Case Report

Two Years of Obscure Gastrointestinal Bleeding: Lessons from a Diagnostic Odyssey

Manish Gautam,[1] Sanjaya Paudyal,[1] Mukund Raj Joshi,[1] Tanka Prasad Bohara,[1] Niroj Hirachan,[2]

Abstract

Lower GI bleeding presents as hematochezia and is more common in old age and less common in young adults and children. Fresh bleeding is more commonly associated with benign anal disorders like fissure and hemorrhoids, but melena is more commonly associated with upper gastrointestinal bleeding with cancerous growth in the elderly. However rare, melena can also be seen in proximal lower gastrointestinal bleeding (mainly proximal jejunum), and it does occur in young adults due to non-cancerous causes.

We report a case of a 26-year-old male, requiring frequent blood transfusions for 2 years in different institutions of Nepal due to GI bleeding in the form of melena. He underwent a series of investigations and acute treatment at different centers for this problem. No definitive cause was identified during this period, and the patient later had to undergo surgical management for massive bleeding requiring multiple transfusions at our institute.

This case report is to emphasize the need for the use of more aggressive and advanced investigative tools for the identification of bleeding spots in the gastrointestinal tract, which otherwise would not have been picked up by usual investigative tools. We should think out of the box to diagnose and manage this kind of patient successfully.

Keywords: Blood transfusion; Lower GI bleed; Melena

Author affiliations:

[1] Department of Surgery,
Sumeru City Hospital, Lalitpur, Nepal.

[2] Department of Anesthesiology,
Sumeru City Hospital, Lalitpur, Nepal.

Correspondence:

Dr. Manish Gautam,
Department of Surgery,
Sumeru City Hospital, Lalitpur, Nepal.

Email: gautam10manis@gmail.com

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Introduction

Gastrointestinal (GI) bleeding is a term used to describe any bleeding that occurs within the gastrointestinal tract from the mouth to the anus. Any bleeding that occurs distal to the ligament of Treitz is considered lower GI bleeding. (1) GI bleeding can be overt (e.g., visible hemorrhage such as hematemesis, hematochezia, or melena) or occult (e.g., positive fecal occult blood test or iron deficiency anemia). Obscure GI bleeding refers to recurrent or persistent gastrointestinal bleeding in which initial standard evaluations fail to detect the source of bleeding. Obscure bleeding can present as overt or as an occult type.[1] Small bowel bleeding accounts for 5-10% of GI bleeding cases, commonly manifesting as obscure GI bleeding, where the source remains unknown after complete GI tract endoscopic and imaging evaluation.[2]

We report a case of a 26-year-old male, requiring frequent blood transfusions for two years in different institutions of Nepal due to GI bleeding in the form of melena. He underwent a series of investigations and acute treatment at different centers for this problem. No definitive cause was identified during this period, and the patient later had to undergo surgical management for massive bleeding requiring multiple transfusions at Sumeru city hospital Pvt. Ltd.

Case Report

A 26-year-old male presented to the emergency department with a 10-day history of black tarry stools and generalized weakness. He has had recurrent similar episodes over the past two years, during which his hemoglobin level

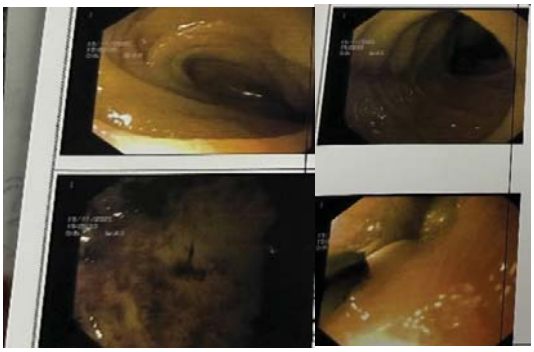

Figure 1. Enteroscopic view with tattooing

has dropped to as low as 6g/dl. The patient underwent several investigations, including CT angiography, upper gastrointestinal endoscopy, and colonoscopy. However, no definite source of bleeding was identified, and conservative management was continued. He had a series of blood transfusions during this period. Upon presentation to our institution, his hemoglobin was 6.5g/dl, but he was hemodynamically stable. He was admitted to the ICU and received a packed red cell transfusion, targeting a hemoglobin level of 8-10g/dl. He underwent colonoscopy, endoscopy, and CT angiography, which reported normal findings. Then he was taken for enteroscopy (anterograde and retrograde). Enteroscopy revealed altered blood throughout the colon and part of the ileum; no fresh bleeding was seen. Tattooing was done to the furthermost part of the ileum, anterograde and retrograde, and diagnosed as obscure mild ileal bleeding (**Figure 1**).

Despite being hemodynamically stable, his hemoglobin level declined persistently, and melena persisted. Following a multidisciplinary team discussion, surgical intervention was planned.

Pre-operative tattooing (**Figure 2**) was performed during the enteroscopy in the distal jejunum and proximal ileum, indicating that the bleeding point was located between these two sites. This served as a reference for intraoperative localization of the bleeding source. Thick mesentery with prominent mesenteric lymph nodes

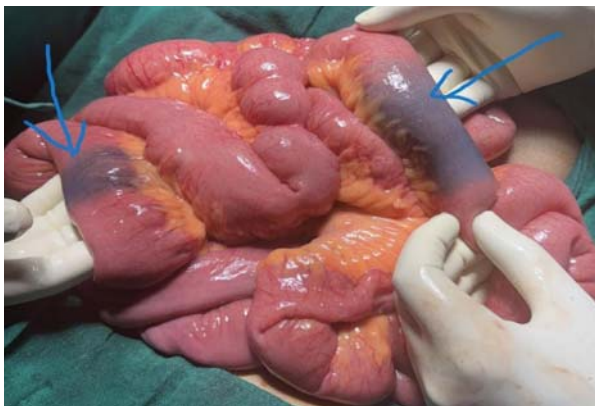

Figure 2. Tattooing of the bowel

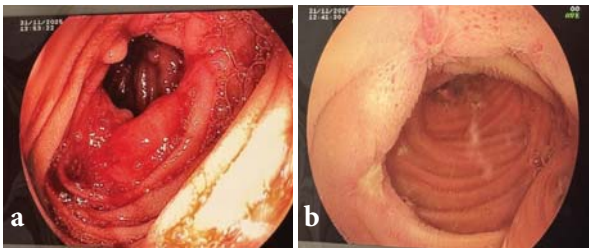

Figure 3. (a) Intraoperative enteroscopy showing an ulcer with a bleeding point; (b) Linear ulcer without active bleeding

were found intraoperatively. Enterotomy was performed between proximal and distal tattooed segments, followed by intraoperative enteroscopy. The distal segment was examined first, which revealed no pathology. Evaluation of the proximal segment demonstrated linear ulcers with and without active bleeding spots (**Figure 3a, 3b**). The localized disease segment of the bowel was marked, and resection of approximately 100 cm of jejunum with stapled side-to-side anastomosis was done. The resected bowel was sent for histopathological examination. Patient received one unit of packed RBC intraoperatively. Patient became hemodynamically stable and hemoglobin level rose to 10 gm/dl in the early postop period.

On the 3rd post-operative day, the patient passed black tarry stool, but his hemoglobin remained stable, and he was hemodynamically stable. No major intervention was carried out as he might have passed retained old blood. He was discharged on the 5th postoperative day after passage of normal colored stool and stable hemoglobin.

Histopathology reported the lesions as non-specific inflammatory lesions with focal ulcerations, and 11 resected lymph nodes all had reactive changes. Inflammation was limited to the muscularis mucosa. No granuloma or atypia was noted. (**Figure 4)**

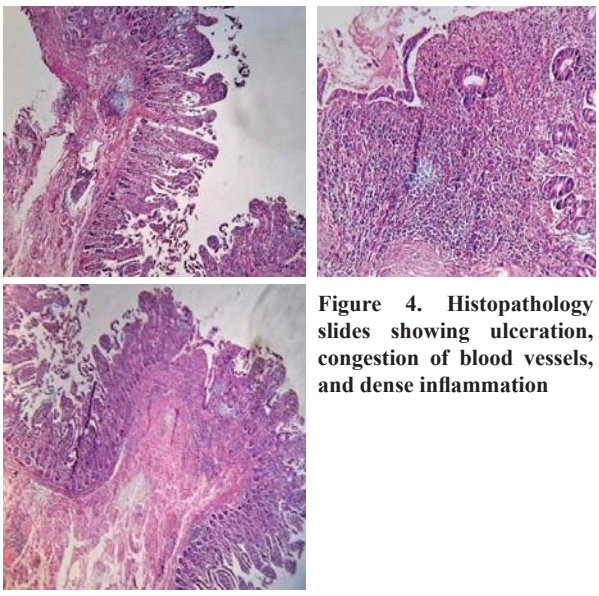

Figure 4. Histopathology slides showing ulceration, congestion of blood vessels, and dense inflammation

Discussion

Obscure GI bleeding (OGIB) is persistent or recurrent bleeding from the digestive tract where the source is not found after standard upper gastrointestinal and lower gastrointestinal endoscopies. This usually involves the small intestine, which is the most challenging area to view. OGBI can be further subdivided into obscure occult bleeding, defined by recurrent iron deficiency anemia and/or recurrent positive fecal occult blood test result, and obscure overt bleeding, defined by recurrent passage of visible blood encompassing melena or hematochezia.[3] Most patients are managed with endoscopic methods, and surgical intervention should be considered for persistent and uncontrolled bleeding.[4]

The common causes in patients who are forty years or older are angioectasia, Dieulafoy's lesion, nonsteroidal anti-inflammatory induced ulcers, and neoplasms. Inflammatory bowel disease, Dieylafoy's lesion, neoplasm, and Meckel diverticulum are more common causes of bleeding in younger patients.

Capsule endoscopy (CE) is one of the best tools to explore the small bowel. CE allows for the exploration of the entire small bowel in approximately 85% of patients. CE has a higher sensitivity and lower specificity than magnetic resonance enteroclysis, computed tomography, and push enteroscopy. CE has a good safety profile and few adverse effects. CE is associated with no difference in patient health-related outcomes, such as re-bleeding or follow-up treatment, compared with push enteroscopy, small bowel follow-through, and angiography.[5]

Although several surgical and non-surgical approaches have been described over the last two decades, OGIB still poses significant diagnostic and therapeutic challenges.[6]

Initial management should always include primary resuscitation with IV fluids and blood transfusions, as in any patient with a significant GI bleed. If the patient continues to be hemodynamically unstable, the surgical team should be involved early in the course while continuing resuscitation. Treatment consists of medical management, minimally invasive intervention, and surgical management.[6]

Conditions that can lead to ulceration of the small intestine include excessive use of NSAIDs and intestinal tuberculosis. Furthermore, these ulcers have also been reported in several patients with Crohn's disease and ischemic colitis. The clinical and chronic nonspecific ulcer are similar to those of NSAIDs-induced enteropathy. Chronic nonspecific ulcer patients have a sharply demarcated ulcer limited to the ileum.[7] Our patient did not have a history of regularly taking NSAIDs, so the possibility of NSAID-induced ulcer could be ruled out.

Proper investigation, including endoscopy, colonoscopy, enteroscopy, CT angiography, and capsule endoscopy, is required when the patient requires blood transfusions multiple times and has had multiple hospitalizations for the same reason. In this patient, we used a novel technique to narrow down the localization of small bowel bleed by tattooing the proximal and distal-most segment where clots were noted in both anterograde and retrograde enteroscopy. This tattooing helped us to narrow down the search intra-operatively and perform the intraoperative enteroscopy between the tattooed segment to localize the lesion quickly. This tattooing technique can be used whenever a patient with an obscure GI bleed undergoes enteroscopy.

Conclusion

Preoperative enteroscopy and tattooing can be done to mark the proximal and distal segments of the visualized small bowel when the bleeding cannot be localised. A segment between the tattoo mark can be targeted for intraoperative enteroscopy to localize the bleeding site.

References

1. Amin SK, Antunes C. Lower Gastrointestinal Bleeding(Archived). 2023 Jul 17. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2026 Jan.
2. Guglielmo FF, Wells ML, Burning DH, Strate LL, Huete A, Gupta A, et al. Gastrointenstinal bleeding at CT Angiography and CT Enterography; Imaging Atlas and Glossary of Terms. RadioGraphis. 2021 Oct 1;41(6):1632-1656.
3. Lepileur L, Dray X, Antonietti M, Iwanicki–Caron I, Grigioni S, Chaput U, et al. Factors Associated With Diagnosis of Obscure Gastrointestinal Bleeding by Video Capsule Enteroscopy. Clinical Gastroenterology and Hepatology. 2012 Dec;10(12):1376–80.
4. Hawks K. M, Svarverud E. J. Acute Lower Gastrointenstinal Bleeding: EVALUATION AND MANAGEMENT. Amaerican Family Physician. 2020 Feb 15;101:7.
5. Health Quality Ontario. Capsule Endoscopy in the Assessment of Obscure Gastrointestinal Bleeding: An Evidence-Based Analysis. Ont Health Technol Assess Ser. 2015;15(1):1–55.
6. Podugu A, Tandon K, Castro J F. Crohn's disease presentating as acute gastrointenstinal hemorrage. World Journal of gastroenterology. 2016 Apr 28;22(16):4073–8.
7. Chen Y, Ma WQ, Chen JM, Cai JT. Multiple chronic non-specific ulcer of small intestine characterized by anemia and hypoalbuminemia. World J Gastroenterol. 2010 Feb 14;16(6):782–4.