

# Gastroscope Meeting the Colonoscope: A Rare Complication After Billroth II Gastrojejunostomy

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**KEYWORDS:** gastrocolic fistula; Billroth II gastrojejunostomy; stomach; colon

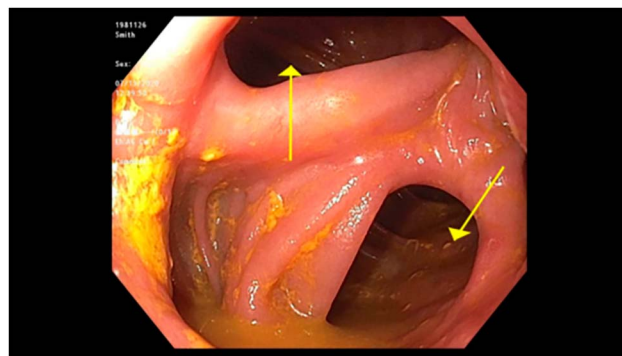
## CASE REPORT

We report a rare case of a 42-year-old man who presented with a gastrocolic fistula after Billroth II gastrojejunostomy for gastric epithelial adenoma. The patient endorsed typical symptoms of Gastrocolic Fistula (GCF), including chronic diarrhea, foul-smelling belching, feculent vomiting, and an unintentional weight loss of 20 pounds.<sup>1,2</sup> On examination, he was found to have scrotal and lower extremity edema. Laboratory test results showed an albumin of 1.6 g/dL (3.5–5.2), potassium of 3.0 mmol/L (3.4–5.2), and hemoglobin of 7.9 mg/dL (11.0–14.7).

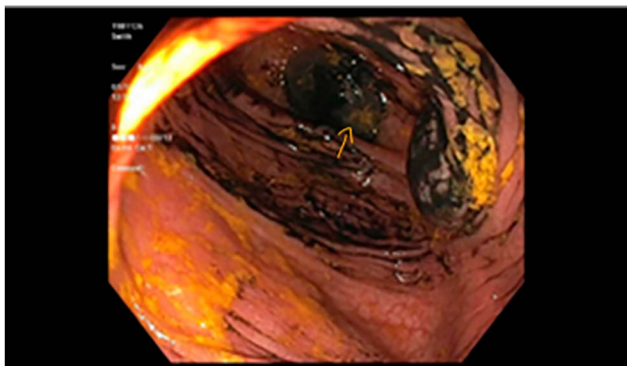
Imaging showed postsurgical changes of the stomach, diffuse anasarca, and a fistulous connection between the mid-body of the stomach and the mid-transverse colon (Figure 1). Subsequent endoscopy revealed a patent Billroth II gastrojejunostomy and a large opening adjacent to the anastomosis leading to the colon (Figure 2). The transverse colon was tattooed preceding colonoscopy



**Figure 1** CT Scan abdomen and pelvis exhibiting a fistula between the mid-body of the stomach and the mid-transverse colon.



**Figure 2.** Endoscopy revealing the gastrojejunostomy (upward-pointing arrow) and gastric-colonic fistula (downward-pointing arrow).



**Figure 3** Gastric-Colonic fistula on upper endoscopy, tattooed.

(Figure 3). The colonoscope easily passed from the transverse colon to the stomach, which confirmed the presence of a GCF (Figure 4). Ultimately, the patient underwent surgical correction, leading to resolution of his symptoms.

We propose that the GCF formed because of an anastomotic leak from a remote Billroth II, which contributed to a prolonged inflammatory process and epithelial cell migration into deep layers, ultimately resulting in a communication between adjacent organs.



**Figure 4** Tattooed area was noted in the transverse colon during colonoscopy.

## DISCLOSURES

Author contributions: A. Abulawi: Writing—original draft, reviewed the literature, revised the manuscript for intellectual content, and approved the final manuscript; J. Liu: Writing—original draft, reviewed the literature, revised the manuscript for intellectual content, and approved the final manuscript; R. Bui: Writing—reviewing and editing, revised the manuscript for intellectual content, and approved the final manuscript; and A. Batool: Writing—review and editing, revised the manuscript for intellectual content, and approved the final manuscript, and is the article guarantor.

Acknowledgments: The authors express gratitude to the patient.

Financial disclosure: None to report.

Previous presentation: This case was presented at the American College of Gastroenterology 2021 Annual Scientific Meeting; October 26, 2021; Las Vegas, Nevada.

Informed consent was obtained for this case report.

Received February 21, 2022; Accepted January 30, 2023

## REFERENCES

1. Stamatakos M, Karaiskos I, Pateras I, Alexiou I, Stefanaki C, Kontzoglou K. Gastrocolic fistulae; from Haller till nowadays. *Int J Surg*. 2012;10(3):129–33.
2. Aslam F, El-Saiety N, Samee A. Gastrocolic fistula, a rare complication. *BJR Case Rep*. 2018;4(4):20170121.

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