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 (▶ Fig. 3). Traction-assisted ESD was completed successfully, leaving an artificial defect 30 mm wide (▶ Fig. 4).

Video 1 A Dual Traction Hood was used successfully for traction as well as closure in a rectal endoscopic submucosal dissection.

Fig. 1 Dual Traction Hood, which has dual threads with multi-rings inside the cap.

Fig. 2 Rectal endoscopic submucosal dissection was performed on a neuroendocrine tumor 8 mm in diameter.

Fig. 3 Traction facilitated rectal endoscopic submucosal dissection after the thread was fixed to the edge of the pocket and opposite the normal mucosa using hemoclips.

Fig. 4 An artificial defect 30 mm in diameter after endoscopic submucosal dissection.
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 with additional hemoclips.

Kobayashi Nobuya et al. Dual-functional use of... Endoscopy 2022; 54: E108–E109 | © 2021. Thieme. All rights reserved.