Endoscopic intermuscular dissection of an undetermined submucosal lesion with adaptive traction to obtain a free vertical margin



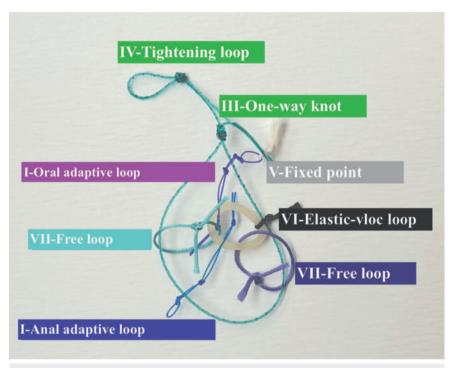


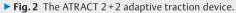
► Fig. 1 Rectal lesion suspected of being a neuroendocrine tumor.

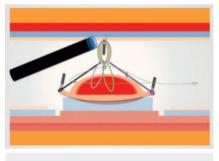


Video 1 Intermuscular dissection of an undetermined submucosal lesion with the adaptive traction strategy.

Endoscopic submucosal dissection (ESD) is a well-established technique for resecting superficial gastrointestinal neoplasms [1]. However, achieving clear vertical margins for submucosal lesions, such as neuroendocrine tumors, can be intricate [2]. The endoscopic intermuscular dissection (EID) method, which involves dissection between the two muscular layers of the rectum, was first developed to treat superficial tumors with vertical extension (T1) [3]. We think this technique could be useful to obtain free vertical margins for submucosal tumors. We detail the case of a 46-year-old woman who was referred to our center for a







► **Fig.3** Placement of the ATRACT2+2 device.



Fig.4 Activation of the device to increase traction and improve intermuscular exposure.

1.5-cm submucosal lesion in the rectum, extending to the anal margin, suggestive of a neuroendocrine tumor (**> Fig. 1**). EID was chosen as the preferred approach given the tumor's location and potential depth (**> Video 1**).

For effective visualization during EID, the A-TRACT-2+2 adaptive traction device was utilized [4,5] (**> Fig.2**). The lesion

was marked, followed by a circumferential incision. The A-TRACT-2+2 was then positioned (**> Fig.3**) to provide consistent exposure of the intermuscular space. Its ability to adjust traction (**> Fig.4**) was beneficial in maintaining a clear view of the dissection plane, reducing the risk of unintended deeper tissue injury.

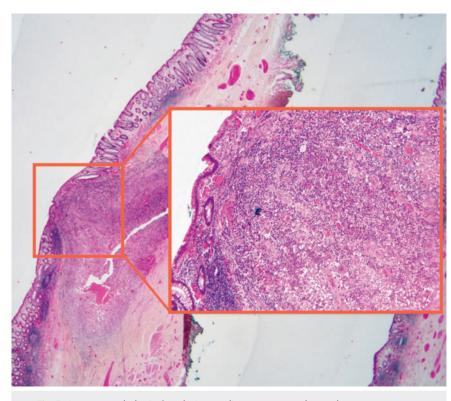


Fig. 5 Anatomopathological analysis revealing a suppurated granuloma.

The lesion was resected en bloc. To our surprise, histopathology revealed the specimen was a suppurative granuloma, resected with clear resection margins (> Fig. 5).

In summary, EID offers a new approach for resecting submucosal lesions suspected of neoplasia. The technique aims to ensure clear resection margins while minimizing potential complications. Proper training and familiarization with the technique and device are essential for optimal outcomes.

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Conflict of Interest

Louis-Jean Masgnaux, Jean Grimaldi, Timothée Wallenhorst, Jérôme Rivory, Jérémie Jacques and Mathieu Pioche are shareholders of the company ATRACT device & Co. Valerie Hervieu does not have any conflict of interest to declare.

The authors

Louis-Jean Masgnaux¹, Jean Grimaldi¹, Valerie Hervieu², Timothée Wallenhorst³, Jérôme Rivory¹, Jérémie Jacques⁴, Mathieu Pioche¹

- 1 Gastroenterology and Endoscopy Unit, Edouard Herriot Hospital, Hospices Civils de Lyon, Lyon, France
- 2 Histopathology Unit, East Group Hospital, Lyon, France
- 3 Gastroenterology and Endoscopy Unit, Pontchaillou University Hospital, Rennes, France
- 4 Gastroenterology and Endoscopy Unit, Dupuytren University Hospital, Limoges, France

Corresponding author

Mathieu Pioche, MD

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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