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A Rare Case of Axillary Non Hodgkin Burkittlymphoma (BL) Associated with HIV: A Case Report

Irfan Ansari[1], Mehnaz Akhtar[2]

Abstract: ***Burkitt's lymphoma is a high - gradenon - Hodgkin lymphoma which can be due to sporadic, human immunodeficiency virus associated or endemic subtypes. Endemic commonly occur in jaw, while sporadic most commonly occur in abdomen and human immunodeficiency virus associated Burkitt lymphoma is aggressive. Burkitt lymphoma most commonly present with abdominal presentation. Drugs like TNF antagonist, phenytoin, digoxin, are also associated with non - Hodgkin lymphoma. Moreover, organic chemicals, pesticides, phenoxy - herbicides, wood preservatives, dust, hair dye, solvents, chemotherapy, and radiation exposure are also associated with the development of NHL [1] [2]***

Keywords: Burkitt lymphoma, Human immunodeficiency virus, axillary region, excision and biopsy, pet scan, immunohistochemistry

1. Case Report

A 34 - year - old male presented to department of surgery, Muzaffarnagar with 3 - month history of painless swelling in right axilla initially the swelling was small in size which rapidly increased in size. On physical examination, there was a swelling of size 7x6 cm non tender, well demarcated, firm in consistency, not fixed to skin, with no skin changes over the swelling. (FIG 1)

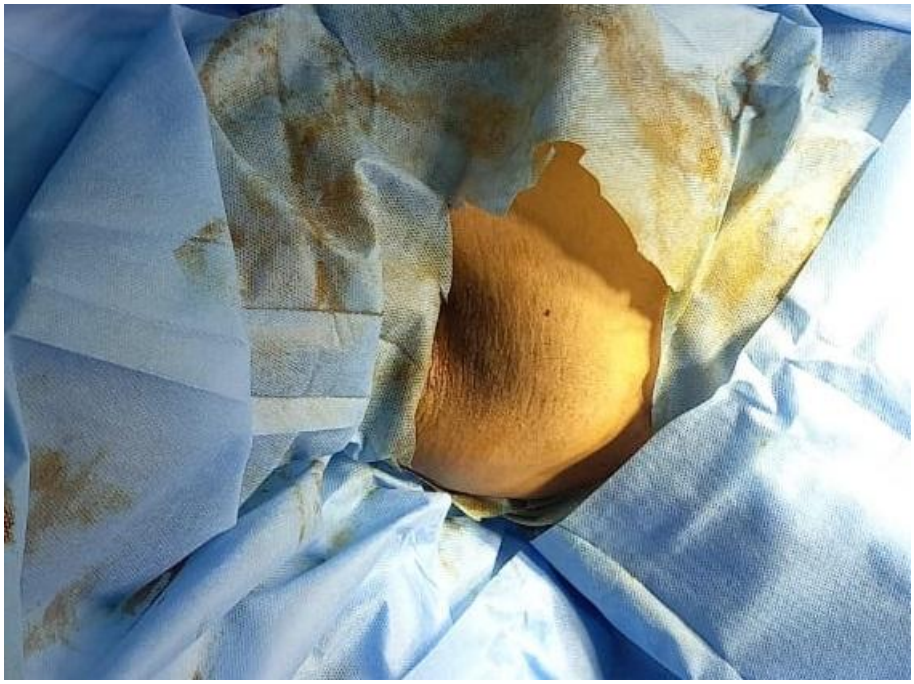

Figure 1

On ultrasonography, a mass of size 8x7cm solid with hyperechoic was observed with no other finding. Then he was planned for ultrasound guided FNAC which revealed the infiltration of large number of lymphocytes with lymphocyte hyperplastic lesion was suspected favoring towards lymphoma. Further the patient was planned for excision biopsy, before excision and biopsy patient was planned for MRI. MRI showed a swelling of size 8x5.2x8.6cm, with isotense on T1 and hypertense lesion T2, which is involving subcutaneous and intermuscular fat plane and compression right axillary vein postero - superiorly. Thus mass excision was done (FIG 2) and Histopathology investigation was done and malignant lymphoma was confirmed, so further immunophenotype analysis was done to determine the type of lymphoma.

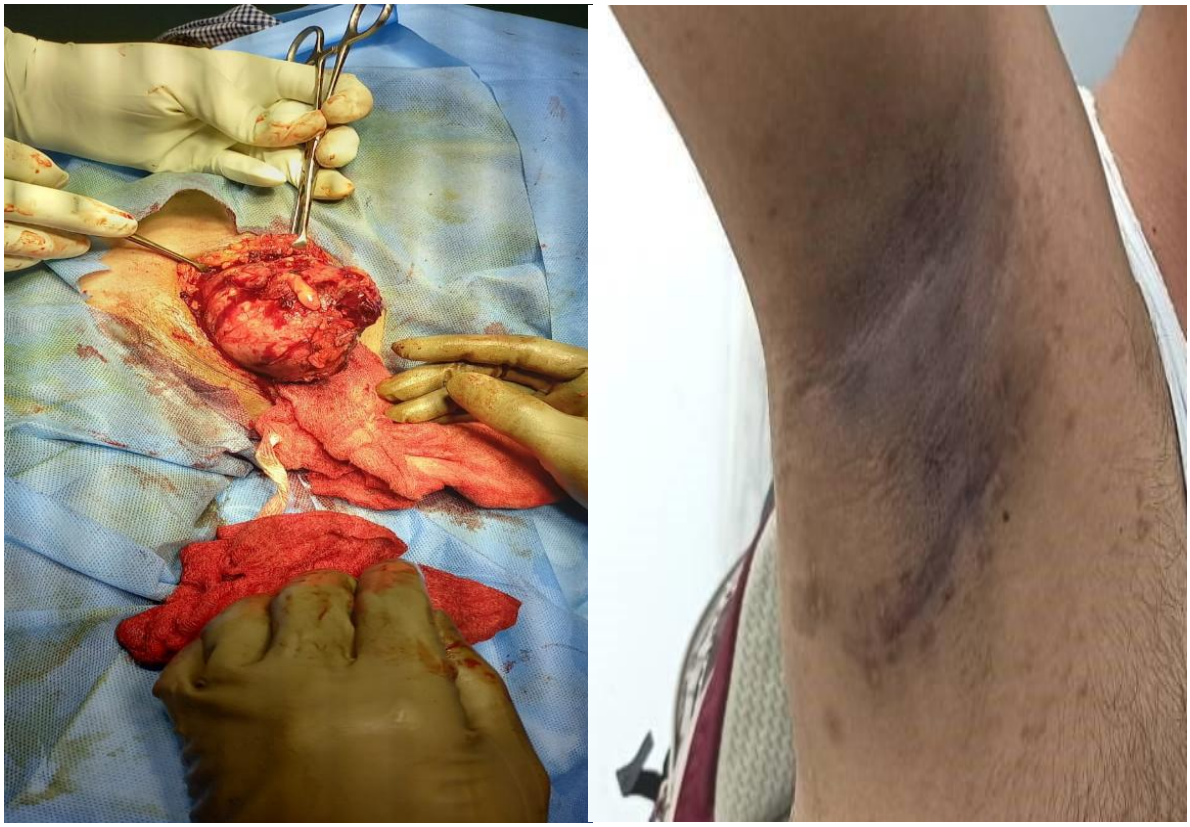

Figure 2

The immunohistochemical profile was positive for cluster of differentiation (CD) 10, CD 20 and BCL6 and negative for CD 3, CD 5, CD 30, cyclin D1 and C - myc. In addition, the Ki67 positive rate was more the 90% The result confirmed the diagnosis of B Cell Lymphoma. Further the patient was planned for positron emission tomography scan (PET scan) which shows no evidence of any metastasis elsewhere in body. Thus, the diagnosis was confirmed and the patient was planned for further management. The patient has undergone five cycle of rituximab based chemotherapy (R - CHOP). The patient till now has positive response with no evidence of disease. Patient is on antiretroviral regimen (ARV) for HIV infection along with chemotherapy. During the follow - up period of 6 month, no sign and symptoms of disease is observed. At present is receiving regular follow up.

2. Discussion

Burkitt lymphoma is highly metastatic malignant B - cell Non - Hodgkin's Lymphoma which is characterized by deregulation and translocation of MYC gene on chromosome8 on DNA strand [3]. With a doubling time of less than 24 hours, it is the fastest growing human tumour. Dennis Burkitt first described this entity in 1956 in equatorial Africa. In India, the clinical presentation of Burkitt's lymphoma is intermediate between sporadic and endemic. It has a 25 - 80 %association with EBV. In present case it was HIV associated non Hodgkin Burkittlymphoma. MRI is more sensitive for detection soft tissue neoplasmsthen CT scan [4]. The primary and secondary sites of involvement determine the clinical manifestations of Burkitt Lymphoma. It usually manifests as an abdominal (sporadic type) or head and neck (endemic type) disease involving the bone marrow or the central nervous system. In 45 percent of cases, Burkitt's lymphoma manifests as an abdominal or pelvic mass, with 22% of cases involving the gastrointestinal tract. Our patient was present with axilla painless swelling in right axilla without significant weight loss or any other finding. Excisional lymph node biopsy is the gold standard for the diagnosis. Fine Needle Aspiration of the lymph node is avoided. An excisional biopsy of an intact node allows sufficient tissue for histologic, immunologic, molecular biologic assessment, and classification by hematopathologists [5]. In our patient Cytopathological Examination done from axillary swelling suggested of "Non - Hodgkin's LymphomaBurkitt type". Multi - agent systemic chemotherapy combined with intrathecal chemotherapy is the mainstay of treatment. In present case, chemotherapy was stated.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the Journal. The patient understands that his name and initials will not be published, and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Nil

Conflicts of interest

There are no conflicts of interest.

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