Diffuse Large B-Cell Lymphoma Presenting as Bleeding and Hypoalbuminemia: A Case Report

Anjella Manoharan, MS MD[1], Anna-Lena Meinhardt, MD[2], Elan Baskir, MD[1], Vincent Wong, MD[1], Kaveh Hajifathalian, MD MPH[3], Kristin Wong, MD[1]
[1]Department of Internal Medicine-Pediatrics, Rutgers NJMS, [2]Department of Internal Medicine, Rutgers NJMS, [3]Department of Gastroenterology, Rutgers NJMS

RUTGERS New Jersey Medical School

Introduction

- Less than 5% of all gastrointestinal (GI) malignancies are primary GI lymphomas
- Diffuse large B cell lymphoma (DLBCL) makes up for around 38-57% of primary GI lymphomas
- 20-30% of GI lymphomas are in small intestine but rarely found in the jejunum due to the lack of lymphoid tissue
- Initial presentation of GI DLBCL can vary from nonspecific symptoms (i.e. fever, weight loss, abdominal pain, fatigue, nausea, vomiting) to more fatal symptoms like bowel perforation
- Imaging studies typically reveal aneurysmal dilation of bowel lumen, bulky abdominal lymphadenopathy, or segmental bowel wall thickening
- On endoscopy, may visualize mucosal ulceration, hyperplasia, polyp, or infiltrative lesion
- Due to the nonspecific symptoms and imaging findings, patients with primary jejunal DLBCL commonly need an extensive workup before diagnosis is made
- We present a rare case of jejunal DLBCL and illustrate the diagnostic difficulties

Case Description

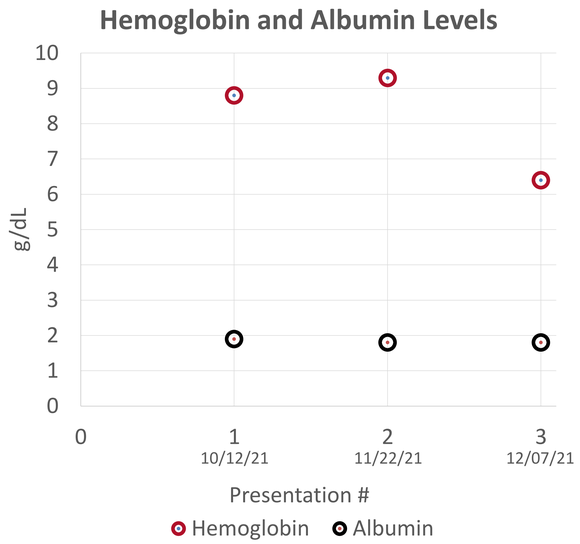
A 49-year-old male with a past medical history of hypertension, iron deficiency anemia, atrial flutter, and chronic non-occlusive deep vein thrombosis (DVT) of the right femoral vein on rivaroxaban presented with weeks of dizziness, dyspnea, hematochezia and 30-pound unintentional weight loss over four months.

Labs were notable for anemia and severe hypoalbuminemia. Esophagogastroduodenoscopy and colonoscopy revealed diverticulosis in sigmoid and distal descending colon and internal and external hemorrhoids. He was discharged once the GI bleed stopped.

A month later the patient presented with shortness of breath, worsening fatigue, recurrence of hematochezia, and melena. Imaging revealed bilateral segmental pulmonary emboli (PE) despite being on anticoagulation for chronic DVT. Rivaroxaban was switched to heparin. CT also demonstrated known diverticulosis as well as intramural thickening of the jejunal loops. Labs were significant for worsening hypoalbuminemia, for which patient was scheduled for outpatient workup of malabsorption. The patient was discharged on apixaban once GI bleed stopped.

The patient returned one week later with acute GI bleed and severe anemia. A capsule endoscopy demonstrated areas of nodular tissue, indicative of possible prior inflammation. Push enteroscopy revealed patchy severe mucosal changes in the jejunum that were characterized by congestion, hemorrhagic appearance, a decreased vascular pattern and ulcerations. Mucosal biopsies were showed an atypical lymphoid infiltrate consisting of medium to large-sized lymphoid cells with open chromatin and visible nucleoli. On immunohistochemical evaluation, these cells were positive for CD45, CD20, CD10 and Bcl-6, and negative for CD3, with a proliferation index of 80-90%. These findings were consistent with DLBCL of the jejunum.

Patient was started on chemotherapy with R-CHOP (Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, Prednisone) while inpatient.



Graph 1. Hemoglobin and Albumin Levels. Graph depicts levels of hemoglobin and albumin on initial visit of each presentation. As demonstrated, hemoglobin and albumin levels were low and declined overtime. The decrease in hemoglobin can be attributed to GI bleed, which was sign of GI DLBCL. Hypoalbuminemia was also consistent with malignancy.

Case Description

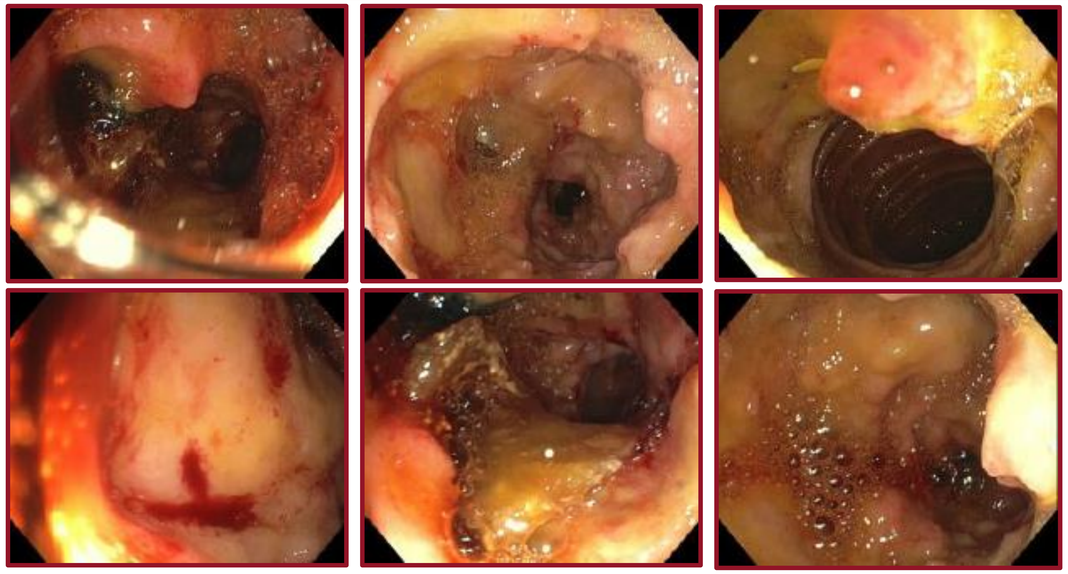


Image Set 1. Endoscopy Results of Jejunum. Endoscopy revealed patchy mucosal changes with congestion, hemorrhage, decreased vascular pattern, and ulceration in the jejunum.

Discussion

- We present a unique case of jejunal DLBCL in which diagnosis proved to be difficult
- Patient presented with non-specific symptoms
- Imaging studies and endoscopy can assist with the diagnosis of GI DLBCL
- Imaging studies showed abnormalities that were non-specific and were significant for intramural thickening of jejunal loops
- Capsule endoscopy noted areas of nodular tissue, suggestive of inflammation
- One challenge was obtaining diagnostic confirmation since the tumor was in the jejunal area, which required push enteroscopy to access
- One unique aspect of the case that led to the diagnosis was hypoalbuminemia
- Patient was not malnourished, had no protein-losing enteropathy, proteinuria, nor liver failure, leaving malignancy as a possible cause
- If a patient is noted to have hypoalbuminemia and other causes of protein loss have been ruled out, then malignancy should be considered, especially in the setting CT or endoscopy changes
- Hypoalbuminemia has been noted to be a risk factor for venous thromboembolism (VTE) in advanced gastric cancer, which could explain presentation with PE while on anticoagulation
- Patient underwent R-CHOP chemotherapy and noted improvement in his symptoms

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