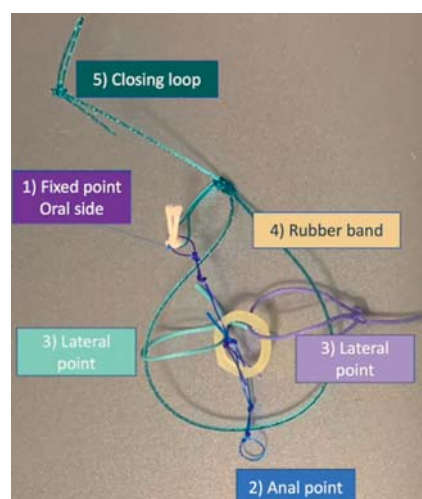
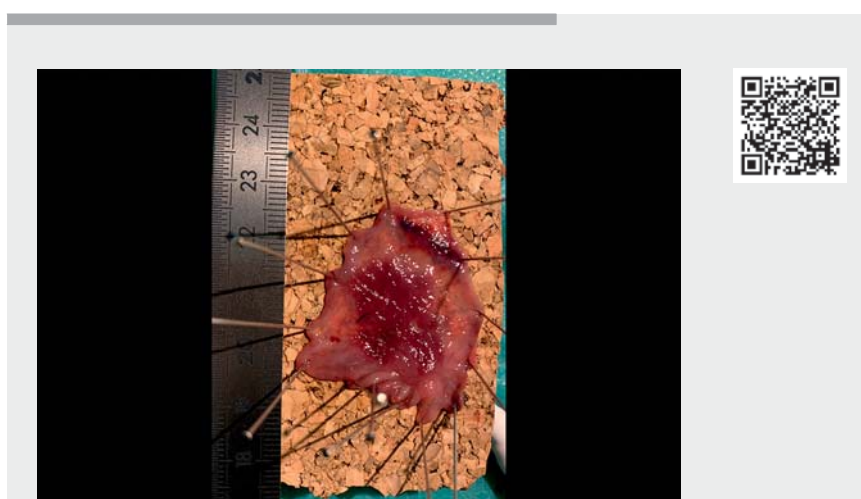


Endoscopic submucosal dissection of colonic residual laterally spreading tumor with adaptive traction: use of the additional loops to improve traction focally in difficult area



► **Fig. 1** A-TRACT device with the different components. **1** Fixed point attached to the oral side. **2** Second blue loop linked to the tightenable part. **3** Lateral free loops to obtain four-cardinal-point traction. **4** Rubber band attached to the opposite wall. **5** Closure loop with notched wire.

Multipolar traction is a recent advance in colorectal endoscopic submucosal dissection (ESD) to expose the submucosal field [1] particularly for challenging lesions like residual lesions [2]. Nevertheless, two limitations exist with four-point traction. First, traction tends to reduce as ESD progresses, although new devices that can be stretched during the procedure to increase traction seem promising [3, 4]. Second, systematically placing four traction points is expensive (four clips), time-consuming, and not needed for lesions <4 cm. For small lesions, two-point adaptive traction seems sufficient, but additional focal traction on the difficult area could help the physician. We developed a traction device (A-TRACT 2+2, Hospices Civils de Lyon) (► **Fig. 1**) with two adjustable loops with a tightening link and two additional large loops that can be used to stretch any part of



► **Video 1** Endoscopic submucosal dissection strategy for a residual non-granular laterally spreading tumor using A-TRACT 2+2.

the lesion when the procedure is in progress.

We report here the case of a 66-year-old patient with a 4-cm residual non-granular laterally spreading tumor in the transverse colon previously resected partially by endoscopic mucosal resection (EMR). After complete circumferential incision and trimming, we fixed the device by catching the two adjustable loops (► **Video 1**); the rubber band was then attached to the opposite wall. Afterward, ESD began but one clip was snatched out when the system was tightened, with the remaining traction on a single point. ESD became difficult because of a severe fibrosis, and additional traction was needed. Therefore, we caught the two additional loops to fix the device to the two edges when exposure became difficult. The loop fixed on the right edge where fibrosis was severe was the most help. We achieved an R0 resection without an adverse event.

In conclusion, this device allows adjustable traction with the capability to add

traction at the difficult area using the additional loops on the device.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

Our institution Hospices civils de Lyon has deposited a patent on this device.

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References

- [1] Bordet M, Lambin T, Wallenhorst T et al. Multipolar traction with homemade “spider” device to improve submucosal dissection of gastric superficial lesions is safe and effective. *Endoscopy* 2022; 54: E554–E555. doi:10.1055/a-1682-6685. Epub 2020
- [2] Faller J, Jacques J, Oung B et al. Endoscopic submucosal dissection with double clip and rubber band traction for residual or locally recurrent colonic lesions after previous endoscopic mucosal resection. *Endoscopy* 2020; 52: 383–388. doi:10.1055/a-1104-5210

- [3] Masgnaux L-J, Grimaldi J, Legros R et al. Endoscopic submucosal dissection in the colon using a novel adjustable traction device: A-TRACT-2. *Endoscopy* 2022. doi:10.1055/a-1888-3963 [Online ahead of print]
- [4] Grimaldi J, Masgnaux L-J, Rivory J et al. Multipolar traction with adjustable force increases procedure speed during endoscopic submucosal dissection: the A-TRACT-4 traction device. *Endoscopy* 2022. doi:10.1055/a-1904-7666 [Online ahead of print]

Bibliography

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