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Rare case of spontaneous duodeno-colic fistula

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Dear Editor,

A 48-year-old woman presented to the outpatient clinic with a 4-month history of alternating diarrhea and constipation with bloating. Physical examination revealed a body mass index of 22.89 kg/m², normal development, and no tenderness or rebound tenderness in the abdomen. The patient has maintained a stable body size since birth, with a previously healthy status and no history of abdominal surgery or trauma. Endoscopic examination revealed an abnormal channel between the posterior wall of the duodenal bulb to the hepatic flexure of the colon (Figure 1). The patient was managed with conservative treatment, including acid suppression and modulation of the gut microbiota, and was closely monitored. Surgical intervention would only be considered in the event of severe symptoms or complications. Over a five-month follow-up period, the patient's symptoms improved.

Discussion

A duodeno-colonic fistula (DCF) is a pathological connection between the duodenum and colon, categorized as either primary or secondary. Primary DCFs are typically associated with intestinal inflammation, tumors, or foreign body ingestion, while secondary DCFs are mainly caused by complications from invasive gastrointestinal surgeries (1,2). Endoscopic examination revealed smooth, intact mucosa in the

esophagus, stomach, duodenum, and colon, with no ulcers or masses, further excluding the possibility of inflammatory bowel disease, peptic ulcer disease, and tumors. Based on a review of six cases of spontaneous DCF, the average age of onset was 51.5 years, with diarrhea being the predominant symptom, which is similar to the present case (3). Based on the patient's history, symptoms, endoscopic findings, and literature review, a diagnosis of spontaneous DCF was considered. For enteric fistulas resulting from a defined etiology, such as Crohn's disease, peptic ulcers, or other causes, surgical treatment generally yields favorable outcomes with a low recurrence rate, though there is a risk of surgical complications (4,5). In this case, due to the absence of a clear etiology, a conservative approach was adopted, and after a five-month follow-up, the patient's symptoms had significantly improved. Although the follow-up period was relatively short, this outcome suggests that conservative treatment may be a viable option for spontaneous DCFs, helping to avoid unnecessary surgical complications. For middle-aged patients presenting with unexplained chronic diarrhea and bloating, clinicians should remain vigilant, conducting a thorough history and comprehensive endoscopic or barium mealto exclude rare conditions.

References

1. Li Z, Peng W, Yao H. Benign duodenocolic fistula: A case report and review of the literature. Front Surg. 2023 Jan 6;9:1049666.

2. Ferent IC, Lauro A, Rinaldi V, Frattaroli S, Varanese M, Saullo P, et al. Treating a Bypass with Bypass Surgery: Repair of a Duodeno-sigmoid Fistula Complicating Acute Diverticulitis. Dig Dis Sci. 2024 Mar;69(3):683–8.

3. Gao M. Spontaneous Duodeno-Colic Fistula: A Case Report and Literature Review. Int J Pathol Clin Res [Internet]. 2016 Dec 31 [cited 2024 Jul 1];2(4).

4. Kamath AS, Iqbal CW, Pham TH, Wolff BG, Chua HK, Donohue JH, et al. Management and Outcomes of Primary Coloduodenal Fistulas. Journal of Gastrointestinal Surgery. 2011 Oct;15(10):1706–11.

5. Huang Z, Cheng F, Wei W. Gastrocolic fistula as a rare complication of a benign gastric ulcer. Rev Esp Enferm Dig. 2022 Sep;114(9):569-570.

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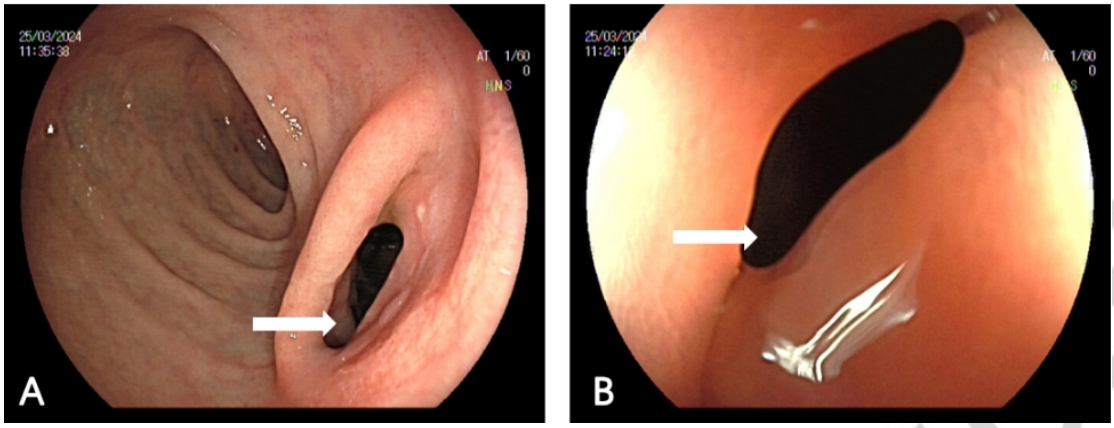

Figure 1 : (A) Gastroscopy reveals a fistulous opening measuring approximately 2.0 cm × 2.5 cm on the posterior wall of the duodenal bulb (arrowhead). The orifice is lip-shaped and aligned parallel to the duodenal lumen. The surrounding mucosa of both the duodenum and the fistula is smooth and intact, with no evidence of erosion or ulceration. The gastroscope could smoothly enter the transverse colon through the fistula tract and allow clear visualization of the cecum and ileocecal valve. (B) Colonoscopy reveals a fistulous opening approximately 2.0 cm × 2.5 cm in size within the folds of the hepatic flexure (arrowhead). The mucosa surrounding the orifice is smooth and intact. The Colonoscopy could smoothly enter the duodenal bulb through the fistula tract.