Endoscopic submucosal dissection of a large cecal polyp involving the ileocecal valve and the terminal ileum

An 83-year-old man with no significant medical history was referred for endoscopic submucosal dissection (ESD) of a large cecal polyp involving the ileocecal valve and the terminal ileum (▶Fig. 1a). The strategy of dissection included the creation of a flap at the ileal side, clip and band countertraction [1], and creation of a pocket [2] (▶Video 1). The lesion was lifted with a mixture of hydroxyethyl starch and indigo carmine. An initial incision was performed inside the terminal ileum with a DualKnife 1.5 mm (Olympus, Japan) (▶Fig. 1b). The presence of fat in this area slowed down the dissection speed and obscured visibility. Progressively a flap was created underneath the lesion. Countertraction was applied using clips and an attached rubber band (▶Fig. 1c), providing further access to the dissection plane. Step by step, a tun-

▶Fig. 1 Endoscopic views showing: a laterally spreading tumor involving the ileocecal valve and the terminal ileum; b dissection being performed inside the terminal ileum; c application of clip and band countertraction; d creation of a large pocket beneath the mucosa; e the mucosal defect at the end of the procedure.

▶Video 1 Video demonstration of the resection of an ileocecal polyp using a variety of endoscopic submucosal dissection techniques.
nel was created along the axis of the polyp. The tunnel was then enlarged on both sides to create a pocket (Fig. 1d). After half of the lesion had been dissected, additional counteraction was provided in a similar fashion to modify the axis of dissection. In addition, dissection with an IT knife (Olympus) under saline was performed in areas with suboptimal lifting from the muscularis propria [3]. The lesion was removed en bloc, after detachment with a loop cutter (Fig. 1e). The procedure lasted 4 hours and was uneventful. Pathology revealed a 6-cm tubulovillous adenoma with low grade dysplasia, and confirmed an R0 resection. In conclusion, we demonstrate the successful resection of a large ileocecal polyp with terminal ileal involvement. In order to overcome the significant challenges related to the location and ileal extension, various techniques were applied, including the clip and band traction method, pocket creation method, dissection under saline, and the use of specialized endosurgical knives. Although technically challenging, advanced ESD techniques may spare the need for more invasive surgery.

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Competing interests

The authors declare that they have no conflict of interest.

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References


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