Endoscopic submucosal dissection of challenging rectosigmoid anastomotic lesion made feasible by a multipolar adaptive traction device combined with a line

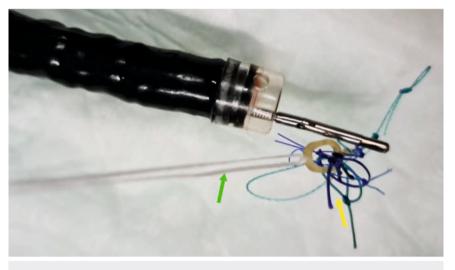


Endoscopic submucosal dissection (ESD) is widely accepted as a minimally invasive treatment for most superficial colorectal neoplasms, enabling a high rate of en bloc R0 resection [1]. However, ESD is difficult to perform in selected cases, such as in anastomotic lesions following colorectal surgery. In such instances, ESD presents technical challenges due to severe fibrosis, limited space, the presence of staples, deformities, and suture lines from previous surgeries, which increase the risk of complications and unsuccessful outcomes [2, 3].

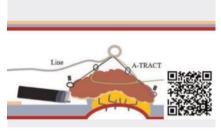
We have already discussed the benefits of using an adaptative traction device (A-TRACT) in selected difficult lesions [4,5].

In this case we report the use of an A-TRACT 2+2 associated with a line (**Fig.1**) to maximize the effects of traction during dissection of a rectosigmoid anastomotic lesion (**Video 1**).

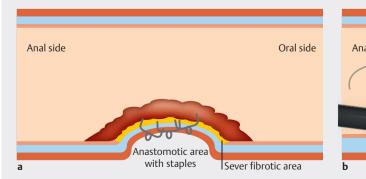
A 76-year-old man was referred for ESD of a 10-mm lesion located at the rectosigmoid anastomosis. After circumferential incision and trimming, the A-TRACT 2+2 was applied by placing the four loops on the lesion's edges. The line that had previously been attached to the A-TRACT was gently pulled to improve the traction (>Fig.2). Underwater ESD was used during the dissection phase to optimize the visibility of the submucosa and muscularis propria. Any staple encountered during the procedure was either removed or avoided, ensuring the excision line was made below it within the thickened muscularis propria. After cutting half of the lesion, the A-TRACT was tightened, and the line was pulled slightly more to better expose the layers. The procedure was concluded without adverse events. The histopathology revealed an adenoma with high grade dysplasia and free margins.

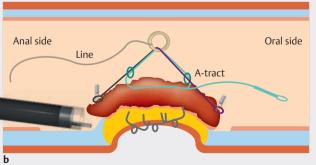


▶ Fig. 1 A-TRACT adaptative traction device (yellow arrow) attached to a line (green arrow).



▶ Video 1 Use of adaptative traction device with a line for a rectosigmoid anastomotic lesion.





▶ Fig. 2 Schematic representation of the procedure using ATRACT 2+2 with a line to maximize the traction during the dissection phase.

We can infer that the use of a line attached to the A-TRACT system offers improved adaptability of traction, potentially making ESD of rectosigmoid anastomotic lesions with limited lumen space safer and more feasible.

Endoscopy_UCTN_Code_TTT_1AO_2AG_3AD

Conflict of Interest

Jérôme Rivory, Jean Grimaldi, Louis-Jean Masgnaux, Mathieu Pioche are co-founders of the ATRACT devices and co. Nothing to declare for the other authors.

The authors

Elena De Cristofaro ¹, Jérôme Rivory², Louis-Jean Masgnaux², Jean Grimaldi², Fabien Pinard³, Timothée Wallenhorst⁴, Mathieu Pioche²

- Gastroenterology Unit, Department of Systems Medicine, University of Rome Tor Vergata, Roma, Italy
- 2 Gastroenterology and Endoscopy Unit, Edouard Herriot Hospital, Hospices Civils de Lyon, Lyon, France
- 3 Gastroenterology and Endoscopy Unit, Hospital Centre Cornouaille, Quimper, France
- 4 Gastroenterology and Endoscopy Unit, Pontchaillou University Hospital, Rennes, France

Corresponding author

Mathieu Pioche, MD

Endoscopy Unit, Department of Digestive Diseases, Pavillon L – Edouard Herriot Hospital, 5 Pl. d'Arsonval, 69437 Lyon Cedex, France

Mathieupioche15@gmail.com

References

- [1] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. Endoscopy 2022; 54: 591–622
- [2] Kobayashi R, Hirasawa K, Ikeda R et al. The feasibility of colorectal endoscopic submucosal dissection for the treatment of residual or recurrent tumor localized in therapeutic scar tissue. Endosc Int Open 2017; 5: E1242–E1250
- [3] Maehata T, Kato M, Ochiai Y et al. Feasibility of endoscopic submucosal dissection for colorectal neoplasia at anastomotic sites: a retrospective study. Surg Endosc 2020; 34: 5495–5500
- [4] Grimaldi J, Masgnaux LJ, Lafeuille P et al. Endoscopic submucosal dissection with adaptive traction strategy: first prospective multicenter study. Gastrointest Endosc 2024. doi:10.1016/j.qie.2024.02.032
- [5] De Cristofaro E, Masnaux LJ, Lupu A et al. Treatment of a sessile serrated adenoma/ polyp deeply invading the appendiceal orifice enabled by combined adaptive traction and underwater endoscopic submucosal dissection. Endoscopy 2024; 56: E215–E216

Bibliography

Endoscopy 2024; 56: E585–E586 DOI 10.1055/a-2346-4744 ISSN 0013-726X © 2024. 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, and 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



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



E-Videos is an open access online section of the journal *Endoscopy*, reporting on interesting cases

and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. Endoscopy E-Videos qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: https://www.research4life.org/access/eligibility/).

This section has its own submission website at

https://mc.manuscriptcentral.com/e-videos