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 followed 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 the normal mucosa using hemoclips (▶ 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. Complete closure was achieved using additional hemoclips.

Competing interests

The authors declare that they have no conflict of interest.

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