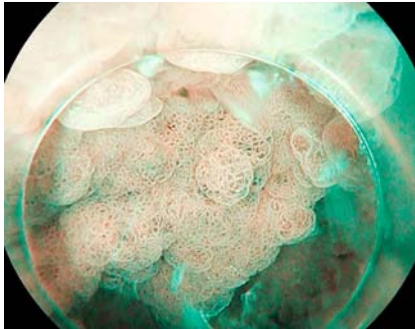


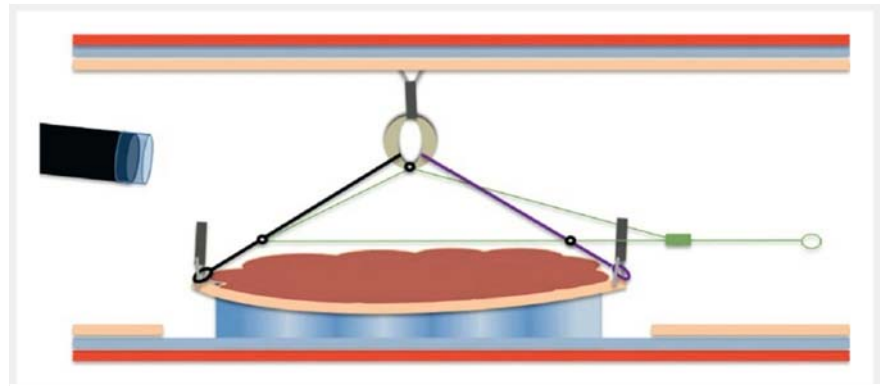
Multipolar adaptive traction makes endoscopic submucosal dissection feasible for large neoplastic area of the fundus in patient with familial adenomatous polyposis



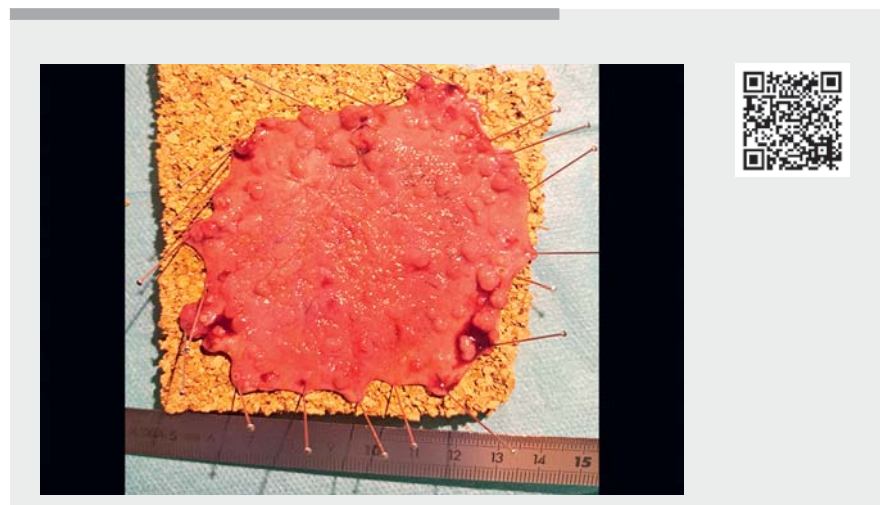
► **Fig. 1** Large fundic lesion in a patient with familial adenomatous polyposis.

Multiple fundic gland polyps (FGPs) are often found in patients with familial adenomatous polyposis (FAP) but are usually benign. FAP-associated dysplasia is rare but, where found, is fundic, whitish, and flat [1]. Endoscopic submucosal dissection (ESD) is a good but challenging option for achieving complete resection because the top of the fundus is difficult to reach and because the multiple FGPs obscure the margins of the dysplastic area, making incision difficult. Dedicated scopes such as the double bending therapeutic gastroscope (2TQ260M; Olympus, Tokyo, Japan) have been designed for fundic lesions, but are not available in Europe [2]. Therefore, alternative strategies are much needed. Adaptive traction devices are useful for complex lesions [3–5]. We describe an option for ESD of difficult fundic lesions using the 4-point multipolar adaptive traction device (A-TRACT 4).

We report the case of a 42-year-old patient with FAP and a large, whitish, dysplastic area in the fundus (► **Fig. 1**). The lesion was anatomically difficult to reach, but by pushing a long loop of the scope against the antrum, the fundus was reached with a relatively tangential approach to the lesion. After circumferential incision and trimming, the four loops of the A-TRACT 4 device were fixed



► **Fig. 2** Schematic representation after application of A-TRACT 4, allowing excellent exposure of the submucosa.



► **Video 1** Challenging endoscopic submucosal dissection of a large fundic lesion using A-TRACT 4 in a patient with familial adenomatous polyposis.

to the lateral edges of the lesion. The rubber band was fixed by another clip to the opposite wall (► **Fig. 2**). The dissection was started with appropriate traction. After cutting three-quarters of the lesion, proper traction was re-established by tightening the A-TRACT 4. The procedure was completed with optimal exposure of the submucosa (► **Video 1**). This technique allowed a curative R0 resection of the 9 × 8 cm lesion in 110 minutes.

We hypothesize that such a dedicated device could facilitate ESD, with the advantage of allowing traction to be adapted during the procedure to change the conformation of the fundus for optimal submucosal exposure. Furthermore, the combined use of additional endoscope looping in the antrum could be helpful in resection of fundic lesions.

Endoscopy_UCTN_Code_TTT_1AO_2AG

Competing interests

J. Jacques, M. Pioche, J. Rivory, and L.J. Masgnaux are cofounders of the ATRACT devices and company. E. De Cristofaro, J.C. Saurin, and B. Napoléon declare that they have no conflict of interest.

The authors

Elena De Cristofaro¹, Louis-Jean Masgnaux², Jean-Christophe Saurin², Jérémie Jacques³, Bertrand Napoléon⁴, Jérôme Rivory², Mathieu Pioche²

- 1 Gastroenterology Unit, Department of Systems Medicine, University of Rome Tor Vergata, Rome, Italy
- 2 Gastroenterology and Endoscopy Unit, Edouard Herriot Hospital, Hospices Civils de Lyon, Lyon, France
- 3 Gastroenterology and Endoscopy Unit, Dupuytren University Hospital, Limoges, France
- 4 Gastroenterology and Endoscopy Unit, Mermoz Hospital, Lyon, France

Corresponding author

Mathieu Pioche, MD, PhD
Endoscopy Unit, Department of Digestive Diseases, Pavillon L – Edouard Herriot Hospital, 69437 Lyon Cedex, France
Mathieu.pioche@chu-lyon.fr

References

- [1] Calavas L, Rivory J, Hervieu V et al. Macroscopically visible flat dysplasia in the fundus of 3 patients with familial adenomatous polyposis. *Gastrointest Endosc* 2016; 85: 679–680
- [2] Jang JY. Future development of endoscopic accessories for endoscopic submucosal dissection. *Clin Endosc* 2017; 450: 242–249
- [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; 54: E988–E989
- [4] Grimaldi J, Masnaux L, Wallenhorst T et al. Endoscopic submucosal dissection of a quasi-circumferential lesion of the ileo-cecal valve by using a novel adjustable traction device. *Endoscopy* 2023; 55 (Suppl. 01): 574–575
- [5] 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; 54: E1013–E1014

Bibliography

Endoscopy 2023; 55: E963–E964
DOI 10.1055/a-2135-8682
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, 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>