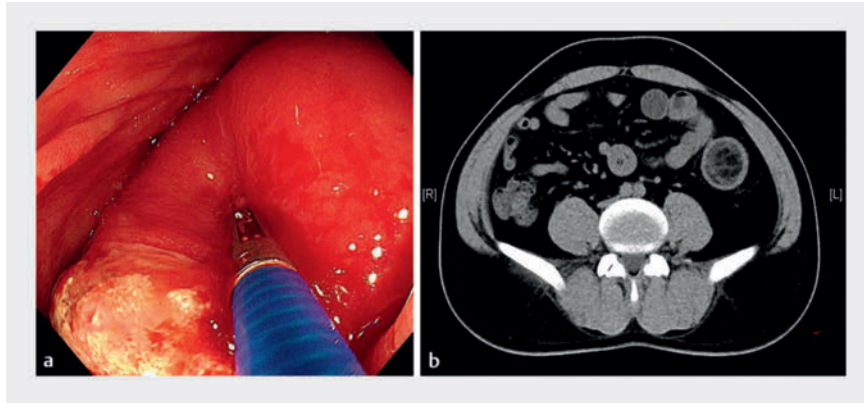
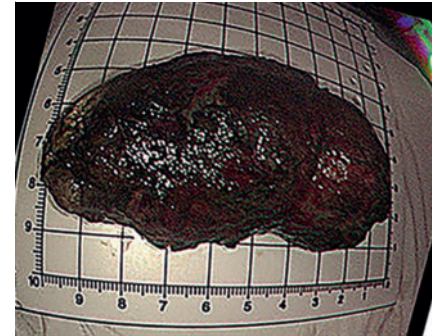


Use of simple endoscopic ligation to successfully remove a large torsional colonic lipoma causing intussusception

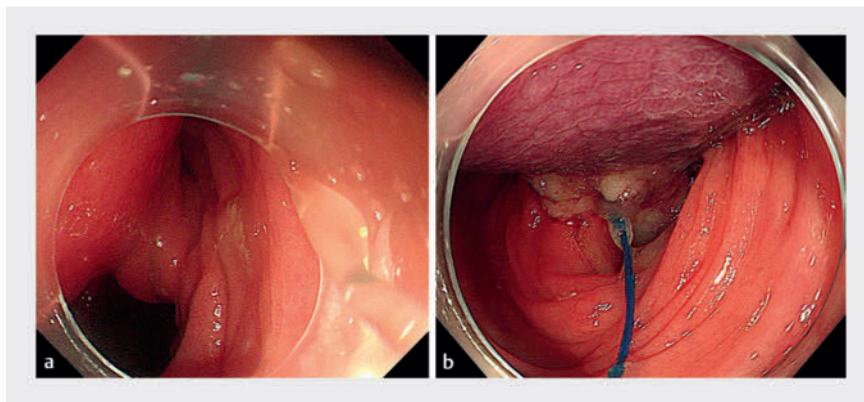
OPEN
ACCESS



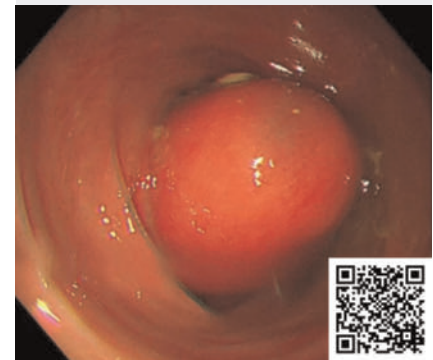
► **Fig. 1** Initial examination. **a** Endoscopic image. **b** Computed tomography image.



► **Fig. 3** The discharged lipoma.



► **Fig. 2** Endoscopic treatment. **a** Torsion of the broad lipoma pedicle. **b** Lipoma after ligation.



► **Video 1** Use of simple endoscopic ligation to successfully remove a large, torsional, colonic lipoma causing intussusception.

Colonic lipomas are uncommon benign submucosal tumors that are usually asymptomatic. However, some lipomas >4cm may cause intussusception, abdominal pain, or hematochezia [1]. Most patients with giant lipomas require surgery for relief of symptoms [2]. Recently, endoscopic mucosal resection, endoscopic mucosal resection after pre-cutting, and endoscopic submucosal dissection have been reported for the treatment of large lipomas [3]. However, the fatty tissue is an inefficient conductor of electronic current and may lead to a high incidence of complications [4]. We

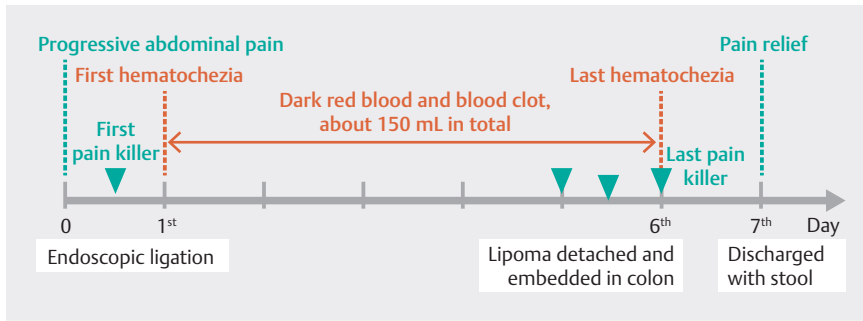
report the use of endoscopic ligation for the treatment of a large, torsional, colonic lipoma causing intussusception.

A 40-year-old man complained of abdominal pain and hematochezia. Colonoscopy found a huge submucosal mass (► **Fig. 1 a**), which was considered to be lipoma with adjacent colonic intussusception by computed tomography (CT) (► **Fig. 1 b**).

Owing to the torsion of the muscularis mucosae and lamina propria layers of the broad lipoma pedicle (► **Fig. 2a**), which could not be resolved by submucosal injection, endoscopic submucosal

dissection carried a high risk of perforation. Ultimately, we decided to employ endoscopic ligation.

First, the nylon loop was gradually tightened and released to ligate the base of the lipoma. The lipoma turned dark purple within 2 minutes (► **Fig. 2b**). Six days later, the lipoma detached and embedded in the colon, 20cm from the anus, and was difficult to remove. On the seventh day, the mass was found in the patient's stool (► **Fig. 3**) and was confirmed to be a lipoma by histopathology examination, with size 6.5×3.7×3.1 cm.



► **Fig. 4** The patient's postoperative symptoms.

Colonoscopy showed a large ulcer with neat margins and light yellow plaque (► **Video 1**).

This case demonstrates the efficacy and safety of endoscopic ligation for giant, torsional, colonic lipoma with broad pedicle. We also thoroughly tracked the patient's postoperative symptoms (► **Fig. 4**), which provides a reference for similar patients in the future.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Conflict of Interest

The authors declare that they have no conflict of interest.

The authors

Yadi Lan^{1,‡}, **Shulei Zhao**^{2,‡}, **Hongwei Xu**^{1,2}

1 Department of Gastroenterology, Shandong Provincial Hospital, Shandong University, Jinan, Shandong, China

2 Department of Gastroenterology, Shandong Provincial Hospital Affiliated to Shandong First Medical University, Jinan, Shandong, China

[‡] Shulei Zhao and Yadi Lan contributed equally to this article.

Corresponding author

Hongwei Xu, MD

Department of Gastroenterology, Shandong Provincial Hospital, Shandong University, 324 Jingwu Road, Jinan 250021, Shandong, China
xhwsdslyy@sina.com

References

- [1] Zhang H, Cong JC, Chen CS et al. Submucous colon lipoma: a case report and review of the literature. *World J Gastroenterol* 2005; 11: 3167–3169. doi:10.3748/wjg.v11.i20.316715918213
- [2] Gould DJ, Anne Morrison C, Liscum KR et al. A lipoma of the transverse colon causing intermittent obstruction: a rare cause for surgical intervention. *Gastroenterol Hepatol* 2011; 7: 487–490
- [3] Lee KJ, Kim GH, Park DY et al. Endoscopic resection of gastrointestinal lipomas: a single-center experience. *Surg Endosc* 2014; 28: 185–192. doi:10.1007/s00464-013-3151-923996333
- [4] Raju GS, Gomez G. Endoloop ligation of a large colonic lipoma: a novel technique. *Gastrointest Endosc* 2005; 62: 988–990. doi:10.1016/j.gie.2005.08.01816301055

Bibliography

Endoscopy 2023; 55: E1150–E1151

DOI 10.1055/a-2194-4717

ISSN 0013-726X

© 2023. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited.

(<https://creativecommons.org/licenses/by/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



E-Videos is an open access online section of the journal *Endoscopy*, reporting on interesting cases

and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. Endoscopy E-Videos qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: <https://www.research4life.org/access/eligibility/>).

This section has its own submission website at

<https://mc.manuscriptcentral.com/e-videos>