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Intestinal lymphoma presenting as intermittent bloody diarrhea and abdominal pain

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Abstract: Primary lymphoma of the colon is a rare tumor of the GI tract that comprises only 0.2-1.2% of all colonic malignancies and most commonly involve the cecum followed by the right colon and sigmoid. They can mimic features of ulcerative colitis and in this article we reporting a colonic lymphoma, which misdiagnosed as a refractory IBD. This is a middle- aged man presenting with abdominal pain and bloody diarrhea, which is diagnosed as ulcerative colitis, but due to the refractory symptoms and non-responsiveness, he has undergone further evaluation, which revealed the primary diffuse large B -cell lymphoma of the colon as the main culprit of patients' symptoms and referred for systemic chemotherapy. Colonic lymphomas can be presented as a mucosal type and characterized by small superficial erosive and hyperemic changes within a mucosal layer that can mimic the features of ulcerative colitis, so in any refractory IBD, their possibility should keep in mind.

Keywords: Abdominal pain, Bloody diarrhea, Lymphoma, Ulcerative colitis

Background

The gastrointestinal (GI) tract is the most common site of extra nodal non-Hodgkin's lymphomas (NHLs) (1). The GI tract lymphoid tissue is mucosa- associated lymphoid tissue (MALT) and contains B cells at various stages of differentiation, organized into different zones and malignant transformation may occur in a cell at any one of these particular stages of differentiation, leading to a malignancy with distinct clinical pathologic features (2, 3). Most lymphomas of the GI tract are B cell lymphomas, with most of these are resulting from transformation of marginal zone B cells (3). Most common symptoms include diarrhea, lower GI bleeding, weight loss and abdominal pain (6, 9-13).

In this paper, we presented an Intestinal lymphoma in a 53-year- old man with complaints of intermittent bloody diarrhea and abdominal pain.

Case presentation

The patient is a 53-year- old man with complaints of intermittent bloody diarrhea and abdominal pain since six months ago. In his past medical history, there has been CBC disturbance during a tonsillec- tomy surgery three years ago, which was followed as CLL and treated with chlorambucil since two years ago. His laboratory profile includes Hb 11.3, MCV 92.5, Plt 122, CRP-, ESR 20, ANCA-, ASCA – and positive fecal Calprotectin (779 µg/g). The re- sponsible physician referred him for a colonoscopy, which revealed diffuse ulceration in rectosigmoid, descending colon and also cecum (Figures 1-3). Mul- tiple biopsies were obtained and pathology department reported crypt destructive colitis consistent with ulcerative colitis. Treatment with oral mesalazine was started with a partial response, but the patient reported recurrence symptoms, including abdominal pain, bloody diarrhea, low grade in- termittent fever and weight loss since one month ago. The therapy with mesalazine was stopped and another colonoscopy was requested.

On second colonoscopy, there were patchy ery- thema, superficial ulceration, loss of vascularity and congestion in rectosigmoid. Descending colon was reported as normal while transverse colon was involved by submucosal polypoid lesions, patchy erythema, loss of vascularity and congestion. The rest of the exam, including terminal ileum was also normal (figure 4). Cecal and rectal biopsy speci- mens reported were infiltrated by atypical lym- phoid cells. An immunohistochemical (IHC) study was performed on the biopsy specimens and the IHC profile was reported as CD3-, CD10-, CD23-, CD20+, CD5+ and BCL2+ (figure 5, 6). The patient was diagnosed as colonic diffuse large B cell lym- phoma and referred for systemic chemotherapy.

Discussion

Primary GI non-Hodgkin's lympho- mas are heterogeneous diseases that mostly in- volve the stomach (4). Primary lymphoma of the colon is a rare tumor of the GI tract and comprises only 0.2-1.2% of all colonic malignancies (5). They most commonly involve the cecum followed by the right colon and sigmoid and are more frequent among males (6-8). Presenting symptoms include diarrhea, lower GI bleeding, and nausea and vomiting secondary to low-grade obstruction, weight loss, abdominal mass, change in bowel habits, hematochezia, ob- struction, intussusceptions and acute peritonitis due to the intestinal perforation (6, 9-13). They sometimes concomitantly involve patients with ulcerative colitis but most of the lymphoma that involve IBD patients are extra intestinal (14).

Based on colonoscopy appearance, they can be classified as mucosal, polypoid or massive type.
Almost half of cases present as mucosal type and characterize by small superficial erosive and hy- peremic changes within a mucosal layer and can mimic features of ulcerative colitis (15).

Therapeutic approaches described in two subsets include: Radical tumor resection (hemicolectomy) plus multi-agent chemotherapy in early stage pa- tients and biopsy plus multidrug chemotherapy in advanced stage patients. Radiotherapy is reserved for specific cases; surgery alone can be considered as an adequate treatment for patients with low- grade NHL disease that does not infiltrate beyond the sub mucosa. Although resection plays an im- portant role in the local control of the disease and in preventing bleeding and/or perforation, it rarely eradicates the lymphoma by itself. Those with lim- ited stage disease may enjoy prolonged survival when treated with aggressive chemotherapy (16, 17). However, the optimal management of primary lymphoma of the colon and rectum has never been determined by randomized trials (18).

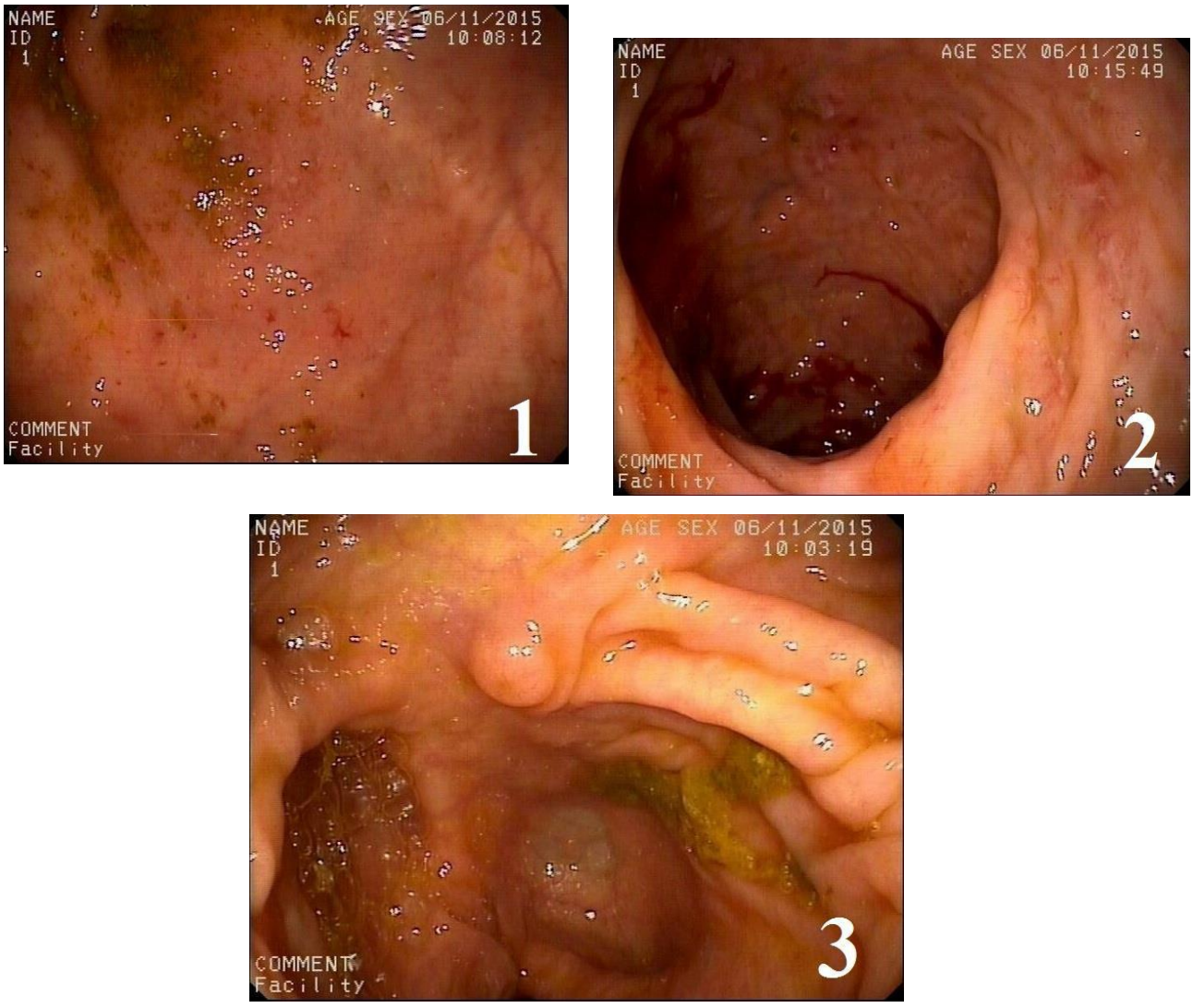

Figure 1: Colonoscopic view

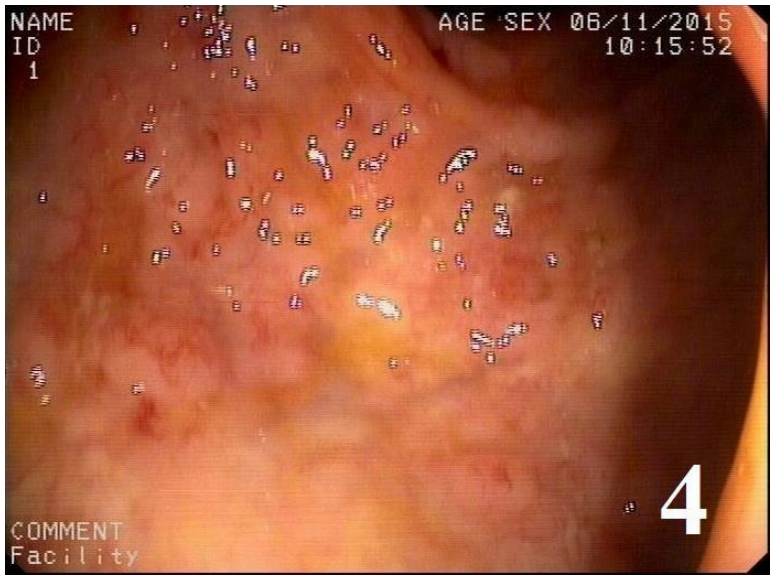

Figure 2: Terminal ileum view

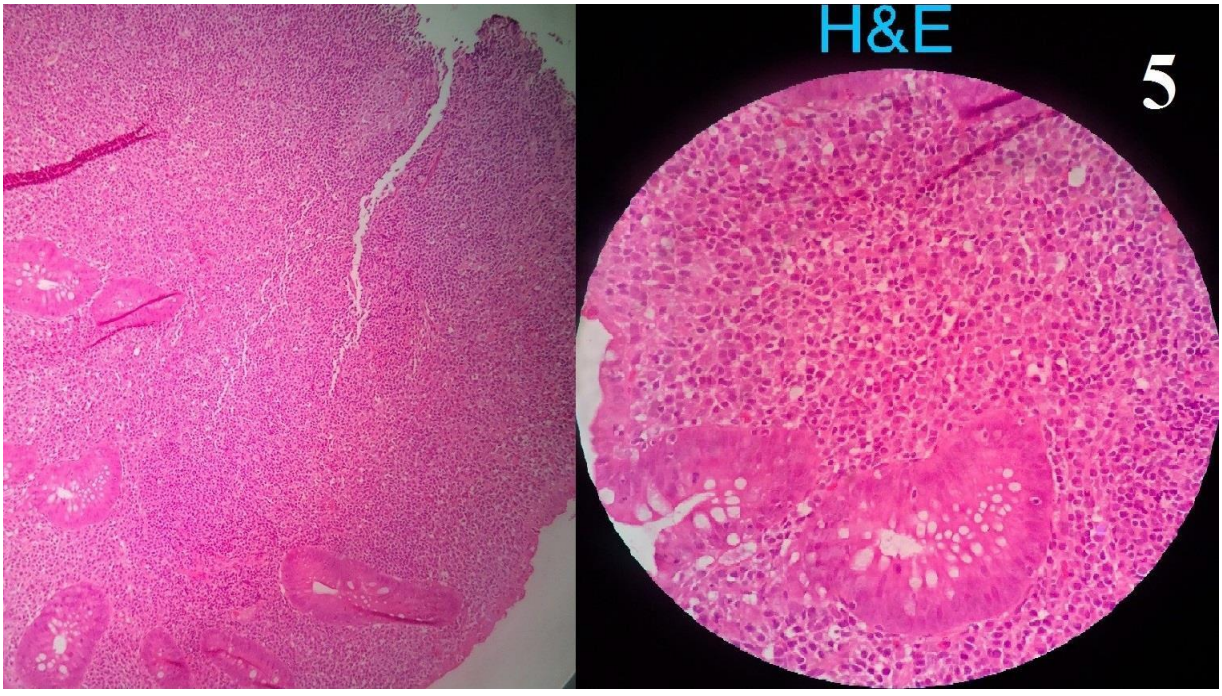

Figure 3: Microscopic view

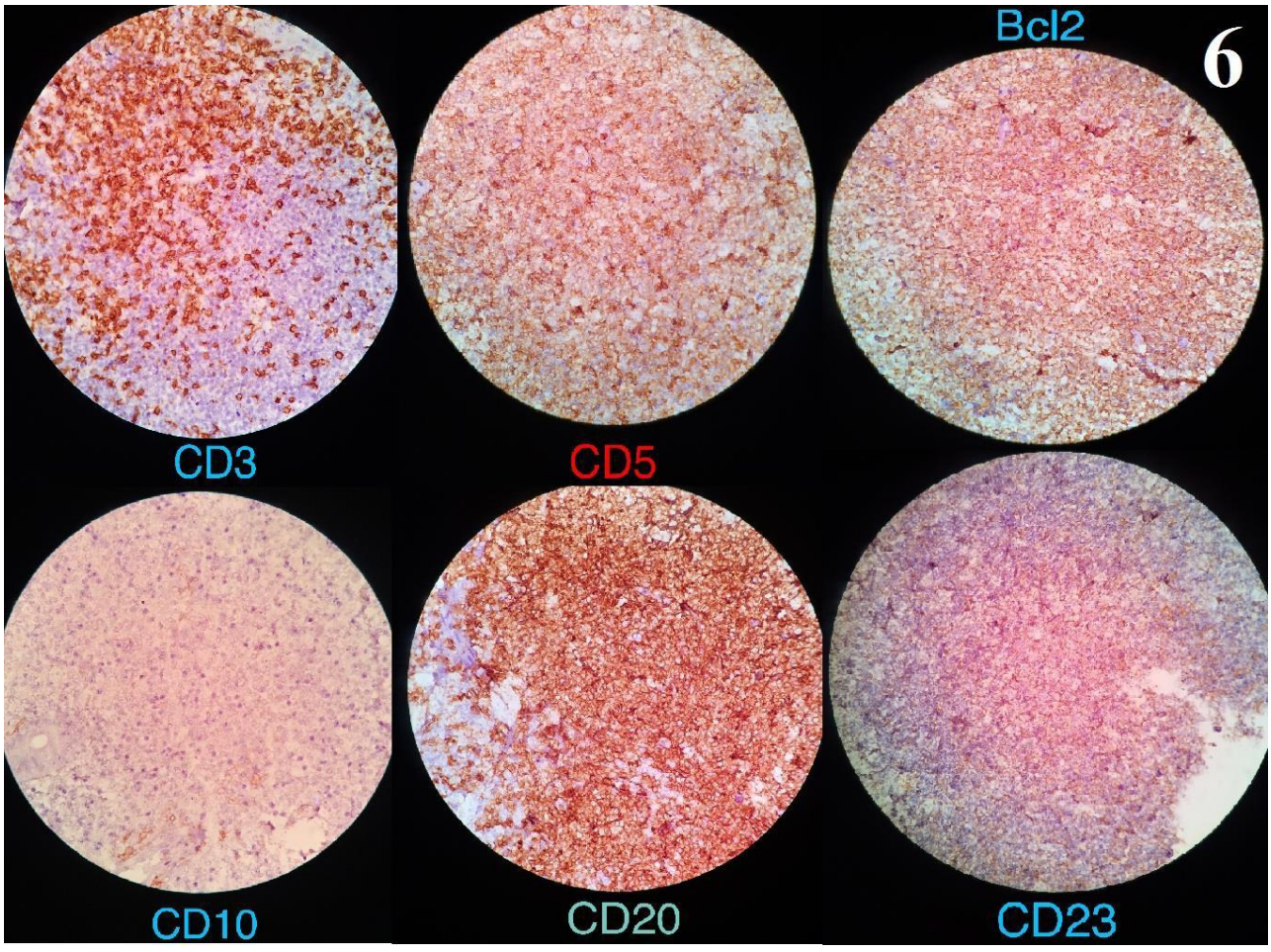

Figure 4: IHC view

Conclusion

Colonic lymphomas can be presented as a mucosal type and characterized by small superficial erosive and hyperemic changes within a mucosal layer that can mimic the features of ulcerative colitis, so in any refractory IBD, their possibility should keep in mind.

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References

1. Ducreux M, Boutron MC, Piard F. A 15-year series of gastro- intestinal non-Hodgkin's lymphomas: A population-based study. *Br J Cancer*. 1998; 77(3):511-14.
2. Isaacson PG. Gastrointestinal lymphomas of T- and B-cell types. *Mod Pathol*. 1999; 12(8):151-8.
3. Jaffe ES, Harris NL, Stein H, Vardiman JW . *Pathology and ge- netics of tumours of haematopoietic and lymphoid tissues*, Lyon: IARC Press. 2001;13(6):121-9.
4. Koch P, del Valle F, Berdel WE. Primary gastrointestinal non- Hodgkin's lymphoma: I. Anatomic and histologic distribution, clinical features, and survival data of 371 patients registered in the German Multicenter Study GIT NHL 01/92. *J Clin Oncol*. 2001; 19(7):3861-73.
5. Tauro LF, Furtado HW, Aithala PS, D'Souza CS, George C, Vish-numoorthy SH. Primary lymphoma of the colon. *Saudi J Gastroen-terol*. 2009; 15(4):272-9.
6. Gonzalez QH, Heslin MJ, vila-Cervantes A. Primary colonic lymphoma. *Am Surg*. 2008; 74(8):214-16.
7. Dionigi G, Annoni M, Rovera F. Primary colorectal lympho- mas: Review of the literature. Surg Oncol. 2007; 16(8): 169-71.
8. Musallam KM, Hatoum HA, Barada K, Taher AT, Salem ME, Malek EM, Shamseddine AI. Primary colorectal lymphoma. *Med Oncol*. 2010;27(2):249-54.
9. Bairey O, Ruchlemer R, Shpilberg O. Non-Hodgkin's lymphomas of the colon. *Isr Med Assoc J*. 2006; 8(6):832–5.
10. Zinzani PL, Magagnoli M, Pagliani G, Bendandi M, Gherlinzoni F, Merla E, et al. Primary intestinal lymphoma: Clinical and thera- peutic features of 32 patients. *Haematologica*. 1997; 82(4):305–8.
11. Zighelboim J, Larson MV. Primary colonic lymphoma: Clinical presentation, histological features, and outcome with combina- tion chemotherapy. *J Clin Gastroenterol*. 1994; 18(7):291–7.
12. Chiang JM, Lin YS. Tumor spectum of adult intussusception. *J Surg Oncol*. 2008; 98(8):444–7.
13. Zubaidi A, Al-Saif F, Silverman R. Adult intussusception: A retro- spective review. *Dis Colon Rectum*. 2006; 49(8):1546–51.
14. Greenstein AJ, Mullin GE, Strauchen JA, Heimann T, Janowitz HD, Aufses AH, Sachar DB. Lymphoma in inflammatory bowel disease. *Cancer*. 1992; 69(5):1119-23.
15. Wang MH, Wong JM, Lien HC, Lin CW, Wang CY. Colonoscopic manifestations of primary colorectal lymphoma. *Endoscopy*. 2001; 33(7):605-9.
16. Tauro LF, Furtado HW, Aithala PS, D'Souza CS, George C, Vish-numoorthy SH. Primary lymphoma of the colon. *Saudi J Gastroen-terol*. 2009; 15(4):273-9.
17. Tondini C, Giardini R, Bozzetti F, Valagussa P, Santoro A, Bertulli R, et al. Combined modality treatment for primary gastrointesti- nal non- Hodgkin's lymphoma: The Milan cancer Institute experi- ence. *Ann Oncol*. 1993; 42(4):831–7.
18. Stanojevic GZ, Nestorovic MD, Brankovic BR, Stojanovic MP, Jo- vanovic MM, Radojkovic MD. Primary colorectal lymphoma: An overview. *World J Gastrointest Surg*. 2011; 15(8):141-9.