A 60-year-old woman with no relevant medical history underwent endoscopic mucosal resection (EMR) of a 7-cm 0-Ic lesion in the distal sigmoid colon. A solution of saline, indigo carmine, and 1/100 000 adrenaline was injected into the submucosa, and piecemeal snare resection was performed (Fig. 1). Persistent oozing occurred during EMR and was partially controlled by subsequent submucosal injections and resections. After complete resection, a 4 × 4 cm mucosal defect over a colonic fold could be seen, with diffuse oozing but no visible vessels.

The defect was closed using hemostatic clips, but diffuse oozing persisted between the clips (Fig. 2). Attempts to place a detachable snare (MAJ-254; Olympus, Tokyo, Japan) underneath the clips, in order to perform the tulip-bundle technique, were unsuccessful because of the large diameter of the defect with clips and its position over the colonic fold (Video 1). Therefore, a double-channel colonoscope (GIF 2T160I; Olympus) was used, and a grasping forceps was used to retract the defect while the detachable snare was positioned underneath the clips, in order to perform the tulip-bundle technique previously described (Video 2). Despite initial hemostasis, the patient presented with hematochezia 4 hours later. Recurrent oozing from the proximal border of the mucosal defect, which had not been entrapped by the detachable snare, was observed and could not be...
treated with further clipping. With the endoscope in the retroflexed position, the tulip-bundle technique was attempted but was, again, unsuccessful. Using the double-channel colonoscope in the retroflexed position, and the same grasp-to-retract technique, definitive hemostasis was achieved (Video 3).

Histology revealed a tubulovillous adenoma with high grade dysplasia.

Detachable snares have various indications that include assisting polypectomy, resecting submucosal tumors [1], and performing full-thickness resections [2]. The tulip-bundle technique involves the snare entrapping the clips to achieve hemostasis [3] or to close perforations [4]. This grasp-to-retract modification, which has been described previously for other techniques [5], can assist the tulip-bundle technique in difficult procedures.

References


Corresponding author

Rolando Taveira Pinho, MD
Serviço de Gastroenterologia
Centro Hospitalar de Vila Nova de Gaia
Rua Conceição Fernandes
Vila Nova de Gaia 4434-502
Portugal
Fax: +351-227-868369
rolandopinho@gmail.com