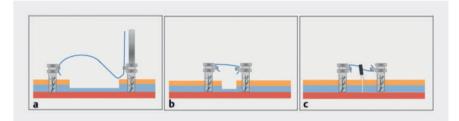
Large defect closure using a helix tacking system and endoclips after endoscopic submucosal dissection of two adjacent colonic lesions





▶ Fig. 1 Schematic representation of the combined X-Tack and endoclips strategy illustrating: a placement of tacks in healthy tissue adjacent to the tissue defect; b tightening of the coaxial suture; c placement of through-the-scope clips to fully close the defect.

Endoscopic resection of gastrointestinal neoplasia, especially endoscopic submucosal dissection (ESD), is increasingly common, but poses risks of complications including bleeding and perforation, which can be prevented by closing the defect. Conventional through-the-scope (TTS) clips are typically effective for successful closure of linear defects up to 2 cm in diameter [1]. For larger defects over-the scope (OTS) clips can be used, but incorrect placement complicates the use of other devices. The OverStitch OTS suturing system can achieve full-thickness closure [2]. Nevertheless, it can be used only with a gastroscope, which must be removed to assemble the device. The X-Tack Endoscopic HeliX Tacking System is a novel TTS device designed for endoscopic approximation of soft tissue through a standard gastroscope or colonoscope [3]. Several case reports have demonstrated its efficacy in closing large mucosal defects [4,5]. Herein, we present the combined use of the X-Tack with TTS clips to close a large defect following ESD (► Video 1).

A 69-year-old man with ulcerative colitis was referred to our center for the resection of two adjacent flat lesions in the sigmoid colon. ESD of each lesion was performed, with use of an adaptive traction system (ATRACT-2) to better expose the submucosa during the dissection. Given the large defect that resulted from the resection of these two adjacent lesions, closure was performed using the X-Tack and TTS clips in combination: four tacks were placed in a "Z" pattern and two TTS clips were placed at the edges to ensure complete closure (> Fig. 1). No adverse events were reported.

We can infer that the combined use of TTS clips and the X-Tack can be beneficial for achieving complete closure of large defects after endoscopic resection. This system is relatively straightforward to use, eliminating the need for endoscope withdrawal for device loading, and can be employed when single TTS clips prove inadequate.

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▶ Video 1 Combined use of the X-Tack and through-the-scope clips to close a large defect following endoscopic submucosal dissection.

Conflict of Interest

J. Rivory, J. Jacques, and M. Pioche are cofounders of ATRACT Devices and Co. E. De Cristofaro, P. Lafeuille, R. D'Almeida, and A. Lupu declare that they have no conflict of interest.

The authors

Elena De Cristofaro¹, Pierre Lafeuille², Jérôme Rivory², Jeremie Jacques³, Rosario D'Almeida², Alexandru Lupu², Mathieu Pioche²

- Gastroenterology, University of Rome Tor Vergata Faculty of Medicine and Surgery, Rome, Italy
- 2 Gastroenterology and Endoscopy Unit, Hôpital Edouard Herriot, Lyon, France
- 3 Gastroenterology and Endoscopy Unit, CHU Dupuytren, Limoges, France

Corresponding author

Mathieu Pioche, MD, PhD

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

References

- Albéniz E, Álvarez MA, Espinós JC et al. Clip closure after resection of large colorectal lesions with substantial risk of bleeding. Gastroenterology 2019; 157: 1213–1221
- [2] Kantsevoy SV, Bitner M, Mitrakov AA et al. Endoscopic suturing closure of large mucosal defects after endoscopic submucosal dissection is technically feasible, fast, and eliminates the need for hospitalization (with videos). Gastrointest Endosc 2014; 79: 503– 507
- [3] Hernandez A, Marya NB, Sawas T et al. Gastrointestinal defect closure using a novel through-the-scope helix tack and suture device compared to endoscopic clips in a sur-

- vival porcine model (with video). Endosc Int Open 2021; 9: E572–577
- [4] Zhang LY, Bejjani M, Ghandour B et al. Endoscopic through-the-scope suturing. VideoGIE 2022; 7: 46–51. doi:10.1016/j. vqie.2021.08.006
- [5] Mohapatra S, Fukami N. Follow-up outcomes of mucosal defect closures after endoscopic resection using a helix tacking system and endoclips. VideoGIE 2022; 7: 268– 272. doi:10.1016/j.vgie.2022.03.002

Bibliography

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