Rapid upfront stalk transection for endoscopic resection of pedunculated colorectal lesions using a grasping-type scissor forceps

The basic paradigm in endoscopic resection of pedunculated colorectal lesions includes hot snare polypectomy (HSP) with mechanical bleeding prevention techniques [1]. However, when larger, floppy polyps are present and/or the lesions are located in angulations, full endoscopic control of resection may not be guaranteed. Some groups have explored endoscopic submucosal dissection (ESD) for this purpose, and this is potentially of special relevance in cases of short- and wide-stalked lesions [2,3]. By contrast, a more simplified and less time-consuming approach, relying on scissor-type knives, has been reported as an endoscopic bail-out after conventional technique failure [4].

This E-Video presents the first clinical report of upfront stalk transection of a colorectal lesion using a grasping-type scissor forceps. The procedure on this sigmoid lesion, estimated at 18 mm in size, was largely opportunistic, since rectal ESD using the same device had been indicated in the first place in this 83-year-old male patient. After adequate endoscopic visualization, the lesion is best approached with its head orally orientated and the stalk stretched, as was spontaneously the case here (Fig. 1a). Next, this easy-to-implement technique involves submucosal injection of about 3 mL indigocarmine–saline solution (Fig. 1b). Unlike in conventional HSP technique, this is followed by immediate mucosal grasping and electrosurgical cutting, using a rotatable, serrated grasping forceps with conductive inner and insulated outer blades (Clutch Cutter, 3.5 mm blade length; Fuji, Düsseldorf, Germany. Electrocautery, VIO200D; Erbe Elektromedizin, Tübingen, Germany. Electrocautery settings for cutting: endocut Q: effect 1, duration 3, interval 1; for hemostasis: soft coagulation, effect 5, 100 W) (Fig. 1c; Video 1). This is followed by extension of mucosal cutting by the “paper cutting technique,” by which most of the submucosal stalk tissue is likewise addressed, until full stalk resection is accomplished, with hemostasis provided by soft coagulation as needed (Fig. 1d, e). In addition, hemoclips are placed at the resection site (Fig. 1f) to prevent delayed postresection bleeding. In our case, in vivo and ex vivo assessment indicated en bloc resection and histopathology confirmed wide R0 status.

Most pedunculated colorectal lesions are amenable to conventional techniques, but scissor-type knife-based stalk transection is an alternative approach for lesions where HSP is less applicable.
Rapid stalk transection for endoscopic resection of pedunculated colorectal lesions with a grasping-type scissor forceps (time from first to final cut: 198 s).

Corresponding author

Vincent Zimmer, MD
Department of Medicine, Marienhausklinik St. Josef Kohlhof, Klinikweg 1–5, 66539 Neunkirchen, Germany
Fax: +49-6821-3632624
vincent.zimmer@gmx.de

The authors declare that they have no conflict of interest.

References


