

Management of Rectal lymphoma in a renal transplant patient- experience from the developing world



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ABSTRACT

Rectal lymphomas are of a rare occurrence. We hereby report the case of a middle aged renal transplant patient, who presented 4 years post live related renal transplantation with per rectal bleeding and on workup was found to have rectal lymphoma. Later on he underwent a battery of investigations including Lower GI endoscopy, CT scan, PET scan which confirmed his findings. He was managed with 4 cycles of rituximab and repeat PET scan showed decrease in the size of the lesion.

Key words: Lymphoma; Renal transplant recipient; Rituximab; Sigmoid mass

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INTRODUCTION

Lymphomas are malignant lymphocytes, which may be classified as Hodgkin's lymphoma and non-Hodgkin's lymphoma.¹ Non-Hodgkin's lymphomas may be divided into nodal and extra nodal lymphoma. The gastrointestinal tract is the most common site of extra nodal lymphoma.²

Primary gastrointestinal lymphoma occurs in the absence of systemic disease. Dawson et al,³ established a criterion for the diagnosis of primary colorectal lymphomas in 1961. These include: Lack of superficial palpable lymph nodes at presentation; Chest Xray lacking signs of enlarged mediastinal lymph nodes ; normal white blood cell count;

at surgery, involvement of the regional lymph nodes ; No involvement of the liver and spleen.

Therapeutic approaches of treating gastrointestinal lymphomas still remains controversial and further research is still required. In this paper, we present the case of primary lymphoma of the rectum and focus on the role of chemotherapy in its management.

CASE REPORT

A 47-year-old male who underwent live related renal treatment in March 2015, then later on in May 2019 he was presented in our clinic with per rectal bleed along with a swelling at the perianal region for 15 days. Digital

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rectal examination had shown an increased anal tone, with a palpable mass 2cm away from anal verge at posterior wall, which was soft and mobile. So a sigmoidoscopy was done which showed mild to moderate erythema and edema with loss of vascularity seen involving rectum and distal sigmoid. Multiple biopsies were taken. The biopsy revealed it to be a low-grade non-Hodgkin lymphoma based upon morphological and immunohistochemical stains (IHC markers were applied and showed CD79a, CD 20 both to be patchy positive, while CD 3,5 and 43 were positive in the background cells, Mum1 was positive and Ki67 was positivity in <5% of atypical lymphoid cell) as shown in Image I and II. Hence, we proceeded with a CT scan Chest, Abdomen and Pelvis (CT CAP) which showed minimal asymmetrical soft tissue thickening seen in the distal rectum just above the internal sphincter. It measured 6mm in maximum dimension. No definite evidence of a mass lesion was identified nor any evidence of lymphadenopathy was noted. Rest of the scan was normal. A PET CT scan was advised after oncological consult, which showed a

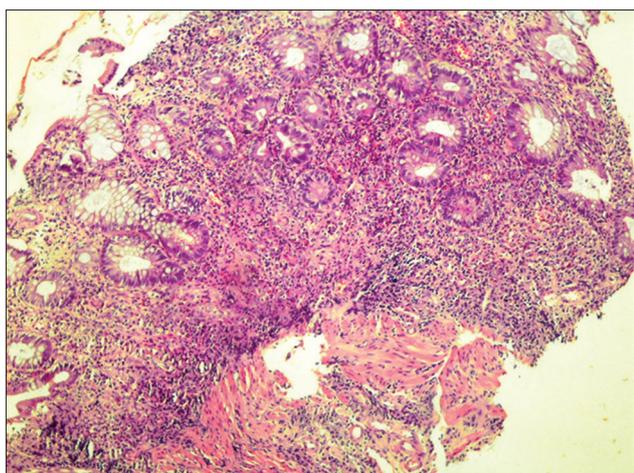


Image I: Shows the sigmoid mucosa with inflammatory cells

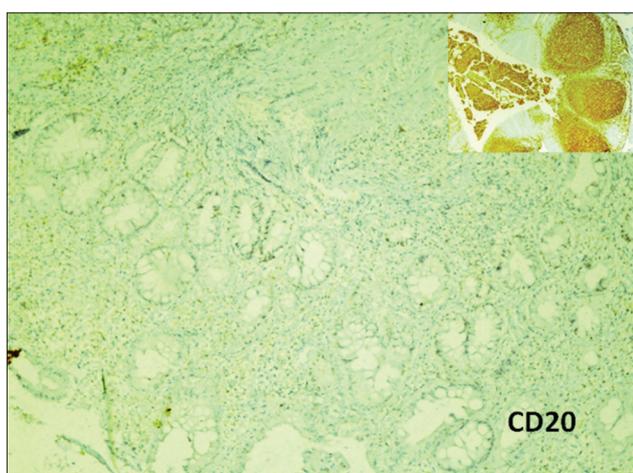


Image II: Shows the same sigmoid mucosa showing patchy positivity for CD 20 IHC marker

FDG avid mural thickening involving left posterolateral part of rectum, maximum thickness measures 1.3cm. No other abnormal FDG avid lesion was seen. The oncologist was again consulted and 4 cycle of CHOP with Rituximab 375mg/m² three weekly were given and for response evaluation a repeat PET scan was advised. The repeat PET scan showed normal uptake with mild FDG mural thickening involving the posterior wall of the rectum. As compared to previous scan there was a slight interval decrease in size of the lesion in the rectum seen.

DISCUSSION

Primary malignant lymphoma of the colon is uncommon and accounts for only 0.2-0.4% of all colonic malignancies and 10-15% of all primary lymphomas of the gastrointestinal tract, which themselves account for about 30% of extra nodal lymphomas.^{4,8} The most frequent location of colonic lymphoma is the cecum followed by the rectum and ascending colon.⁹

Majority of these patients present with non-specific symptoms or have negative rectal biopsy, which causes delays in diagnosis and an advanced stage at presentation. Rectal bleeding may be observed in these patients just like primary rectal carcinoma.¹⁰ Endoscopy with biopsy along with an abdominal CT are valuable diagnostic modalities.

When the CT scan findings reveal a combination of a focally or diffusely infiltrative process of the colon and extensive abdominal and/or pelvic adenopathy, lymphoma should be the primary consideration in the differential diagnosis and must be excluded by endoscopic biopsy. However, if the adenopathy is not associated with a primary colorectal lymphoma, it might be difficult to distinguish this lesion from a primary adenocarcinoma of the colon by radiologic methods. This difficulty arises predominantly in the settings of solitary mass lesions. Primary colorectal lymphomas manifests as a discrete mass, which tends to have a greater depth of mural invasion than the infiltrative lesions.

The two risk factors associated with the development of the primary colorectal lymphoma: are inflammatory bowel disease and immunosuppressive state (which can be due to post transplant, AIDS, or immune disorder).

As there is only a low incidence of the disease, there have been no prospective studies evaluating the relative benefits of adjuvant chemotherapy, radiotherapy, surgery or a combination of treatments for primary rectal lymphoma.¹¹ DLBCL of the colorectum generally has a uniform method of treatment: chemotherapy followed by aggressive surgical resection.

Lymphoma of the rectum although is a very rare entity, controversy still exists about its treatment.

CONCLUSION

Some authors still believe that medical management should be considered as the primary therapy even in surgically operable localized tumours. This case report shows some promises in treating the colorectal lymphoma by nonsurgical management.

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Author's contribution:

MD- Managed the patient and conceptualized the study; **ZM-** Managed the patient and wrote the first draft; **FH-** Edited and wrote the first draft; **NA-** Wrote the second draft; **NHL-** Edited the final version of the manuscript.

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