"Spider-traction" endoscopic submucosal dissection for a submucosal lesion invading the site of a previous appendectomy



Double clip and rubber band tractionassisted endoscopic submucosal dissection (ESD) has been previously shown to be effective and safe for difficult colonic ESDs, such as those for recurrent lesions with severe fibrosis or for lesions invading the appendiceal orifice [1, 2]. Subepithelial lesions can also be removed by double clip and rubber band traction-assisted ESD [3]. "Spider-traction" ESD was recently reported to improve both the effectiveness and speed of ESD [4].

A 60-year-old patient with a history of appendectomy was diagnosed with a protruding subepithelial lesion at the site of the previous appendectomy (> Fig. 1 a). We scheduled endoscopic removal of this lesion with spider-traction ESD so as to obtain a perfect histological diagnosis and try to avoid unnecessary surgery. After with glycerol mixed with indigo carmine had been injected submucosally, circumferential incision trimming of the edges was done using a DualKnife (Olympus, Tokyo, Japan). The spider-traction system was then placed on the precut lesion (>Video1). With the creation of four-guadrant traction using our system, better visibility of the cutting plan and a wider submucosal space for dissection were obtained (**> Fig. 1 b**). We were able to finish complete en bloc resection of this subepithelial lesion, without any adverse events, in 25 minutes (> Fig. 1 c, d). We decided to close the ulcer bed with five clips to prevent delayed complications (> Fig. 2). The final pathology result revealed fatty fibrous change, with an R0 resection.

ESD of subepithelial lesions in difficult locations, such as in the appendiceal orifice, is effectively possible with our spider-traction system. It was possible to pull the lesion completely out of the orifice, facilitating submucosal dissection. Pathological analysis confirmed that this was a completely benign lesion and









Video 1 Colonic endoscopic submucosal dissection is performed with the assistance of the spider-traction system.



► Fig.2 Endoscopic view showing clip closure of the ulcer bed.

surgery was avoided. A multitraction system, like the spider-traction system, pushes the limits of ESD for challenging lesions.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

The authors declare that they have no conflict of interest.

The authors

Borathchakra Oung¹, Jérémie Albouys², Sophie Geyl², Romain Legros², Thomas Lambin², Mathieu Pioche³, Jérémie Jacques²

1 Department of Gastroenterology and Digestive Endoscopy, Calmette Hospital, Phnom Penh, Cambodia

- 2 Service d'hépato-gastro-entérologie, Dupuytren University Hospital, Limoges, France
- 3 Department of Endoscopy and Gastroenterology, Pavillon L, Edouard Herriot Hospital, Lyon, France

Corresponding author

Jérémie Jacques, MD

Service d'Hépato-gastro-entérologie, CHU Dupuytren, 2 avenue Martin Luther-King, 87042 Limoges, France jeremiejacques@gmail.com

References

- 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
- [2] Oung B, Rivory J, Chabrun E et al. ESD with double clips and rubber band traction of neoplastic lesions developed in the appendiceal orifice is effective and safe. Endosc Int Open 2020; 8: E388–E395
- [3] Oung B, Walter T, Hervieu V et al. Nonampullary duodenal subepithelial neuroendocrine tumor removed R0 by endoscopic submucosal dissection with double clips and rubber band traction. VideoGIE 2019; 4: 570–573
- [4] Lafeuille P, Rivory J, Jacques J et al. Diagnostic endoscopic submucosal dissection for invasive cancer with the four cardinal points traction strategy. Endoscopy 2022. doi:10.1055/a-1516-3680

Bibliography

Endoscopy 2022; 54: E897–E898 DOI 10.1055/a-1847-7438 ISSN 0013-726X published online 1.7.2022 © 2022. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https:// creativecommons.org/licenses/by-nc-nd/4.0/) Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



ENDOSCOPY E-VIDEOS https://eref.thieme.de/e-videos



Endoscopy E-Videos is an open 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. Processing charges apply (currently EUR 375), discounts and wavers acc. to HINARI are available.

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