Dual-functional use of thread delivery hood for traction-assisted rectal endoscopic submucosal dissection and defect closure

Endoscopic closure of an artificial defect after colorectal endoscopic submucosal dissection (ESD) is useful in preventing adverse events [1], with several closure methods having been developed [2, 3]. While the use of traction facilitates ESD [4], no devices currently exist that can facilitate both traction and closure. An elastic thread delivery hood (Dual Traction Hood; Adachi Co., Ltd., Osaka, Japan and Nomura Medical Device Co., Ltd., Nagano, Japan) that has dual threads with multi-rings inside the cap has been developed for traction use (▶ Fig. 1) [5].

We describe a case in which this device was used successfully for traction as well as closure in a rectal ESD (▶ Video 1).

A 65-year-old man presented with a rectal neuroendocrine tumor (▶ Fig. 2). Rectal ESD was performed using a Dual Traction Hood as follows. The first thread was used for the traction. After a submucosal pocket was created by a whole circumferential incision, the thread was released from the hood using a hemoclip (HX-610-090; Olympus, Tokyo, Japan). Using hemoclips, the thread was then fixed to the edge of the pocket and opposite normal mucosa (▶ Fig. 3). Traction-assisted ESD was completed successfully, leaving an artificial defect 30 mm wide (▶ Fig. 4).
The second thread was used to close the defect post-ESD. One ring of the thread was anchored to the defect edge using a hemoclip, and another ring was anchored to the opposite edge. The procedure was repeated in a zig-zag pattern while the thread was attached to both edges. Consequently, the defect was approximated by these hemoclips. The thread was then anchored to both edges in a zig-zag pattern. Complete closure was achieved using additional hemoclips.

**Competing interests**

The authors declare that they have no conflict of interest.

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**Bibliography**

Endoscopy
DOI 10.1055/a-1381-6363
ISSN 0013-726X
published online 2021
© 2021, Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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▶ Fig. 5 a–c One ring of the thread was anchored to the defect edge using a hemoclip, and another ring was anchored to the opposite edge. The defect was approximated by these hemoclips. The thread was then anchored to both edges in a zig-zag pattern. d Complete closure was achieved using additional hemoclips.