

## Endoscopic submucosal dissection of Barrett's neoplasia using adaptive multipolar traction combined with line: report of two cases

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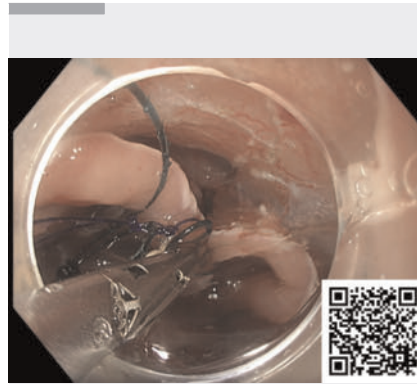
Endoscopic submucosal dissection (ESD) is the gold standard for the resection of visible lesions of >15 mm in Barrett's neoplasia [1]. Recently, the "tunnel+traction with a line" strategy has shown encouraging results in terms of safety and efficacy [2, 3]. However, the traction with a line technique has the disadvantage of exerting a traction force that is quasi-tangential to the plane of the submucosa. We believed that combining this with the ATRACT 2+2 adaptive multitraction device (► **Fig. 1**) [4, 5] would enable a 90° traction force to be exerted, which could also be increased during the procedure.

We report here on two patients referred for ESD resection of Barrett esophagus (BE), using the adaptive multipolar traction combined with a line (► **Video 1**).

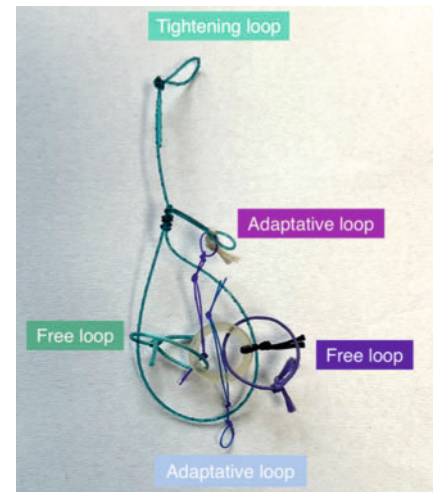
The first patient presented with a Barrett's neoplasia within a pseudodiverticular hiatal hernia. After a circumferential incision had been made at the distal pole, two tunnels (anterior and posterior) were made. The ATRACT 2+2 device attached to a line was then placed with three points on the proximal edge and one point on the distal edge, so as to obtain an optimum 90° angle of traction. The line attached to the ATRACT 2+2 device prevents the lesion from tilting towards the stomach during the procedure. After two-thirds of the dissection had been completed, the ATRACT 2+2 device was tightened to increase the traction (► **Fig. 2**) and facilitate completion of the procedure (► **Fig. 3**).

The second patient underwent a near-circumferential BE dissection, using a similar strategy. The two procedures were carried out by two different operators.

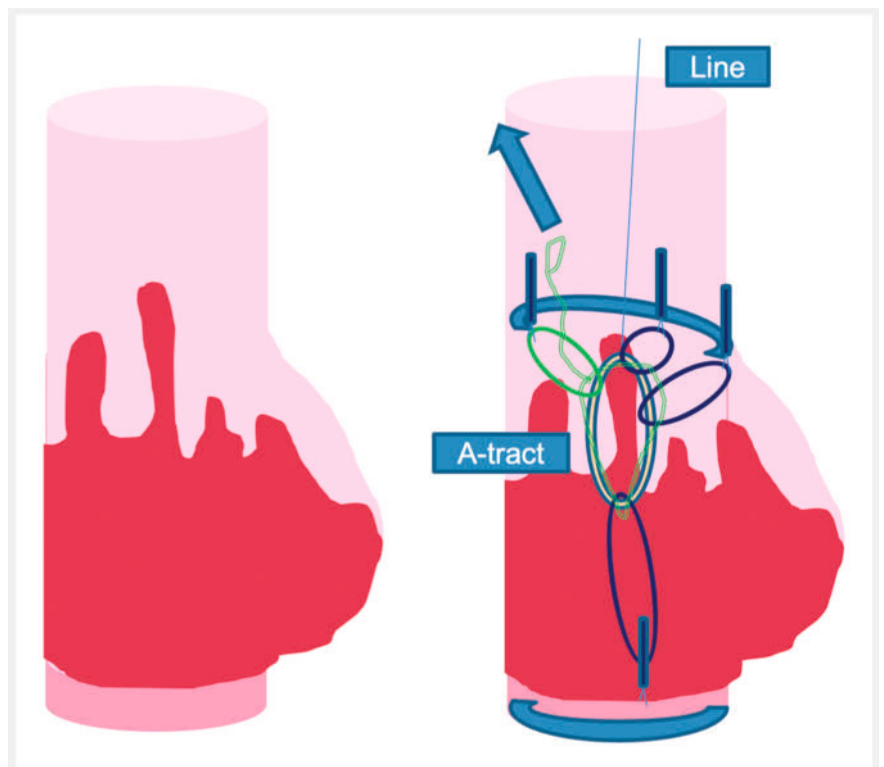
The dissections enabled en bloc resection of both lesions, the first corresponding to an intramucosal adenocarcinoma and the second to a T1b sm2 adenocarcinoma. There were no complications, in particular no perforations, during the procedures.



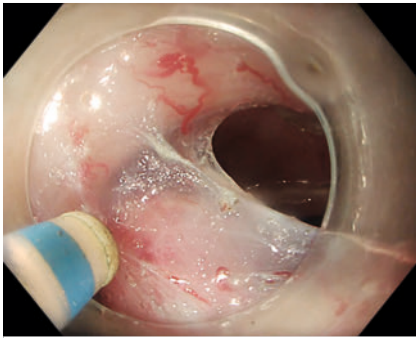
► **Video 1** Endoscopic submucosal dissection of Barrett's neoplasia using adaptive multipolar traction combined with a line.



► **Fig. 1** Photograph of the ATRACT 2+2 device.



► **Fig. 2** Schematic representation of the use of multipolar adaptive traction combined with a line.



► **Fig. 3** Endoscopic view showing the optimal 90° traction angle being maintained at the end of the endoscopic submucosal dissection procedure when the ATRACT 2+2 device is used with a line.

Further investigations are needed to evaluate the efficacy of the multipolar adaptive traction device combined with a clip-and-line traction strategy for the resection of esophageal lesions, but the technique seems promising.

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### Conflict of Interest

J. Grimaldi, L.-J. Masgnaux, T. Wallenhorst, J. Rivory, J. Jacques, and M. Pioche are founders of the company ATRACT Device and Co. A. Lupu declares that he has no competing interest.

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