Recurrent lymphoma as a cause of obscure massive small bowel bleeding

Abstract
Diffuse large B-cell lymphoma (DLBCL) is an aggressive malignancy that accounts for the largest proportion of non-Hodgkin lymphoma. Recurrent lymphoma is unusual to present as obscure massive small bowel bleeding, especially after long-standing remission. This case describes a 72-year-old man with a history of DLBCL presenting with gastrointestinal hemorrhage. Common causes of small bowel bleeding include underlying Crohn’s disease, arteriovenous malformations, Dieulafoy’s lesion, or NSAID-induced ulcers, and malignant neoplasms. Because massive small bowel bleeding is extremely rare, it is crucial to evaluate with a systematic approach using both radiographic and endoscopic imaging to determine the source of bleeding.

Keywords: small bowel bleeding, lymphoma

Introduction
Diffuse large B-cell lymphoma (DLBCL) is an aggressive malignancy that accounts for the largest proportion of non-Hodgkin lymphoma. The gastrointestinal (GI) tract is the most common site of extra-nodal involvement. Subsequent gastrointestinal bleeding can be a life-threatening complication. Recurrent lymphoma is unusual to present with gastrointestinal hemorrhage, especially after longstanding remission. Here, we present obscure massive small bowel bleeding as the initial presentation of recurrent DLBCL.

Case report
A 72-year-old man with a history of diffuse large B-cell lymphoma of an intra-abdominal lymph node at the pancreas head 5 years prior presented with acute onset rectal bleeding associated with syncope. He had a history of decompensated cirrhosis due to primary sclerosing cholangitis (PSC). He had no history of varices or variceal bleeding and was on antiplatelet therapy with aspirin and clopidogrel. On presentation, his temperature was 94.2°F, blood pressure, 103/55 and heart rate, 92 beats per minute. Physical examination revealed conjunctival pallor, ascites, abdominal distention, and spider angiomas. His initial hemoglobin was 5.4g/dL (baseline 10.0 g/dL). The patient was resuscitated in the ER and underwent abdominal CT angiogram that revealed no evidence of active bleeding or abdominal varices. He underwent initial endoscopic evaluation with a push enteroscopy and colonoscopy, which showed portal hypertensive gastropathy (Figure 1), sigmoid diverticulosis, blood throughout the entire colon (Figure 2). There was clotted blooded at the ileocecal valve. He continued to have hemodynamically significant active hematechasia; nuclear medicine bleeding scan demonstrated active bleeding in the left upper quadrant. Mesenteric angiography was negative. Anterograde single balloon small bowel enteroscopy was performed on day 4. In the jejunum, a 1cm ulcerated polyoid mass was biopsied (Figure 3). Pathology confirmed recurrent diffuse large B-cell lymphoma. Oncologic evaluation included a PET scan that showed extensive small, hypermetabolic foci consistent with recurrent lymphoma of abdomen and chest with extra-nodal extension into the heart and GI tract.

Discussion
The small bowel is implicated in only 5-10% of patients with gastrointestinal (GI) bleeding, yet it is responsible for obscure bleeding after upper endoscopy and colonoscopy. Small bowel tumors comprise roughly 3-6% of the gastrointestinal neoplasm cases.

Figure 1. Esophagogastroduodenoscopy (EGD) showing portal hypertensive gastropathy in the gastric fundus.
10 case reports in the literature. More common causes of small bowel bleeding include underlying Crohn’s disease, arteriovenous malformations, Dieulafoy’s lesion, Meckel’s diverticulum, small bowel varices, NSAID-induced ulcers, and malignant neoplasms. Angiodysplasias and telangiectasias account for more than half of all small bowel bleeds, but often present as occult bleeding.\(^2,^4\)

The source of small bowel bleeding is challenging to diagnose. As a result, one must use a systematic approach when evaluating the source of bleeding. In unstable patients with overt active bleeding, CT angiogram can localize active bleeding with high sensitivity.\(^5\) Patients with recurrent bleeding may require repeat EGD, colonoscopy, or CT angiography/nuclear scan, especially in cases of suspected aorto-enteric fistula. It should be noted that up to 25% of potential small bowel bleeds are actually missed bleeding sources within reach of EGD and colonoscopy.\(^3\) However, in patients with ongoing overt bleeding, deeper evaluation is warranted. Video capsule endoscopy and deep enteroscopy provide options for evaluation. In patients with obscure persistent GI bleeding, the yield for capsule endoscopy has been reported to be greater than 90 percent.\(^6\)

**Conclusion**

Massive small bowel bleeding is incredibly rare. Careful evaluation with a systematic approach using both radiographic and endoscopic evaluation is crucial in determining the source of bleeding.

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**Conflicts of interest**

Author declares that there is no conflict of interest.

**References**