Marking was done around the lesion and a full-circumference incision was made. First, a clip was placed on the mucous membrane on the lesion side (▶ **Fig. 1 a**). Then, a second clip was placed on the handle of the first clip (▶ **Fig. 1 b**). Next, the teeth of a third clip were passed through the gap between the teeth of the second clip, which served as an anchor, and then fixed to the contralateral normal colorectal mucosa (▶ **Fig. 1 c**). In the current case, the third clip did not fix to the contralateral colorectal mucosa. However, there was adequate space between the teeth of the second clip for

▶ **Video 1** Colorectal endoscopic submucosal dissection and troubleshooting using the clip-on-clip traction method.

a fourth clip to be added. This ensured a strong traction.

Because the submucosa could be viewed properly using CCTM, colorectal ESD could be performed safely without any intraoperative adverse event. As the resected lesion was fixed with a clip to the contralateral side, the lesion could be removed from the mucosa with a grasping forceps.

CCTM is simple, and is a novel method that can be applied safely to achieve

effective traction even in a narrow intestinal tract, such as the rectosigmoid or sigmoid colon.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

None

▶ **Fig. 1** Colorectal endoscopic submucosal dissection schema using the clip-on-clip traction method. **a** After full-circumference incision of the lesion, the first clip was placed on the mucous membrane on the lesion side. **b** A second clip was placed on the handle of the first clip. The gap between the teeth of the second clip (red area) was used as an anchor. **c** The teeth of a third clip (green) were passed through the gap, and then fixed to the contralateral normal mucosa.

The authors

Tatsuma Nomura^{1,2}, Akira Kamei², Shinya Sugimoto², Jun Oyamada²

- 1 Department of Gastroenterology, Kinan Hospital, Minamimuro, Japan
- 2 Department of Gastroenterology, Ise Red Cross Hospital, Ise, Japan

Corresponding author

Tatsuma Nomura, MD

Department of Gastroenterology, Kinan Hospital, 4750 Atawa, Mihama-cho, Minamimuro-gun, Mie 519-5293, Japan
Fax: +815-9792-3357
m06076tn@icloud.com

References

- [1] Osada T, Sakamoto N, Shibuya T et al. "Loops-attached rubber band" facilitation of endoscopic submucosal dissection of superficial colorectal neoplasm. *Endoscopy* 2008; 40 (Suppl. 02): E101 – E102
- [2] Matsuzaki I, Isobe S, Hirose K et al. Magnetic anchor-guided endoscopic submucosal dissection for colonic tumor. *VideoGIE* 2017; 2: 74 – 75
- [3] Nomura T, Kamei A, Sugimoto S et al. Colorectal endoscopic submucosal dissection using the "dental floss with rubber band method". *Endoscopy* 2018; 50: E78 – E80
- [4] Nomura T, Kamei A, Sugimoto S et al. New closure method for a mucosal defect after endoscopic submucosal dissection: the clip-on-clip closure method. *Endoscopy* 2018. doi:10.1055/s-0044-100486

Bibliography

DOI <https://doi.org/10.1055/a-0605-2868>

Published online: 7.6.2018

Endoscopy 2018; 50: E197–E198

© Georg Thieme Verlag KG

Stuttgart · New York

ISSN 0013-726X

ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at
<https://mc.manuscriptcentral.com/e-videos>