



Polyp Endotherapy for Multiple Jejunal Lipomas Presenting as Small Bowel Intussusception: “Loop and Let Go Technique”

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Abstract

A 46-year-old woman presented with abdominal pain, vomiting, and intermittent constipation for the last 2 days. She had similar history of recurrent symptoms for the last 6 months. Abdominal examination showed mild central abdominal tenderness and generalized abdominal fullness and no palpable mass. A diagnosis of intestinal obstruction was considered. Nasogastric aspiration was performed with intravenous (IV) antibiotics and IV fluids. Computed tomography (CT) scan of the abdomen showed “bowel in bowel” or “target” sign appearance of jejunum with a submucosal hypodense lesion (suggestive of lipoma) acting as the lead point. There were two more submucosal lipomas of sizes approximately 3 cm each in the distal jejunal loops. A diagnosis of jejunal lipomas causing small bowel intussusception was made. The patient improved with conservative management. Exploratory laparotomy was planned with an intent to resect the small bowel. The patient did not provide consent for the same and so the option of enteroscopy-guided polyp endotherapy was offered to the patient. An antegrade single balloon enteroscopy was done (SIF-Q180, Olympus Medical Systems, United States). Three submucosal lesions with smooth overlying mucosa were noted in the mid and distal jejunum consistent with lipomas. The base of the lesions was ligated tightly using endoloop to make them ischemic and detach. Notable changes in color and mucosal appearance were noted after the application of endoloop. Since all the lipomas detected on cross-sectional radiologic imaging have been tackled via antegrade route, a retrograde enteroscopy was not attempted further. After 2 days, the patient was discharged in stable condition. Follow-up cross-sectional imaging at 3 months showed no residual lipomas, and she remained symptom-free at the end of 6 months.

Keywords

- ▶ endoloop
- ▶ jejunal lipomas
- ▶ single balloon enteroscopy
- ▶ small bowel intussusception

Case Details

A 46-year-old woman presented with abdominal pain, vomiting, and intermittent constipation for the last 2 days. She had similar history of recurrent symptoms for the last 6 months. Abdominal examination showed mild central

abdominal tenderness and generalized abdominal fullness and no palpable mass. A diagnosis of intestinal obstruction was considered. Nasogastric aspiration was performed with intravenous (IV) antibiotics and IV fluids. Computed tomography (CT) scan of the abdomen showed “bowel in bowel” or “target” sign appearance of jejunum with a submucosal

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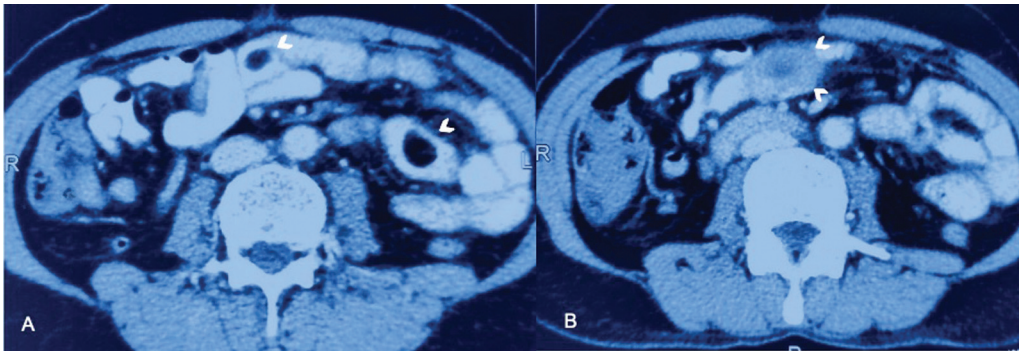


Fig. 1 Contrast-enhanced CT (CECT) scan of the abdomen showing (A) multiple hypodense intraluminal lesions in the jejunum (*arrowheads*) and (B) bowel-in-bowel (target sign) appearance in the jejunum with lipoma as lead point (*arrowheads*).

hypodense lesion (suggestive of lipoma) acting as the lead point. There were two more submucosal lipomas of sizes approximately 3 cm each in the distal jejunal loops (**►Fig. 1**). A diagnosis of jejunal lipomas causing small bowel intussusception was made. Patient improved with conservative management. Exploratory laparotomy was planned with an intent to resect the small bowel. The patient did not provide consent for the same and so the option of enteroscopy-guided polyp endotherapy was offered to the patient. An antegrade single balloon enteroscopy was done (SIF-Q180, Olympus Medical Systems, United States). Three submucosal lesions with smooth overlying mucosa were noted in the mid and distal jejunum consistent with lipomas (**►Fig. 2**). The base of the lesions was ligated tightly using endoloop to make them ischemic and detach. Notable changes in color and mucosal appearance were noted after application of endoloop (**►Video 1**). Since all the lipomas detected on cross-sectional radiologic imaging have been tackled via antegrade route, a retrograde enteroscopy was not attempted further. After 2 days, the patient was discharged in stable condition. Follow-up cross-sectional imaging at 3 months showed no residual lipomas, and she remained symptom-free at the end of 6 months (**►Fig. 3**).

Video 1

Single balloon enteroscopy showing lipomas in the jejunum with endoloop application at the base of lipomas. Online content including video sequences viewable at: <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0044-1786966>.

Discussion

Small intestinal lipomas are usually solitary and are the second most common tumor after small bowel adenocarcinoma. Majority of them are asymptomatic or present with nonspecific symptoms such as vague abdominal pain, nausea, vomiting, and occult gastrointestinal bleed and rarely with intussusception, perforation, and obstructive jaundice.¹

Symptomatic small bowel lipomas were conventionally managed by surgical techniques such as exploratory laparotomy and intestinal resection or enucleation techniques. Multiple endoscopic techniques such as polypectomy

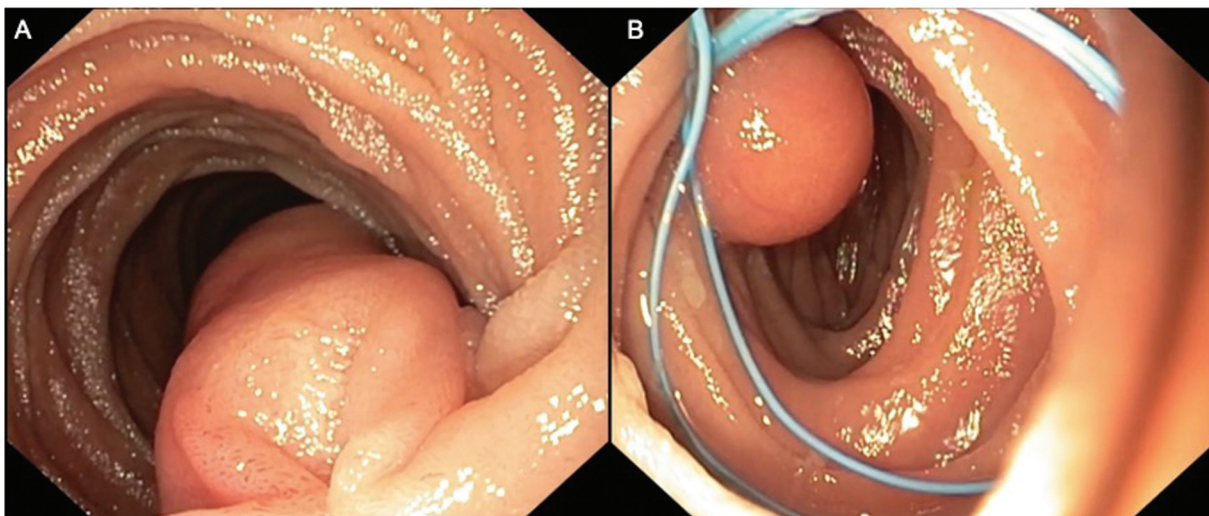


Fig. 2 Enteroscopy showing (A) submucosal lesions with smooth overlying mucosa in jejunum consistent with lipoma and (B) endoloop application at the base of the lipomatous polyp.



Fig. 3 (A, B) Follow-up (at 3 months) CT abdomen showing normal bowel with no residual lesions.

using snare or endoloop, endoscopic unroofing, endoscopic mucosal resection, and endoscopic submucosal dissection have been described. Before embarking on endoscopic option, it is important to seek a multidisciplinary team opinion, especially that of abdominal surgeons, to offer the best care to the patient. Polypectomy of lipomas is challenging as fatty tissue is an inefficient conductor of electric current, which might increase the risk of perforation and hemorrhage. Endoloop-assisted ligature is used in ligation of polyp pedicles, to achieve hemostasis, and treatment of postpolypectomy bleeding.² Endoloop-assisted unroofing technique offers safe removal of lipomas with favorable outcomes. There is no risk of postprocedure bleeding and perforation. Follow-up enteroscopy reported complete detachment of polyps and normal-appearing mucosa in these cases.³⁻⁵

Patient Consent

Informed patient consent was obtained for recording of the case details and its publication.

Conflict of Interest

None declared.

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