Obscure gastrointestinal bleeding caused by intestinal lipomatosis: double-balloon endoscopic and laparoscopic views

Fig. 1 Double-balloon endoscopy showed small-bowel lipomatosis, with twisted pedunculated lesions located in the distal jejunum.

Fig. 2 Pedunculated lesions with signs of ischemia (redness, edema, and apical erosions).

Fig. 3 Abdominal computed tomography scan showing intussusception.

Fig. 4 At laparoscopy, an area of small-bowel intussusception was seen.

Small-bowel endoscopy, demonstrating intestinal lipomatosis, and laparoscopy, showing small-bowel intussusceptions.

A 52-year-old white man without co-morbidities presented with a 6-year history of recurrent abdominal pain and episodes of melena twice a week for the past year. He was started on oral iron sulfate supplements and had already received a blood transfusion.

Findings from physical examination were normal. The hemoglobin level was 10.8 g/dL. Gastroduodenoscopy and colonoscopy revealed several smooth sessile and pedunculated lesions covered by normal mucosa, which are characteristics of lipomas, and with no signs of bleeding. Double-balloon endoscopy (DBE) revealed innumerable similar subepithelial lesions, measuring 1–4 cm in diameter, throughout the entire small bowel (▶ **Video 1**). In the distal jejunum, multiple pedunculated lesions were seen, with twisted pedicles, superficial erosion, and covered by fibrin, suggestive of vascular damage (▶ **Fig. 1**, ▶ **Fig. 2**).

Abdominal computed tomography scan showed multiple hypodense lesions compatible with lipomas, and areas of intussusception with mild proximal small-bowel dilation (▶ **Fig. 3**). The patient underwent laparoscopy, which confirmed irreducible intussusception, and led to minilaparotomy with four enterotomies and resection of multiple lipomas (▶ **Fig. 4**, ▶ **Fig. 5**). A total of 26 lesions were resected, including some with signs of bleeding. Histopathology confirmed the diagnosis of lipomatosis (▶ **Fig. 6**). The patient was discharged 3 days after surgery, and at the 5-month follow-up visit he remained asymptomatic with a hemoglobin level of 12.9 g/dL.

Lipomas of the gastrointestinal (GI) tract are benign tumors and are usually solitary; however, they can rarely present as GI lipomatosis [1]. Although mostly asymptomatic, GI lipomas may cause symptoms, including obstruction as a result of intussusceptions, and GI bleeding [2,3]. Treatment consists of surgical or endoscopic resection. Endoscopic options include mucosal or submucosal resection, unroofing technique, and application of an endoloop or endoclip [4,5].

This case demonstrated the endoscopic and laparoscopic characteristics of diffuse GI lipomatosis. DBE was essential to the diagnosis, and surgical resection resolved the intussusception and obscure GI bleeding.

Endoscopy_UCTN_Code_CCL_1AC_2AC

Competing interests: None

Fig. 5 At laparotomy, an area of intussusception was observed.

Fig. 6 Histological analysis of the surgical specimens revealed lipomatosis (hematoxylin and eosin, $\times 10$).

Adriana Vaz Safatle-Ribeiro¹, Rodrigo José de Oliveira¹, Leonardo Zorrón Pu¹, Ângela H. M. Caiado², Eduardo G. H. de Moura¹, Ulysses Ribeiro¹, Bruno Zilberstein¹

¹ Department of Gastroenterology, University of São Paulo Medical School, São Paulo, Brazil

² Department of Radiology, University of São Paulo Medical School, São Paulo, Brazil

References

- 1 Tani T, Abe H, Tsukada H et al. Lipomatosis of the ileum with volvulus: report of a case. *Jpn J Surg* 1998; 28: 640–642
- 2 Gao PJ, Chen L, Wang FS et al. Ileo-colonic intussusceptions secondary to small-bowel lipomatosis: a case report. *World J Gastroenterol* 2014; 20: 2117–2119
- 3 Tatsuguchi A, Fukuda Y, Moriyama T et al. Lipomatosis of the small intestine and colon associated with intussusception in the ileocecal region. *Gastrointest Endosc* 1999; 49: 118–121
- 4 Lee BJ, Park JJ, Joo MK et al. A case of small-bowel intussusception caused by intestinal lipomatosis: preoperative diagnosis and reduction of intussusception with double-balloon enteroscopy. *Gastrointest Endosc* 2010; 71: 1329–1332
- 5 Fu C-K, Hsieh T-Y, Huang T-Y. Lipomatosis of the small intestine: detection and endoscopic unroofing by single-balloon enteroscopy. *Digest Endosc* 2013; 25: 84–93

Bibliography

DOI <http://dx.doi.org/10.1055/s-0042-101387>
Endoscopy 2016; 48: E61–E62
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

Adriana Vaz Safatle-Ribeiro, MD, PhD

Department of Gastroenterology
Prédio dos Ambulatórios – Hospital das Clínicas
University of São Paulo Medical School
Av. Dr Enéas de Carvalho Aguiar, 155
6° andar, Bloco 3
São Paulo – SP 05403-000
Brazil
Fax: +55-11-2661-7579
adrisafatleribeiro@terra.com.br