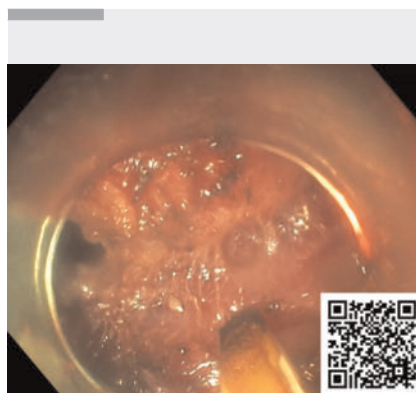


Use of adaptive traction for endoscopic submucosal dissection when using a bipolar knife for cardiological reasons

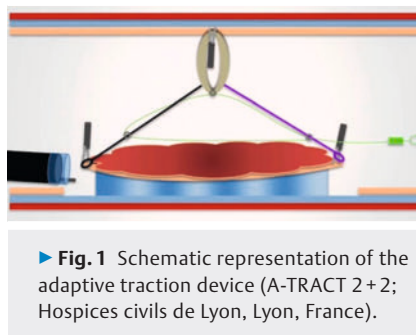


Endoscopic submucosal dissection (ESD) allows en bloc resection of gastrointestinal lesions, providing completeness of resection and facilitating accurate histological assessment. The knives currently in use for ESD are monopolar devices that can cause electromagnetic interference with cardiac implantable electronic devices (CIEDs). Speedboat (Speedboat-RS2; Creo Medical Ltd, Chepstow, UK) is a novel bipolar device designed for ESD, which utilizes advanced energy (radiofrequency and microwave) for dissection and coagulation. It is an all-in-one device, capable of executing submucosal injection, dissection, and coagulation, making the procedure faster without interfering with CIEDs [1]. We report the use of this device during ESD with an adaptive traction instrument (A-TRACT 2+2; Hospices civils de Lyon, Lyon, France), the benefits of which have been described previously (► **Video 1**) [2–5].

A 75-year-old patient was referred to our center with a gastric flat lesion, 30×35 mm in size (high grade dysplasia at previous biopsies). ESD was indicated and a bipolar knife was preferred because of the patient's pacemaker. After circumferential incision and trimming, we placed the A-TRACT 2+2 by fixing the two loops on lateral edges of the lesion and the rubber band to the opposite wall (► **Fig. 1**). The dissection was started with appropriate traction and good submucosal exposure. After cutting half of the lesion, the adaptive traction was tightened to re-establish proper traction. The Speedboat device allowed safe dissection, and effective and immediate treatment of intraprocedural bleeding, without requiring any cardiological precaution due to the presence of the pacemaker. In addition, the traction device facilitated the procedure by ensuring



► **Video 1** Use of the adaptive traction device combined with a bipolar knife for endoscopic submucosal dissection of a gastric lesion.



► **Fig. 1** Schematic representation of the adaptive traction device (A-TRACT 2+2; Hospices civils de Lyon, Lyon, France).

optimal submucosal exposure until the end of the procedure. The procedure was completed in 40 minutes without events adverse, and the histopathology revealed curative resection of high grade dysplasia. We suggest that the adaptive traction strategy could facilitate ESD, even when this new bipolar knife is selected in order to avoid complications in patients with CIEDs.

Endoscopy_UCTN_Code_TTT_1AO_2AG

Conflict of Interest

J. Jacques, M. Pioche, J. Rivory, and L.-J. Masgnaux are co-founders of the ATRACT devices and co. E. De Cristofaro and J. Grimaldi declare that they have no conflict of interest.

The authors

Elena De Cristofaro¹, Louis Jean Masgnaux², Jérôme Rivory², Jérémie Jacques³, Jean Grimaldi², 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

Corresponding author

Mathieu Pioche, MD, PhD

Endoscopy Unit, Department of Digestive Diseases, Pavillon L – Edouard Herriot Hospital, place d'Arsonval 5, 69437 Lyon Cedex, France
Mathieu.pioche@chu-lyon.fr

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Endoscopy 2024; 56: E173–E174

DOI 10.1055/a-2253-8963

ISSN 0013-726X

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