Polypectomy of a giant sessile polyp in the hepatic flexure using scissor-type forceps and a gravity traction method to create a pseudo-peduncle

A 60-year-old man with abdominal discomfort was referred to our hospital. Abdominal computed tomography (CT) revealed a tumor in the hepatic flexure and colonoscopy showed a giant protruding polyp (► **Fig. 1**). The biopsies were interpreted as adenoma with areas of high grade dysplasia.

Therapeutic endoscopy was performed using scissor-type forceps (Sumitomo Bakelite, Japan) and a RetroView colonoscope (Pentax, Japan) with a distal attachment cap (Olympus, Japan) (► **Video 1**).

First, we took advantage of the polyp's own weight to exert traction in order to form a pseudo-peduncle (► **Fig. 2**). We began cutting the mucosal layer to expose the submucosa. Then, countertraction with a soft straight distal cap facilitated exposure of the dissection plane between the lesion and the muscle layer (► **Fig. 3**). We coagulated the larger vessels in advance. At one point, some muscle fibers were identified by means of the muscle-retraction sign [1] (► **Fig. 4**). The resection was completed within 70 minutes without adverse events. The endoscopic resection defect was closed with endoscopic clips (Boston Scientific, United States). Pathology examination showed an adenoma 48×35 mm in size with low grade dysplasia. Resection margins were clean and included muscle fibers of the main muscle layer (► **Fig. 5**). In the 24-month follow-up no residual adenomatous tissue was observed.

Unfortunately, most cases of endoscopic resection of complex polyps are limited to a piecemeal technique because of the types of polypectomy snare used [2]. However, we now have fast, easy, and safe endoscopic submucosal dissection (ESD) devices [3], that can help in performing en bloc resection.

This case report, similarly to previous ones [4], demonstrates that the scissor-style knife can safely speed en bloc re-

► **Fig. 1** a Abdominal computed tomography revealed a tumor (arrow) in the hepatic flexure, without lymphadenopathy or infiltration of the pericolic fat. b Diagnostic colonoscopy revealed a giant protruding polyp, type 0-Is in the Paris classification.

► **Fig. 2** Creation of a pseudo-peduncle, taking advantage of gravity (gravity traction method).

section in a western setting. Further studies are needed to assess the efficacy and safety of this device when used in the resection of protruding polyps by nonexpert ESD endoscopists.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

None

► **Fig. 3** Use of the distal cap facilitates exposure of the dissection plane between the lesion and the muscular layer.

► **Fig. 4** The muscle-retraction sign was seen.

► **Fig. 5 a** The resected specimen was 48 × 35 mm in size. **b** Histological examination revealed a tubular adenoma with low grade dysplasia. The resection margins were clean and included muscle fibers of the main muscle layer.

► **Video 1** Endoscopic resection of a giant protruding polyp in the hepatic flexure, using scissor-type forceps.

The authors

Felipe Ramos-Zabala^{1,2}, Alejandra Alzina-Pérez^{1,2}, Jorge Vázquez-Guerrero^{1,2}, Marian García-Mayor¹, Ana Domínguez-Pino³, Irene Rodríguez-Pérez⁴, Luis Moreno-Almazán^{1,2}

- 1 Department of Gastroenterology, HM Montepríncipe University Hospital, Boadilla del Monte, Madrid, Spain
- 2 Department of Clinical Sciences, School of Medicine, University of CEU San Pablo, Boadilla del Monte, Madrid, Spain
- 3 Department of Anesthesiology and Resuscitation, HM Montepríncipe University Hospital, Boadilla del Monte, Madrid, Spain
- 4 Department of Pathological Anatomy, HM Puerta del Sur University Hospital, Móstoles, Madrid, Spain

Corresponding author

Felipe Ramos-Zabala, MD, PhD

Department of Gastroenterology,
HM Montepríncipe University Hospital,
Av. de Montepríncipe, 25, 28660 Boadilla
del Monte, Madrid, Spain
Fax: +34-91-7089900
framoshdiaz@gmail.com

References

- [1] Toyonaga T, Tanaka S, Man-I M et al. Clinical significance of the muscle-retracting sign during colorectal endoscopic submucosal dissection. *Endosc Int Open* 2015; 03: E246–E251
- [2] Angarita FA, Feinberg AE, Feinberg SM et al. Management of complex polyps of the colon and rectum. *Int J Colorectal Dis* 2018; 33: 115–129
- [3] Homma K, Otaki Y, Sugawara M et al. Efficacy of novel Sb Knife Jr examined in a multi-center study on colorectal endoscopic submucosal dissection. *Dig Endosc* 2012; 24: 117–120
- [4] Ge PS, Thompson CC, Aihara H. Endoscopic submucosal dissection of a large cecal polyp using a scissor-type knife: implications for training in ESD. *VideoGIE* 2018; 3: 313–315

Bibliography

DOI <https://doi.org/10.1055/a-0978-4839>
Published online: 9.8.2019
Endoscopy 2020; 52: E15–E16
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X