

Endoscopic submucosal dissection with a novel traction wire for esophageal cancer in the cervical esophagus

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► **Fig. 1** Endoscopy, showing circumferential markings, revealed esophageal cancer in the cervical esophagus.



► **Video 1** Endoscopic submucosal dissection with a traction wire device for esophageal cancer in the cervical esophagus.

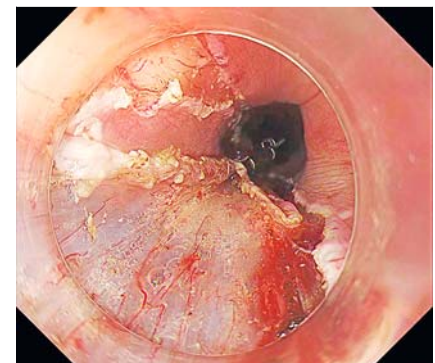
Endoscopic submucosal dissection (ESD) for cervical esophageal cancer is challenging owing to unstable endoscopic maneuverability. Various assistive devices have been developed for esophageal ESD. A traction wire (ProdiGI Traction Wire, ERD-TW20; Medtronic, Minneapolis, Minnesota, USA) is a unique traction device consisting of a curved wire loop with a grasping clip [1–5].

A 76-year-old man with superficial esophageal cancer was referred to our department for endoscopic treatment. Endoscopy revealed a half-circumferential reddish lesion on the left side of the cervical esophagus. Narrow-band imaging showed this as a brownish area. Although the oral side of the lesion could be observed, the space in which the endoscope could be manipulated was not sufficient. We then performed ESD using a traction wire (► **Fig. 1**, ► **Video 1**).

Following the circumferential mucosal incision, the primary clip with traction wire was deployed at the oral margin. The wire loop was then hooked by the second grasping clip and placed just on the distal side of the distal mucosal incision (► **Fig. 2**). The tension of the traction wire exposed the submucosa, and submucosal dissection progressed (► **Fig. 3**). During dissection, the position of the sec-



► **Fig. 2** The traction wire was deployed at the oral margin and the distal margin of the lesion.



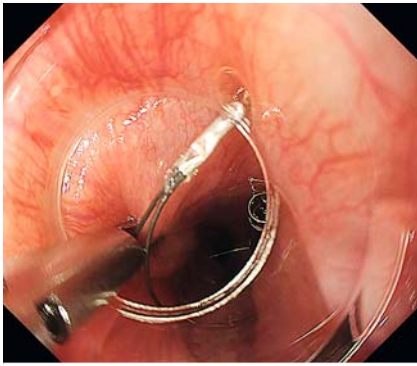
► **Fig. 3** The tension of the traction wire exposed the submucosa.

ond clip was switched from the distal side to facilitate the remaining submucosal dissection. The clip was removed by forceps. Then, the wire loop was hooked by another grasping clip and placed on the proximal opposite side of the lesion (► **Fig. 4**). Suitable tension was obtained by switching the position of the traction wire. Finally, the lesion was resected en bloc (► **Fig. 5**). Histopathology revealed squamous cell carcinoma confined to the

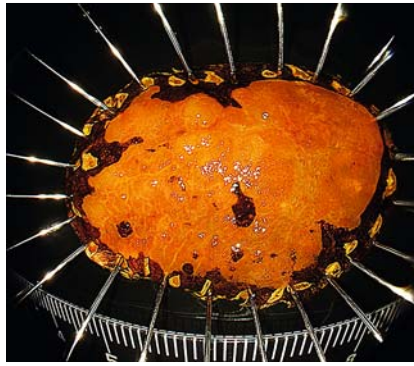
lamina propria mucosa with negative margins.

In conclusion, the traction wire may be useful to facilitate submucosal dissection for esophageal ESD. However, the position of the wire loop should be changed to provide appropriate traction if submucosal dissection is not feasible.

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► **Fig. 4** The position of the wire loop was changed from the distal side to the proximal side of the lesion to facilitate submucosal dissection.



► **Fig. 5** The lesion was resected en bloc.

Competing interests

The authors declare that they have no conflict of interest.

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References

- [1] Bhatt A, Hwang JH, Sharma NR et al. Traction wire endoscopic submucosal dissection: tips and techniques from 4 institutions. *VideoGIE* 2021; 7: 21–22
- [2] Omae M, Wang N, Löhr JM et al. Endoscopic submucosal dissection by using a new traction device. *VideoGIE* 2021; 6: 543–545
- [3] Aslam SP, Abdelrahim M, Subramaniam S et al. Feasibility and safety of using a novel traction wire for endoscopic submucosal dissection of challenging gastrointestinal neoplasia. *Endoscopy* 2022. doi:10.1055/a-1707-1390
- [4] Shoguchi Y, Esaki M, Minoda Y. Intralesional traction-assisted endoscopic submucosal dissection for early gastric neoplasm using the ProdiGI traction wire. *Dig Endosc* 2022; 34: e56–e57
- [5] Ishii H, Fukuda H, Hayashi Y et al. A traction wire facilitates the pocket-creation method for endoscopic submucosal dissection in the cecum. *Endoscopy* 2022. doi:10.1055/a-1807-7571

Bibliography

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