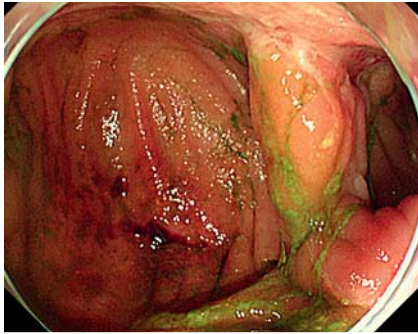
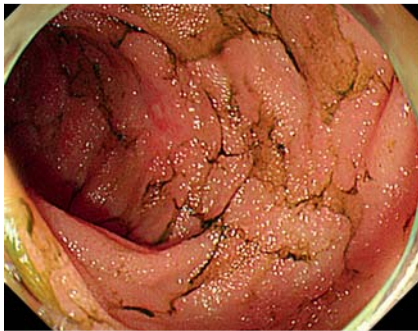


Unusual case of a large small-bowel enteroenteric fistula successfully closed using purse-string sutures



► **Fig. 1** A large fistula in the second portion of the duodenum.



► **Fig. 2** The jejunoleal lumen.



► **Fig. 3** Closure of the fistula orifice using purse-string sutures.

A 28-year-old man was diagnosed with colonic Crohn's disease with previous symptoms of diarrhea, weight loss, and vomiting 8 years ago. He was continually prescribed sulfasalazine (3g/day) from



► **Video 1** Closure of the large small-bowel enteroenteric fistula.

the first diagnosis. During the medication period, these symptoms were successfully relieved. However, he was readmitted to our hospital 1 week ago with complaints of refractory diarrhea and vomiting.

Physical examination was normal except for diffuse abdominal tenderness, whereas laboratory tests revealed hemoglobin 73 g/L, potassium 3.3 mmol/L, sodium 128.6 mmol/L, and albumin 13.7 g/L. After the patient's nutritional status had been improved, esophagogastroduodenoscopy was performed and showed a large fistula in the second portion of the duodenum (► **Fig. 1**), extending to the jejunoleal lumen through the fistula tract (► **Fig. 2**). A small-bowel enteroenteric fistula was diagnosed.

We used purse-string sutures, with an endoloop and hemostatic clips, to successfully close the fistula orifice (► **Fig. 3**, ► **Video 1**). The patient's symptoms resolved after the procedure, and he was switched to anti-tumor necrosis factor agents for further treatment.

Duodenal fistulas in patients with Crohn's disease are rare and surgical treatment is usually recommended [1]. To our knowledge, this is the first case report of a large small-bowel enteroenteric fistula successfully closed using purse-string sutures.

Endoscopy_UCTN_Code_TTT_1AO_2AI

Acknowledgments

This work was supported by the Natural Science Foundation of the Guangdong Province (No.2018A0303100024), Three Engineering Training Funds in Shenzhen (No.SYLY201718, SYJY201714 and SYLY201801), Technical Research and Development Project of Shenzhen (No.JCYJ20150403101028164), and Shenzhen Health Planning Commission (No. SZXJ2017030).

Competing interests

The authors declare that they have no conflict of interest.

The authors

**De-feng Li, Su-zhu Zhu, Zheng-lei Xu,
Jun Yao**

Department of Gastroenterology, the 2nd
Clinical medicine College (Shenzhen People's
Hospital) of Jinan University, Shenzhen, China

Corresponding author

Li-sheng Wang, MD

Department of Gastroenterology,
The Second Clinical Medicine College
(Shenzhen People's Hospital) of Jinan
University, 1017 Dong men North Road,
Luo hu District, Shenzhen 518020, P.R. China
Fax: +86-755-25533118
wanglsszrmy@163.com

* These authors contributed equally

Reference

- [1] Tonkic A, Borzan V. Treatment of fistulizing
Crohn's disease. *Acta Med Croatica* 2013;
67: 191–194

Bibliography

Endoscopy 2020; 52: E422–E423

DOI 10.1055/a-1149-1328

ISSN 0013-726X

published online 6.5.2020

© 2020. Thieme. All rights reserved.

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

ENDOSCOPY E-VIDEOS

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



Endoscopy E-Videos is a free
access online section, reporting
on interesting cases and new
techniques in gastroenterological
endoscopy. All papers include a high
quality video and all contributions are
freely accessible online.

This section has its own submission
website at

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