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

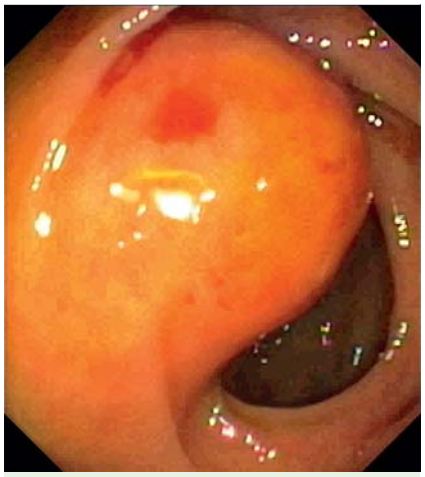

Fig. 1 Endoscopic image of an ileal submucosal lesion with a normal overlying mucosa. The lesion has prolapsed through the ileocecal valve into the cecum.

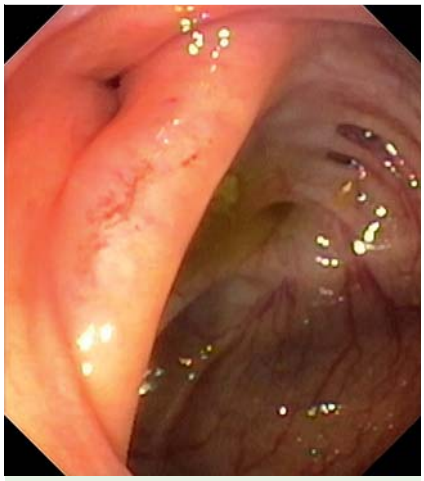

Fig. 2 Endoscopic image showing retraction of the lipoma into the terminal ileum.

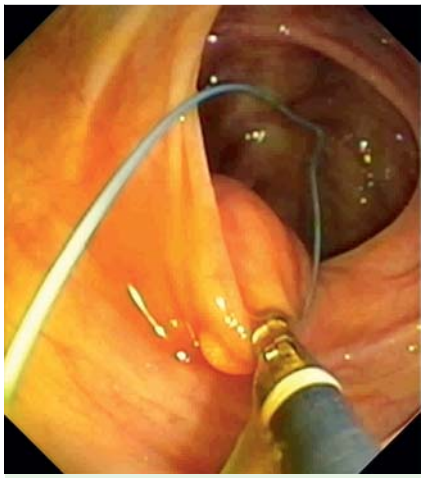

Fig. 3 Endoscopic image depicting the use of a grasping forceps to pull the lipoma toward the ascending colon, allowing placement of the endoloop.

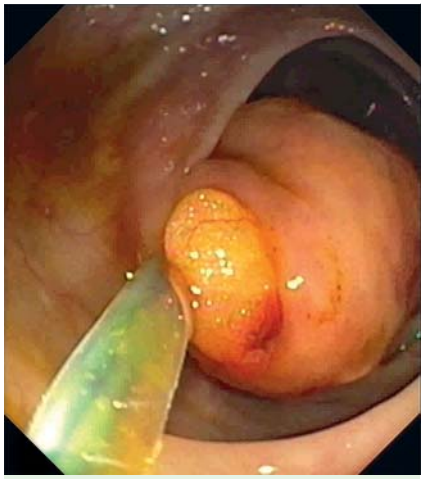

Fig. 4 Endoscopic image revealing the extrusion of fat – the "naked fat" sign – after endoloop ligation.

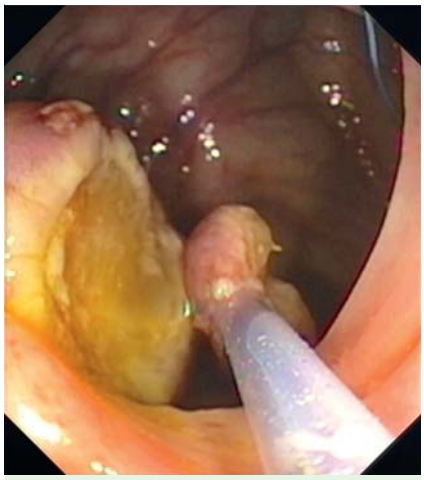

Fig. 5 Endoscopic image showing unroofing after snare resection of the top of the tumor for tissue sampling.

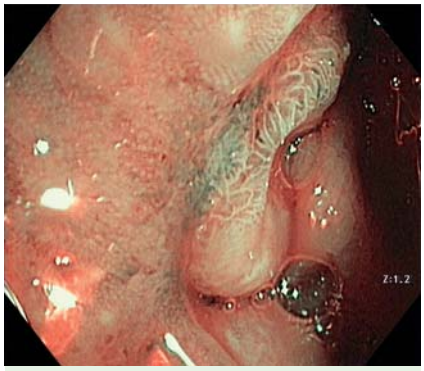

Fig. 6 Narrow-band imaging and electronic zoom to 1.2× magnification reveal a scar with no residual lesion.

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**, **Video 1**). Endoloop ligation resulted in congestion of the mucosa and the extrusion of fat – the "naked fat" sign (**Fig. 4**, **Video 1**). 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

Video 1

Management of a large ileal lipoma by applying the "grasp-to-retract, ligate, unroof, and let-go" technique with a double-channel therapeutic colonoscope.

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.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests: None

Ana Ponte[1], Rolando Pinho[1], Sílvio Vale[2], Carlos Fernandes[1], Iolanda Ribeiro[1], Joana Silva[1], João Carvalho[1]

[1] Department of Gastroenterology, Centro Hospitalar Vila Nova de Gaia, Espinho, Portugal

[2] Department of General Surgery, Centro Hospitalar Vila Nova de Gaia, Espinho, Portugal

References

1 *Yoshimura H*, *Murata K*, *Takase K* et al. A case of lipoma of the terminal ileum treated by endoscopic removal. Gastrointest Endosc 1997; 46: 461–463

2 *Raju GS*, *Gomez G*. Endoloop ligation of a large colonic lipoma: a novel technique. Gastrointest Endosc 2005; 62: 988–990

3 *Ivekovic H*, *Rustemovic N*, *Brkic T* et al. Endoscopic ligation ("Loop-And-Let-Go") is effective treatment for large colonic lipomas: a prospective validation study. BMC Gastroenterol 2014; 14: 122

4 *Veloso R*, *Pinho R*, *Rodrigues A* et al. Endoloop ligation ("loop-and-let-go") of a large ileal lipoma by balloon-assisted enteroscopy. Endoscopy UCTN 2012; 44: E176

5 *Binmoeller KF*, *Shah JN*, *Bhat YM* et al. Retract-ligate-unroof-biopsy: a novel approach to the diagnosis and therapy of large nonpedunculated stromal tumors (with video). Gastrointest Endosc 2013; 77: 803–808

Bibliography

DOI http://dx.doi.org/10.1055/s-0034-1391824

Endoscopy 2015; 47: E215–E216

ISSN 0013-726X

Corresponding author

Ana Ponte, MD

Department of Gastroenterology

Centro Hospitaler de Vila Nova de Gaia

Rua Conceição Fernandes

Vila Nova de Gaia 4434-502

Portugal

Fax: 351-22-786-8369

ana.ilponte@gmail.com