*IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*
*e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 19, Issue 12 Ser.6 (December. 2020), PP 01-04*
*www.iosrjournals.org*

# Primary Retroperitoneal Diffuse Large B Cell Lymphoma- A Case Report

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***Abstract***
***Background:****Diffuse large B cell lymphoma can develop in the lymph nodes or in "extranodal sites" such as the gastrointestinal tract, testes, thyroid, skin, breast, bone, brain, or essentially any organ of the body. It may be localized or generalized. Despite being an aggressive lymphoma,Diffuse large B cell lymphoma L is considered potentially curable.*
***Case Report:****we are presenting our experience in diagnosing and management of 55 years old male patient with primary retroperitoneal diffuse large B cell lymphoma. Accurate histopathological diagnosis of lymphomas are crucial in formulating chemotherapeutic regimens.*
***Discussion:****High index of suspicion for lymphoma in evaluating retroperitoneal mass is needed, since primary treatment modality for lymphomas are chemotherapy.*
***Key words:****Diffuse large B cell lymphoma,retroperitoneal mass,immunohistochemistry.*

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Date of Submission: 28-11-2020 Date of Acceptance: 13-12-2020

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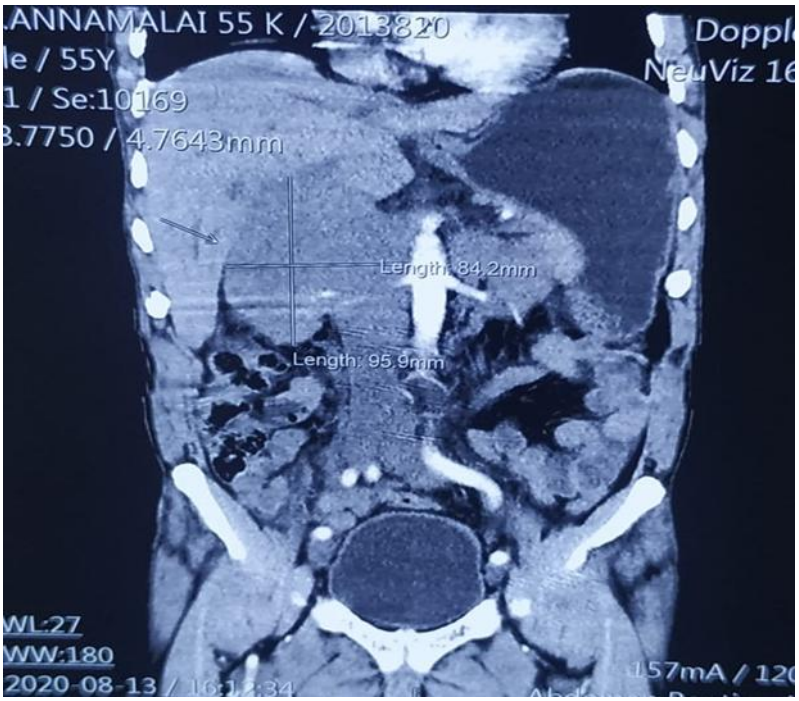
## I. Introduction

In spite of the fact that very uncommon nature, retroperitoneum can harbor threatening lymphomas. On the grounds that the anatomical area is unprecedented and the symptoms are rare, the diagnosis is ordinarily late and challenging. Imaging strategies such as magnetic resonance imaging, computed tomography (CT) and positron emission tomography-computed tomography (PET-CT), image guided needle biopsy, can characterize and find the tumor. Only few cases of primary retroperitoneal diffuse B cell lymphoma has been reported. Several types of nonhodgkin's lymphoma has been described. They are diffuse large B-cell lymphoma, follicular lymphoma, mantle cell lymphoma and marginal zone B-cell lymphoma of mucosa-associated lymphoid tissue (MALT) type. Here we are communicating our experience with primary retroperitoneal B cell lymphoma in 55 years old male with abdominal pain.

## II. Case Report

A 55 years old male patient came to CMCH general surgery OP department with chief complaints of abdominal pain which was dull aching type of pain, over epigasric , right hypochondrium and right lumbar regions for 20 days. He is an alcoholic and smoker for 15 years. He had no comorbidities. History of loss of appetite and loss of weight was present for last 3months. There was no history of fever, night sweats, vomiting, constipation, diarrhea, jaundice, GI bleeding, breathlessness, cough, chest pain, weakness, seizures, headache and trauma. On examination he was anaemic, no generalized lymphadenopathy. Per abdomen, showed tenderness over right hypochondrium, right lumbar and epigastric regions, bowel sounds present, no mass, and organomegally. Respiratory and cardiovascular systems were clinically normal. Blood investigations showed HB-7.2g%, total WBC count,platelet count, RBS, RFT, LFT, serum electrolytes were normal. Lactate Dehydrogenase (LDH), CEA, CA 19-9, Human Immuno Deficiency (HIV), Hepatitis B surface Antigen (HBsAG) and Hepatitis C Virus (HCV) were normal.

In Ultrasound abdomen multilobulatedheteroechoeic mass lesion noted in retroperitoneal region, right side, abutting the inferior surface of liver, and anterior surface of right kidney. CECT abdomen revealed multilobulated soft tissue lesion of size 86*84*78mms, encasing right renal vessels, the lesion extends from the inferior surface of right lobe of liver till lower border of L2 (middle of right kidney), the lesion abuts the anterior surface of right kidney with loss of fat intersurface, the lesion also indents over right pre and paravertebral space involving psoas muscle, the lesion encases and pushes the IVC. Aorta is pushed by aortocaval and prevertebral involvement. Multiple other macrolobulated nodules seen in left upper para aortic region. Few small discrete small nodes seen in celiac and superior mesenteric region.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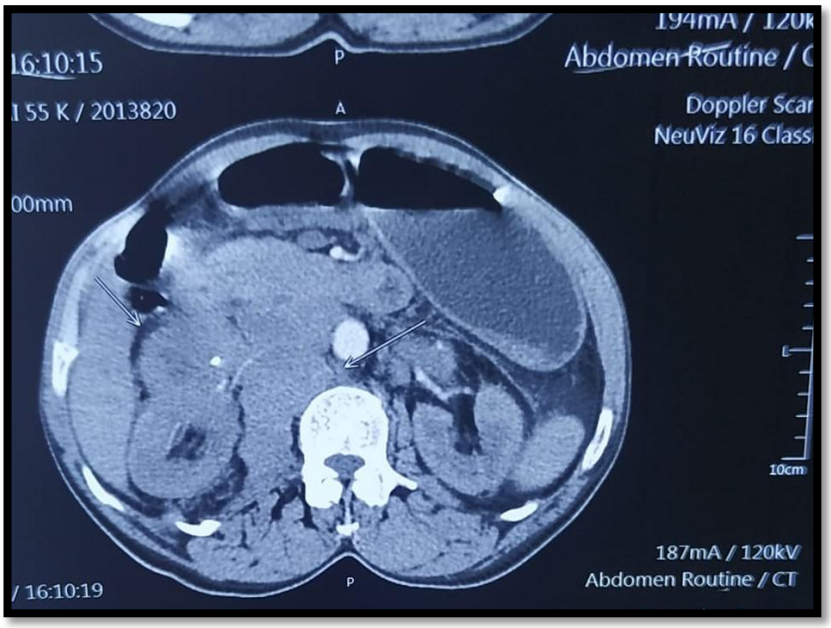
(A)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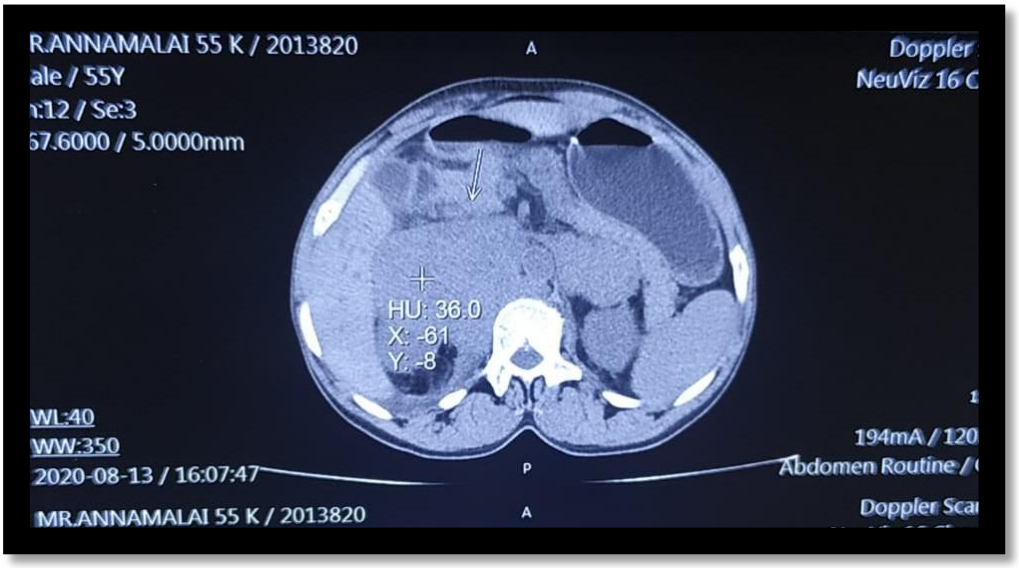
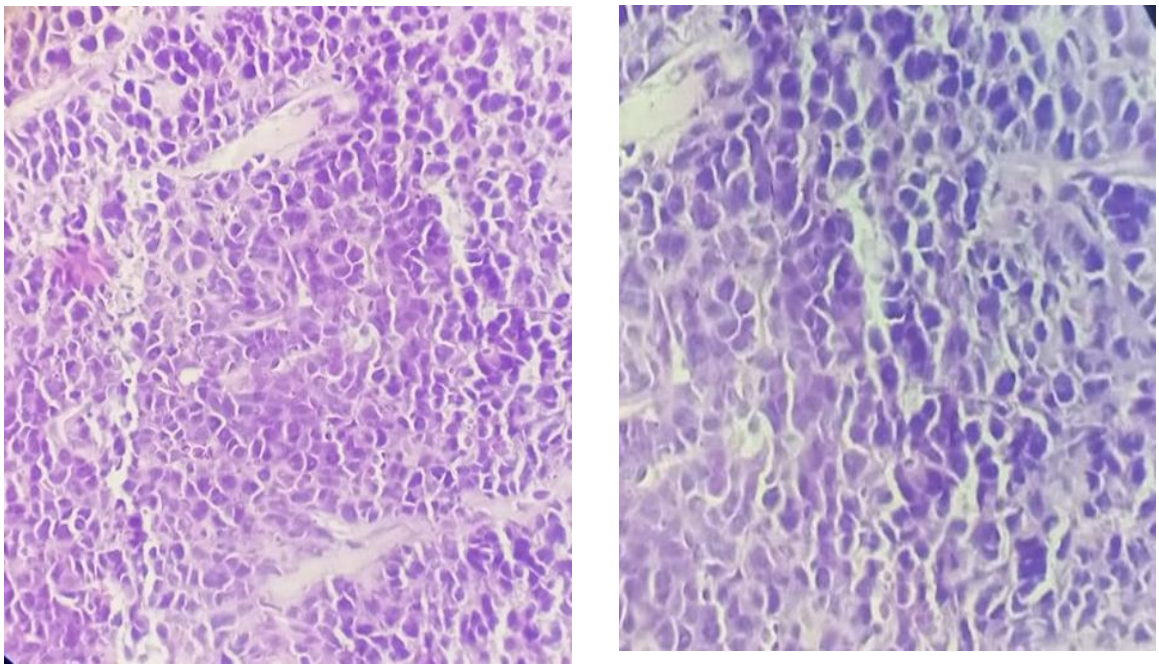
**(B)**




**(C)**

**FIG-A, B & C: CECT ABDOMEN & PELVIS – SHOWING RETROPRITONEAL MASS**

CT guided biopsy done and sent for histopathology examination, which showed medium to large tumor cells with dark nuclei having moderate to scant eosinophilic cytoplasm, nucleoli not seen, many apoptotic bodies made out and no evidence of necrosis, suggestive of Non Hodgkin lymphoma-diffuse large B cell lymphoma or poorly differentiated neuroendocrine tumor. Biopsy slides further evaluated by immunohistochemistry stains which revealed strong positive immunoreactivity in >80% of tumor cells for CD45 and CD20, positive in more than 60% of cells for BCL6 and negative for markers CD3, ALk, synaptophysin, chromogranin, vimentin, EMA. IHC pattern consistent with diffuse large B cell lymphoma.



**(a)** **(b)**

**FIG – a & b:HISTOPATHOLOGY SLIDES**

Staging workup done. Bone marrow aspiration showed erythroid series with micronormoblastic and megaloblastic maturation. No atypical cells or blast cell. CECT-chest findings were minimal right pleural effusion with linear areas of consolidation in right middle and anteriorbasal segments of bilateral lower lobes and no significant mediastinal lymphadenopathy. CECT brain and CECT neck with skull base were

unremarkable. Multidisciplinary tumor board consultation obtained and patient was started on R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisolone) chemotherapy regimen.

## III. Discussion

Extra nodal lymphoma occurs in roughly 40% of all patients with lymphoma, extra nodal involvement is more common with non-Hodgkin lymphoma (NHL). It causes numerous deaths around the world, and its frequency is expanding. Diffuse large B-cell lymphoma (DLBCL) is the most common histological NHL subtype in adult patients.

Ann Arbor staging system is used for nonhodgkin's lymphoma. Because of several anatomical location and paucity of symptoms, diagnosis and treatment of lymphoma is challenging. The term "B symptoms" is used to refer to fever, drenching night sweats and loss of more than 10 percent of body weight over 6 months. B symptoms are significant to the prognosis and staging of the disease. Other NHL symptoms, such as itching and fatigue, do not have the same prognostic importance as B symptoms and are not considered to be B symptoms. There are about 600 lymph nodes in the body. The most common early sign of NHL is painless swelling of one or more lymph nodes. Depending upon the location, Common symptoms of NHL include, Painless swelling in one or more lymph nodes, Unexplained fever, Drenching night sweats, Persistent fatigue, Loss of appetite, Unexplained weight loss, Cough or chest pain, Abdominal pain, Sensation of bloating or fullness (due to an enlarged spleen), Itchy skin, Enlargement of the spleen or liver and Rashes or skin lumps.

Although CT scan is the diagnostic modality of choice[3],Magnetic resonance imaging (MRI), offers superior soft tissue contrast in comparison with CT, they are necessary for the diagnostic because they allow the lesion localization and characterization. Biopsy or tumor resections are the tools that allow the definitive diagnosis[4]. Indolent NHL is generally considered incurable. Several regimens have been commonly used; however, treatment has never been shown to extend overall survival. The poly-chemotherapy with CHOP represents the standard chemotherapy regimen for NHL treatment with good outcome, and few and acceptable side-effects[2]. New strategies with retuximab, a chimerical anti CD20 IgG1 monoclonal antibody which is a cell surface protein that occurs almost exclusively in mature B-cells, are used to improve the prognosis of these patients[5]. The prognosis has improved in recent years owing to the development of various aggressive chemotherapeutic regimens depending on the histological type, stage and age of each patient. Complete response is obtained in about 45–53% of cases with long term survival of 30–37%[2].

## IV. Conclusion

Early diagnosis and commencement of chemotherapy is crucial to ensure good prognosis, particularly in aggressive tumors. Image guided biopsy and immunohistochemistry staining are important in diagnosing and treatment of retroperitoneal lymphoma.

**CONFLICTS OF INTEREST**

There is no conflict of interest.

## References:

[1]. F. d'Amore, B.E. Christensen, H. Brincker, et al.Danish LYFO study group: Clinicopathological features and prognostic factors in extranodal non-Hodgkin lymphomas Eur J Canc, 27 (1991), pp. 1201-1208

[2]. C. Fulignati, P. Pantaleo, G. Cipriani, et al.An uncommon clinical presentation of retroperitoneal non-Hodgkin lymphoma successfully treated with chemotherapy: a case report World J Gastroenterol, 11 (2005), pp. 3151-3155

[3]. D. Karaosmanoglu, M. Karcaaltincaba, B. Oguz, D. Akata, M. Ozmen, O. AkhanCT findings of lymphoma with peritoneal, omental and mesenteric involvement: peritoneal lymphomatosis Eur J Radiol, 71 (2009), pp. 313-317

[4]. S.J. Vinnicombe, R.H. ReznekComputerised tomography in the staging of Hodgkin's disease and non-Hodgkin's lymphoma Eur J Nucl Med MolImag, 30 (2003), pp. 42-55

[5]. P. Feugier, A. Van Hoof, C. Sebban, et al.Long-term results of the R-CHOP study in the treatment of elderly patients with diffuse large B-cell lymphoma: a study by the Grouped'Etude des Lymphomes de l'Adulte J ClinOncol, 23 (2005), pp. 4117-4126Sircar S, Taneja VA.

Dr.P.Silambarasan, et. al. "Primary Retroperitoneal Diffuse Large B Cell Lymphoma- A Case Report." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 19(12), 2020, pp. 01-04.