Two-step traction-assisted endoscopic submucosal dissection for a gastric neoplasm using a clip with a traction band and thread

The traction technique is a common assistance method for gastric endoscopic submucosal dissection (ESD) [1–3]. We previously developed intralesional traction-assisted ESD (ILT-ESD) [4,5]. Although this provides a favorable clear view of the submucosal layer by achieving intralesional elevation using clips with a traction band, there is one problem to be solved. The traction force decreases because of the reduced area of lesion attachment as submucosal dissection progresses. To resolve this problem, we further developed a two-step traction-assisted ESD (TT-ESD), where intralesional traction is performed in the first half and clip-with-thread traction is applied in the latter half of the submucosal dissection (▶Video 1).

A gastric lesion with a 15-mm diameter was located at the greater curvature of the gastric body. TT-ESD was applied to the lesion. A clip with traction band and thread were prepared, with the thread tied to the traction band (▶Fig. 1). After the circumferential mucosal incision around the lesion had been completed, the clip with the traction band and thread was placed at the proximal margin of the mucosal flap (▶Fig. 2a). Subsequently, the second clip was placed at the distal margin of the lesion by hooking the traction band (▶Fig. 2b, c). Intralesional traction was achieved by the elastic force of the band between the clips (▶Fig. 2d). Submucosal dissection was conducted with a clear view of the submucosal layer in the first half of the procedure (▶Fig. 2e). In the second part of the procedure, when the intralesional traction force decreased, conventional clip-with-thread traction was applied to generate an effective traction force on the lesion (▶Fig. 2f). Submucosal dissection was therefore completed with a clear view of the submucosal layer throughout the procedure, and en bloc resection was achieved without any complications. Intralesional traction assists the first half of the submucosal dissection, while clip-with-thread traction assists the latter stages of the procedure. This combined technique provides a clear view of the submucosal layer throughout the dissection procedure.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests
H. Ogino and E. Ihara are involved in the endowed course supported by Miyarisan Pharmaceutical Co. Ltd., Fujifilm Medical Co., Ltd., Terumo Corporation, Fanci Corporation, and Muta Hospital. E. Ihara has also received a lecture fee from Takeda Pharmaceutical Co. K. Nishioka, M. Esaki, T. Iwasa, Y, Minoda, and N. Shiga declare that they have no conflict of interest.

The authors
Kei Nishioka1, Mitsuhiro Esaki2,3, Tsutomu Iwasa1, Yosuke Minoda2, Noriko Shiga1, Haruei Ogino2,4, Eikichi Ihara2
1 Department of Gastroenterology, Saiseikai Futsukaichi Hospital, Fukuoka, Japan
2 Department of Medicine and Bioregulatory Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan
3 Department of Gastroenterology, Harasanshin Hospital, Fukuoka, Japan
4 Department of Gastroenterology and Metabolism, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan
Corresponding author

Mitsuru Esaki, MD
Department of Medicine and Bioregulatory Science, Graduate School of Medical Sciences, Kyushu University, 3-1-1, Maidashi, Higashi-ku, 812-8582, Fukuoka, Japan
esaki_saiseikai@yahoo.co.jp

References


Bibliography

Endoscopy 2023; 55: E1041–E1042
DOI 10.1055/a-2155-7172
ISSN 0013-726X
© 2023. The Author(s).
This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, reproduction so long as the original work is properly cited.
(https://creativecommons.org/licenses/by/4.0/)
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany