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

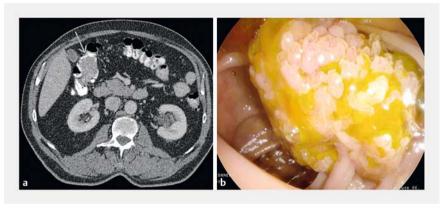
A 60-year-old man with abdominal discomfort was referred to our hospital. Abdominal computed tomography (CT) revealed a tumor in the hepatic flexure and colonoscopy showed a giant protruding polyp (> Fig. 1). The biopsies were interpreted as adenoma with areas of high grade dysplasia.

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.

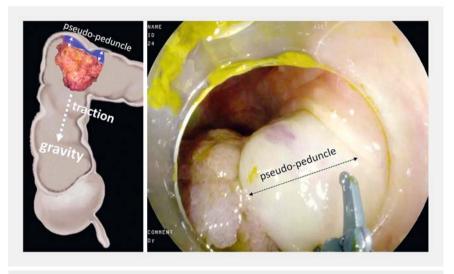
Unfortunately, most cases of endoscopic resection of complex polyps are limited to a piecemeal technique because of the types of polypectomy snare used [2].

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

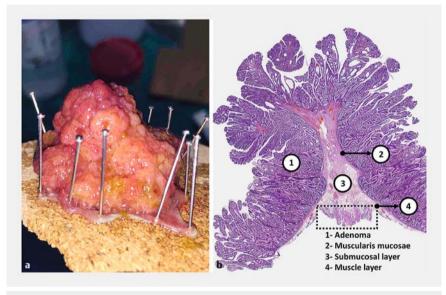
None



➤ 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.

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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 multicenter 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

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