

Introduction

- Non-Hodgkin's lymphoma is the 7th most common malignancy in the United States, with a 5-year survival rate of 71%
- The development of extranodal NHL can be a diagnostic challenge despite the fact that 30% of the cases are extranodal and involve the gastrointestinal tract (1)
- Primary colon lymphoma. comprises around 0.2-1.2% of all colorectal malignancies with a median age of 62 years (2)
- The incidence of a primary colonic lymphoma is rare, especially in young patients

Case Description

- A 21-year-old man initially presented to our emergency department (ED) with abdominal pain, weakness, rectal bleeding, and anemia
- Two months prior to this admission, he presented to an ED in Colorado with rectal bleeding and abdominal pain. He was diagnosed with gastroenteritis and discharged with antibiotics. He was evaluated in Ohio for syncope and profound anemia (hemoglobin of 4.2) two weeks later
- A CT scan of the abdomen and pelvis demonstrated right colon wall thickening. He was diagnosed with inflammatory bowel disease and discharged on prednisone
- At his presentation, he reported a 15-pound weight loss and CT imaging demonstrated significant right colon wall thickening with a 19cm "mass-like" lesion
- A subsequent colonoscopy showed a large, ulcerated, partially obstructing right colon mass consistent with malignancy
- Histology demonstrated a high-grade B-cell lymphoma that was CD20 positive by immunohistochemical staining

Images



Figure 1
An ulcerated partially obstructing large mass in the ascending colon. The mass was circumferential, measured 10 cm in length and 10 cm in diameter. Oozing was present.



Figure 2
Redemonstration of the mass in the ascending colon

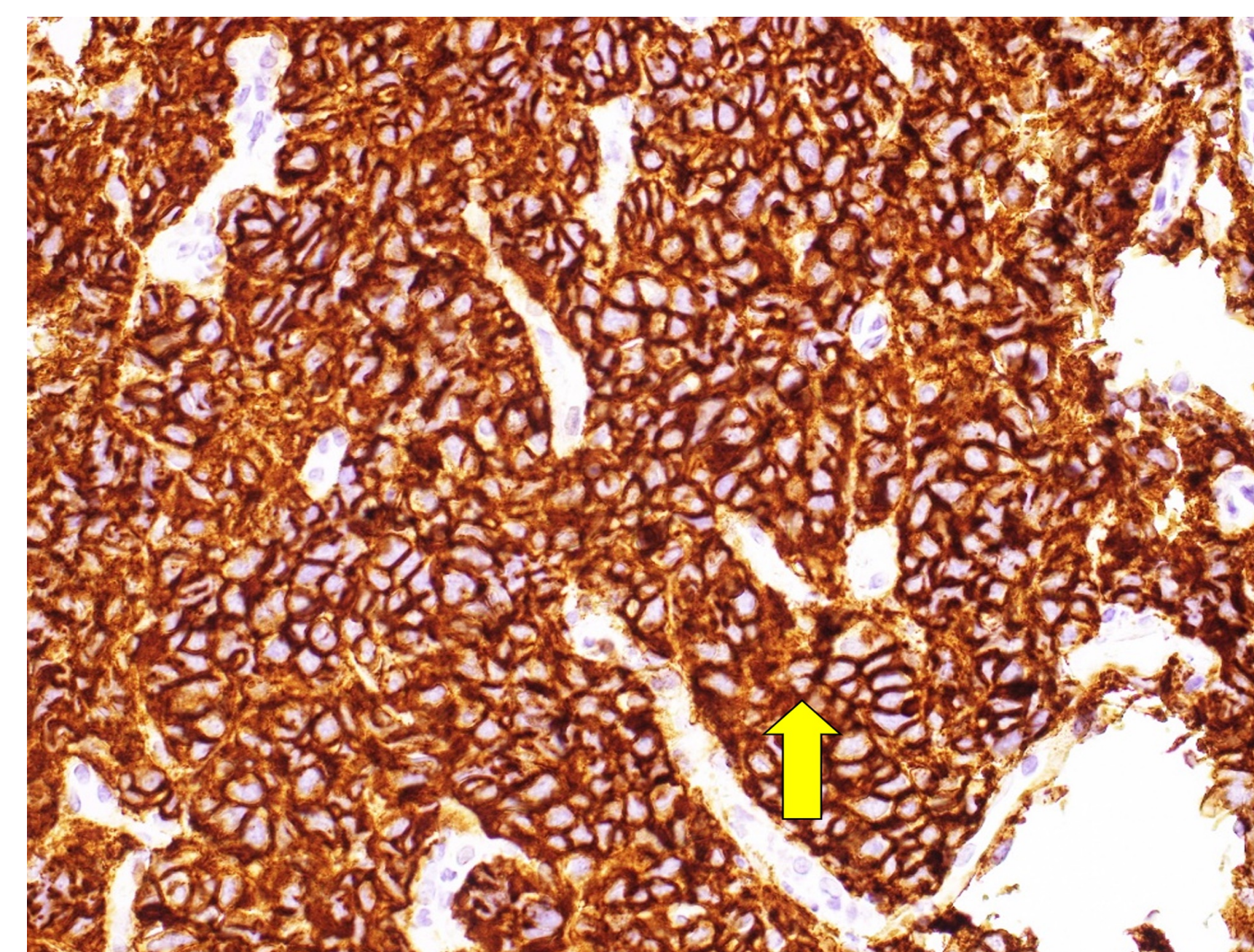


Figure 3
Microscopy image showing malignant lymphocytes positive for CD20 antibody

Image courtesy of Lodhi H T, Hussain Q, Munir A, et al., image found on cureus

Patient Outcome

- Two weeks later, he presented to another ED with bloody diarrhea, abdominal pain, and vomiting
- A CT scan demonstrated perforation of the cecum with free air
- He underwent an exploratory laparotomy with a stormy postoperative course and eventually died from postsurgical complications

Discussion

- Although a primary colonic lymphoma is exceedingly rare, especially in the young population, this case is instructive as it is common to overlook malignancy in the young that presents with gastrointestinal symptoms.
- The patient was seen in 2 separate hospitals and treated symptomatically even when he presented with profound anemia (hemoglobin of 4) and an abnormal CT scan of the right colon.
- Presentation of this disease can vary; however, it most commonly includes abdominal pain, abdominal masses, and hematochezia
- Although presentation can vary, it should be considered and recognized in younger patients to avoid delays in proper management, which could lead to severe complications, as illustrated by this case.
- Given its rarity, no large trials have been conducted to evaluate optimal treatment.
- Surgery is the mainstay for any emergent presentation such as obstruction or perforation. Chemotherapy remains the mainstay treatment for B-cell lymphomas.

References

1. Vannata B, Zucca E. Primary extranodal B-cell lymphoma: current concepts and treatment strategies. *Chin Clin Oncol* 2015;4(1):10. doi: 10.3978/j.issn.2304-3865.2014.12.01
2. Li, Qingguo, et al. "Changes in Incidence and Survival by Decade of Patients with Primary Colorectal Lymphoma: A Seer Analysis." *Frontiers in Public Health*, Frontiers Media S.A., 16 Oct. 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7596220/>
3. Lodhi H T, Hussain Q, Munir A, et al. (September 05, 2018) Primary Gastrointestinal Diffuse Large B-cell Lymphoma. *Cureus* 10(9): e3258. doi:10.7759/cureus.3258