Resection of a large ileal lipoma exhibiting ball-valve prolapse into the cecum with a “grasp-to-retract, ligate, unroof, and let-go” technique

A 51-year-old woman was referred to our department for endoscopic resection of a symptomatic ileal lipoma, which had been detected during a previous colonoscopy performed to investigate a 6-month history of intermittent episodes of abdominal pain and diarrhea. Colonoscopy revealed a large, yellowish, pseudo-pedunculated ileal lesion with normal overlying mucosa that was prolapsed through the ileocecal valve into the cecum (Fig. 1).

Because of retraction of the lipoma into the terminal ileum with manipulation (Fig. 2, Video 1), a two-channel therapeutic colonoscope (CF-2T160I; Olympus America, Center Valley, Pennsylvania, USA) was used. The lipoma was pulled toward the ascending colon with a grasping forceps while an endoloop (MAJ-254; Olympus), previously placed over the forceps, was positioned and tightened around its base (Fig. 3). Endoloop ligation resulted in congestion of the mucosa and the extrusion of fat – the “naked fat” sign (Fig. 4). Subsequently, unroofing was accomplished by snare resection of the top of the tumor (Fig. 5, Video 1). Histopathologic examination of which confirmed the clinical diagnosis. At follow-up colonoscopy 2 months later, the patient was asymptomatic, and a scar with no residual lesion was found (Fig. 6).

Lipomas account for 21.4% of all benign small-bowel tumors and are located...
mainly in the terminal ileum [1]. Larger lipomas may result in abdominal pain, constipation, and diarrhea and require resection to avoid complications [1–3]. Although surgical resection has been used traditionally, the endoscopic removal of lipomas is increasingly being reported [1,3]. Unlike endoscopic snare cautery of large subepithelial tumors, endoloop has a negligible risk of bowel perforation because it involves the slow mechanical transection of large pedunculated lipomas [2–4]. Its main pitfalls are the lack of a specimen for examination and the eventual need for additional ligation procedures to complete resection of the lipoma [2,4,5]. Nevertheless, the unroofing technique allows spontaneous enucleation of the lesion and tissue sampling [5]. This “grasp-to-retract, ligate, unroof, and let-go” technique constitutes a safe and successful approach to the management of prolapsing ileal lipomas.

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Competing interests: None