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Germinal Center-Type Diffuse Large B-Cell Lymphoma Presenting as A Rectosigmoid Mass in A 75-Year-Old Patient: A Case Report

I.Radouane[1*], I.Karam[1], M. El Beyeg[2], H.Chahdi[2], S.berrag[1], F.Nejjari[1], T.Adioui[1], M.Tamzaourte[1]

[1]Departement of Gastroenterology I, Mohamed V Military Hospital
[2]Department of Anatomical Pathology, Mohamed V Military Hospital

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***Corresponding author:** I. Radouane
Departement of Gastroenterology I, Mohamed V Military Hospital

Abstract **Case Report**

Primary rectal lymphoma is an exceptionally rare form of extranodal non-Hodgkin lymphoma with nonspecific clinical manifestations, often leading to delayed diagnosis. We report the case of a 75-year-old patient presenting with progressive asthenia, chronic diarrhea, abdominal pain, significant weight loss, and nocturnal fever. Clinical examination revealed peripheral lymphadenopathy without hepatosplenomegaly. Computed tomography demonstrated circumferential rectosigmoid wall thickening associated with multiple abdominopelvic and inguinal lymphadenopathies. Rectosigmoidoscopy identified an ulcerative-proliferative circumferential rectosigmoid lesion, and histopathological examination of biopsies showed diffuse large atypical lymphoid cell proliferation. Immunohistochemistry revealed strong CD20 and BCL6 expression, absence of MUM1 expression, and a high Ki-67 proliferation index, consistent with germinal center-type diffuse large B-cell lymphoma according to the 2022 WHO classification. The patient was managed with systemic immunochemotherapy using the R-CHOP regimen, with a favorable initial response. This case highlights the diagnostic challenges posed by primary rectal lymphoma due to its rarity and nonspecific presentation, as well as the essential role of histopathology and immunophenotyping in establishing the diagnosis. Reporting such cases contributes to improving awareness, diagnostic accuracy, and therapeutic decision-making for this uncommon but aggressive malignancy.

Keywords: Primary rectal lymphoma, Non-Hodgkin lymphoma, Diffuse large B-cell lymphoma, Gastrointestinal lymphoma, Immunohistochemistry, R-CHOP chemotherapy, Case report.

INTRODUCTION

Non-Hodgkin lymphoma (NHL) is a malignant hematologic disorder that primarily involves lymph nodes but can also develop in extranodal sites. The gastrointestinal tract represents the most common extranodal location, with gastric involvement being predominant. Primary rectal lymphoma, however, remains an exceptional entity, accounting for a very small proportion of colorectal tumors. Its nonspecific clinical presentation often delays diagnosis, underscoring the importance of reporting new cases to enhance understanding of its diagnostic and therapeutic features.

CASE REPORT

This is a 75-year-old patient with a history of hypertension treated with amlodipine, a 30-year history of smoking cessation, occasional alcohol use ceased 20 years ago, and two previous surgical interventions for femoral fractures. The onset of the disease dates back five months, characterized by progressively worsening generalized fatigue, followed by chronic diarrhea and abdominal pain, more pronounced in the left hypochondrium and flank.

The condition evolved in the context of general health deterioration, with a weight loss of 10 kg over five months and undocumented nocturnal fever. Clinical examination revealed pallor of the skin and mucous membranes, bilateral mandibular lymphadenopathy (up to 2 cm) and bilateral inguinal lymphadenopathy (1.5 cm), without hepatosplenomegaly or other notable abnormalities.

A thoraco-abdomino-pelvic CT scan showed a sigmoid process approximately 3 mm in maximum thickness, extending over 10 cm, associated with

multiple retroperitoneal, meso-sigmoid, mesorectal, internal and external iliac, as well as inguinal lymphadenopathies, the largest measuring 30 mm in short axis at the right internal iliac region.

Rectosigmoidoscopy revealed an ulcerative-proliferative circumferential rectosigmoid lesion, approximately 10 cm in length, bleeding easily upon contact. Histological examination of biopsies demonstrated a diffuse malignant lymphoid proliferation composed of large atypical cells with vesicular nuclei and prominent nucleoli, obliterating the glandular architecture. Immunohistochemistry showed strong expression of CD20 and BCL6, negativity for MUM1, and a high proliferation index (Ki-67) estimated at 75%. The overall morphological and immunophenotypic profile was consistent with germinal center-type diffuse large B-cell lymphoma according to the 2022 WHO classification.

The patient was referred to clinical hematology, and the R-CHOP protocol was initiated two months ago, with a good response.

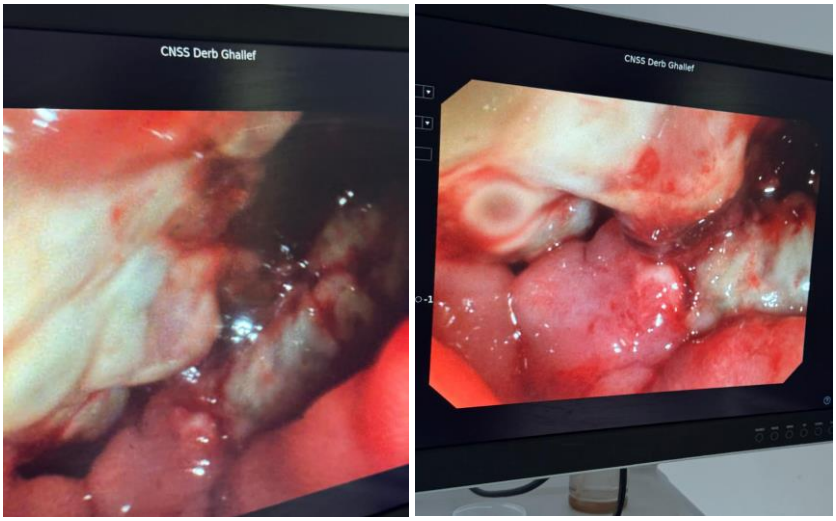
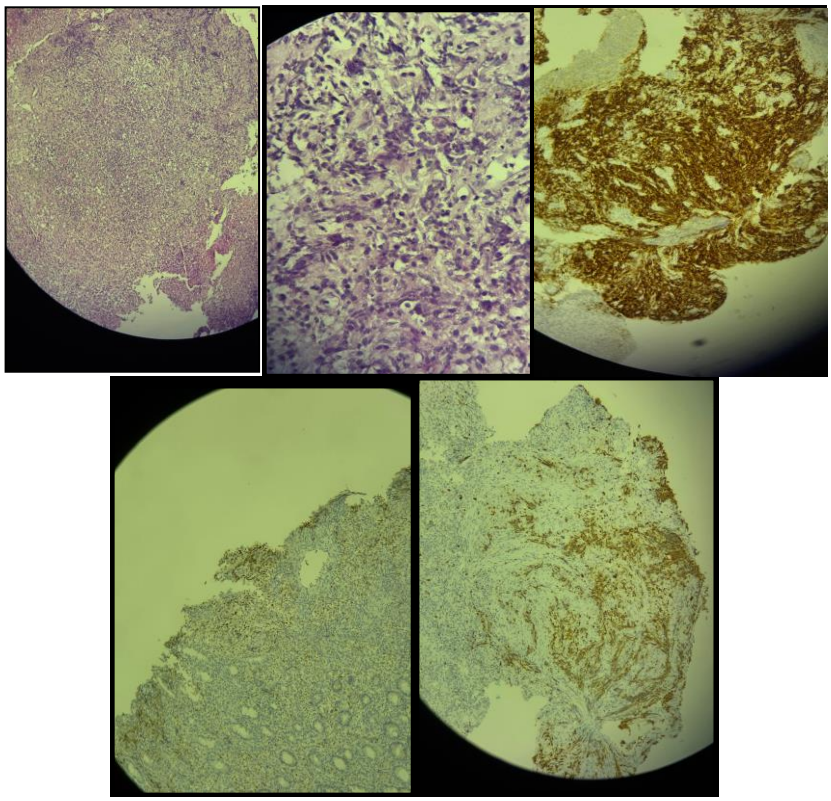


Figure (1-2): Endoscopic appearance of the rectosigmoid lesion



Figures (3-7): Histopathological and immunohistochemical features of the biopsied lesion Fig 3 (10x), Fig 4 (40x): diffuse lymphoid proliferation with large atypical cells. Fig 5: strong CD20 expression. Figure 6: germinal center positivity. Fig 7: high Ki-67 (75%)

DISCUSSION

Gastrointestinal lymphomas represent the most frequent extranodal localization of non-Hodgkin lymphomas (NHL), accounting for 15–20% of all cases (1). Primary extranodal NHL arises outside the lymph nodes and can involve any segment of the gastrointestinal tract, from the oropharynx to the rectum. The most commonly affected sites are the stomach (50–75%), the small intestine (20–30%), and the colon-rectum (10–20%), with a predominance of cecal involvement [1]. Rectal localization remains exceptional, which underscores the clinical relevance of reporting such cases.

Primary rectal lymphoma accounts for 0.1–0.6% of colorectal malignancies and 0.05% of primary rectal neoplasms [2]. Diffuse large B-cell lymphoma (DLBCL) is the most frequent histological subtype involving the colon and rectum [1]. B-cell lymphomas represent approximately 85% of cases, compared with 15% for T-cell types. Immunohistochemical markers such as CD20, CD79a, and CD10 characterize B-cell lymphomas, whereas CD2, CD3, CD4, CD7, and CD8 are associated with T-cell forms [3]. This distribution influences both clinical presentation and biological behavior, with a male predominance and a peak incidence in the sixth to seventh decades of life [1].

Several risk factors have been identified. Viral infections such as Epstein-Barr virus (EBV), HIV, hepatitis C virus (HCV), hepatitis B virus (HBV), and human herpesvirus 8 (HHV-8) can induce lymphocytic transformation or chronic immune stimulation [4]. AIDS-related lymphoma is notable for its aggressiveness and early dissemination. Other contributing factors include immunosuppressive therapy, chronic inflammatory bowel disease, organ transplantation, and prior exposure to chemotherapy and/or radiotherapy [5–6]. Awareness of these factors is essential for guiding follow-up and management.

Clinical presentation is often late and nonspecific, commonly characterized by abdominal pain, altered bowel habits, fever, general weakness, and weight loss [7]. Such nonspecific symptoms delay diagnosis, which relies on imaging and endoscopic evaluation with multiple biopsies. Endoscopically, lesions may appear as ulcerated masses, annular thickening, or mucosal plaques, occasionally resembling lymphomatous polyposis. Radiologically, the typical feature is a concentric thickening of the intestinal wall [5].

The optimal therapeutic approach remains undefined, as most reports consist of small retrospective series or isolated cases [1]. Rectal DLBCL is most often treated with a combination of surgery and chemotherapy, though available studies frequently include other gastrointestinal sites, complicating specific analysis [5]. Surgery is preferred for localized disease, whereas chemotherapy is indicated in nodal or disseminated involvement [1]. The R-CHOP protocol (rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone) remains the standard regimen, occasionally combined with adjuvant radiotherapy depending on stage and localization.

Despite these therapeutic interventions, primary rectal lymphoma remains a rare and aggressive entity with a poor prognosis, with 5-year survival rates estimated between 27% and 33% [8]. The rarity of this localization warrants the publication of additional case reports to improve understanding of its clinical behavior and to standardize therapeutic strategies.

REFERENCES

1. Hastürk D, Koç M, Yıldırım S, *et al.,* *Primary colon lymphomas: An analysis of our experience. * Medicine (Baltimore). 2024;103(19):e63.
2. Jiang C, Gu L, Luo M, Xu Q, Zhou H. *Primary rectal lymphoma: A case report and literature review. * OncolLett. 2015;10(1):43–44.
3. Unal B, Karabeyoglu M, Erel S, *et al.,* *Primary rectal lymphoma: an unusual treatment for a rare case. * Postgrad Med J. 2008;84(992):333–335.
4. Engels EA. *Infectious agents as causes of non-Hodgkin lymphoma. * Cancer Epidemiol Biomarkers Prev. 2007;16(3):401–404.
5. Bilsel Y, Balik E, Yamaner S, Bugra D. *Clinical and therapeutic considerations of rectal lymphoma: a case report and literature review. * World J Gastroenterol. 2005;11(3):460–463.
6. Gay ND, Chen A, Okada CY. *Colorectal lymphoma: Review. * Clin Colon Rectal Surg. 2018;31(5):309–316.
7. Wong MT, Eu KW. *Primary colorectal lymphomas. * Colorectal Dis. 2006;8(7):586–591.
8. Mansour R, Beattie M, Miller J, Haus C. *Diffuse large B-cell lymphoma mimicking a flare of ulcerative colitis. * ACG Case Rep J. 2019;6(3):1–3.