HODGKIN LYMPHOMA INVOLVING SPLEEN DIAGNOSED ON USG GUIDED ASPIRATION

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INTRODUCTION- Hodgkin lymphoma (HL) is an uncommon malignancy involving lymph nodes and the lymphatic system[1]. The spleen is involved in about 30% of all Hodgkin lymphoma and 30-40% of patients with systemic non-Hodgkin lymphoma (NHL) . Most patients are diagnosed between 15 and 30 years of age, followed by another peak in adults aged 55 years or older. Lymphoma patients often present with fever, night sweats and weight loss. CHL is characterized by the presence of Reed-Stern-berg cells in an inflammatory background[1].

CASE REPORT- A 20 year male presented with complaints of fever especially in evening hours, pain & swelling in left hypochondrium since 25 days. On performing USG abdomen, it showed splenomegaly along with multiple infiltrations & multiple enlarged lymph nodes in right iliac fossa (para-aortic ,peripancreatic, mesntric & periportal region). CECT whole abdomen was advised to rule out Koch's abdomen which showed hypoenhancing abdominal lymphadenopathy with multiple non-enhancing splenic parenchymal lesions suggestive of lymphoma & it also showed moderate hepatomegaly.

USG guided FNAC was taken from splenic SOL which showed cellular cytosmears comprising of a background of lymphoid cells admixed with scattered plasma cells and few eosinophils. The smears also showed numerous scattered mononuclear, binucleate and multinucleated cells. Many scattered huge & bizarre cells also seen.. Cells show abundant fragile pale cytoplasm with large nuclei showing hyperchromasia and large eosinophilic nucleoli. Overall cytomorphological features were in favor of Lymphoproliferative disorder.

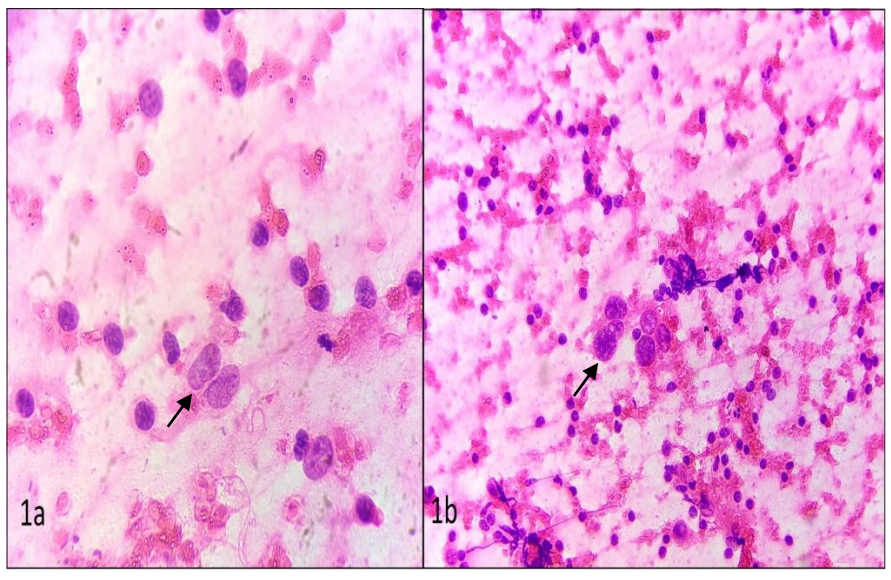

Fig 1a-Binucleate cells in inflammatory background; 1b- Scattered mononuclear bizarre cells (H &E Stain-40X).

On examining splenic aspirate, patient was called to the SMS pathology department for clinical examination. Patient also had multiple cervical nodes on right side of neck. Aspiration was taken from the cervical node, which showed same cytomorphological features as of splenic aspirate examined. A biopsy from cervical node with marker study was performed which showed loss of normal architecture of lymph node & was replaced by polymorphous population of lymphocytes admixed with plasma cells, histiocytes & few eosinophils. Amidst these mononucleated & monolobated large cells were seen with prominent eosinophilic nucleoli, thereby confirmed the diagnosis of Hodgkin's lymphoma. Marker study was advised for exact histogenesis which confirmed Classical Hodgkin's lymphoma- Nodular Sclerosing type. RS cells were positive for CD30 and negative for CD20 & LCA

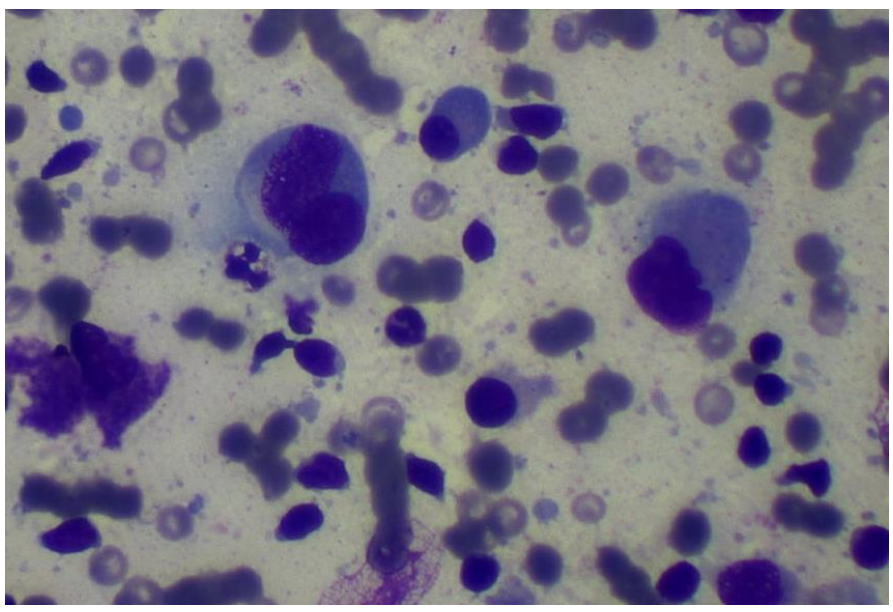

Fig 2-Binucleate cells in the background of lymphoid cells & plasma cells (Giemsa-40X).

DISCUSSION- Hodgkin's lymphoma accounts for approximately 30% of all lymphomas & it comprises of two entities: Classic Hodgkin lymphoma and Nodular lymphocyte predominant Hodgkin lymphoma. Classic Hodgkin lymphoma mainly shows- atypical mononuclear cells, Reed Sternberg cells and variable number of eosinophils, plasma cells and histiocytes in a background population of lymphocytes[2]. Immuophenotype of Classic Hodgkin lymphoma - Reed Sternberg cells CD30, CD15, and MUM1. The Reed Sternberg cells in classic variant are often but not always negative for B-cell markers CD20 and CD79a[2]. In this case RS cells were positive for CD30 and negative for CD20 and LCA.

CONCLUSON- Spleen is involved in about 20-30% of all Hodgkin lymphoma. Workup should include a thorough history and physical examination; standard laboratory tests, PET/CT, and diagnostic contrast-enhanced CT. An adequate USG guided Fine needle aspiration should be performed if clinically indicated and if it indicates towards lymphoproliferative disorder, excisonal lymph node biopsy with marker study is recommended for exact histogenesis.

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