

## UNUSUAL CASE OF SUBCUTANEOUS NODULES WITH ENDOBRONCHIAL LESIONS IN A PATIENT WITH RETROVIRAL INFECTION: DISSEMINATED CUTANEOUS LYMPHOMA: CASE REPORT

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### PRESENTATION OF CASE

A 46-year-old male was admitted with sudden onset of asymptomatic multiple cutaneous nodules on chest, abdominal wall, back, upper limbs and thighs of two weeks duration. He also had dyspnoea, dysarthria, dysphagia and persistent dull aching abdominal pain. He was diagnosed to have HIV infection 15 years ago and was on irregular treatment follow up.

Physical examination showed he had pallor, bilateral pitting pedal oedema and bilateral level 2 cervical lymphadenopathy. There were multiple (~20), skin coloured erythematous, firm to hard subcutaneous nodules of size varying from 1 x 1 cm to 7 x 4 cm on chest, abdomen, back, left arm and thighs. They were non-tender and non-inflamed. A pharyngeal mass was present in the right tonsillar region.

Patient was investigated and blood haemoglobin was 10.3 g/dl, total WBC count 13000 cells/cmm, with 72% polymorphs, 15% lymphocytes and 13% eosinophils. Peripheral smear showed lymphocytosis with a few atypical lymphocytes. CD4 count was 248 cells/mm<sup>3</sup>. Liver and renal function tests were normal.

Chest X-ray was normal. USG abdomen showed multiple enlarged para aortic nodes, pleural effusion on left side and bilateral hypoechoic kidneys with hydronephrosis.

### DIFFERENTIAL DIAGNOSIS

1. Cutaneous metastasis
2. Disseminated cutaneous lymphoma
3. Scrofuloderma
4. Kaposi sarcoma
5. Deep fungal infection

### PATHOLOGICAL DISCUSSION

Excision biopsy was done from one of the subcutaneous nodules from the abdominal wall under local anaesthesia

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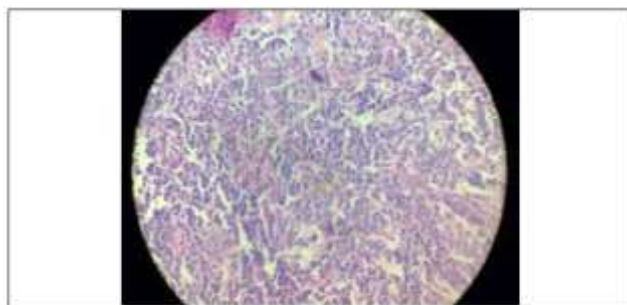
and universal precautions. Histopathology showed neoplastic cells with moderate eosinophilic cytoplasm, vesicular nuclei and few macrophages and apoptotic bodies in dermis and subcutis. Immunohistochemistry was positive for leucocyte common antigen. A final diagnosis of lymphoma was made.



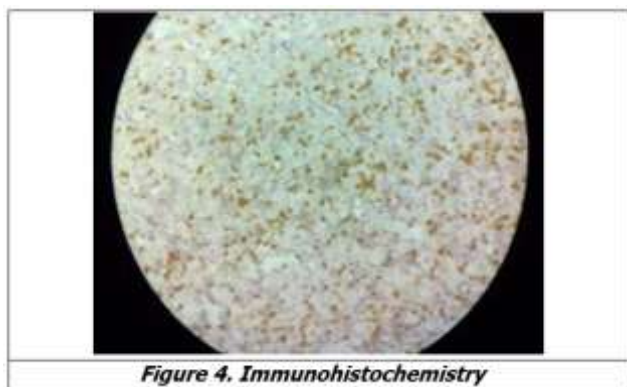
**Figure 1. Multiple Erythematous Cutaneous Nodules in Chest, Upper Limbs and Abdominal Wall**



**Figure 2. CECT Chest Showed Endobronchial, Endotracheal and Pulmonary Nodules**



**Figure 3. Histological Picture of Excision Biopsy Neoplastic Cells with Moderate Eosinophilic Cytoplasm, Vesicular Nuclei and Few Tangible Body Macrophages and Apoptotic Bodies in Dermis and Subcutis. High Grade NHL**



**Figure 4. Immunohistochemistry**

High grade NHL CK- Negative LCA- cytoplasmic & membranous Positivity. CD3- Focal Positivity. CD10- Negative.

We could not evaluate the patient further since the patient died on the fifth day after admission due to massive haemoptysis.

## DISCUSSION

Cutaneous lymphomas represent a unique group of lymphomas and are the second most frequent extranodal lymphomas.<sup>1,2</sup>

Cutaneous lymphomas are identified by lymphoproliferative skin infiltrates of T-cell, B-cell, or natural killer cell lineage, and seen confined to the skin with paucity of extracutaneous manifestations.

Major bulk of nodal lymphomas are formed by B-cell lymphomas, but the cutaneous form of lymphoma is constituted primary cutaneous B-cell lymphomas (CBCLs) by only 20-25%.

Cutaneous B cell lymphomas are having excellent prognosis so early appropriate diagnosis is vital for appropriate therapy. The two important and relevant prognostic markers are the tumour type and the extent of cutaneous involvement.<sup>3,4</sup>

Lymphomas with cutaneous manifestations are uncommon in HIV-infected patients after the advent of ART. Aggressive B cell Lymphomas form the major bulk in Retroviral patients and it is postulated that certain lymphotropic herpes viruses contribute to the pathogenesis. Clinical presentation of cutaneous NHL

includes single or multiple papules, subcutaneous nodules, ulcers and infiltrative lesions.

The WHO/EORTC classification of CBCLs includes the following categories:<sup>5,6,7</sup>

- Primary cutaneous marginal zone B-cell lymphoma (mucosa-associated lymphoid tissue (MALT) type).
- Primary cutaneous follicle center lymphoma.
- Cutaneous diffuse large B-cell lymphoma, leg type and others.
- Intravascular large B-cell lymphoma.

Treatments may include surgical excision, antibiotics, and radiotherapy. Treatment varies depending on whether the patient has solitary or multiple lesions. Likewise, with approaches to various forms of lymphoma also defer depending on whether it is an isolated or scattered lesion.

Cutaneous B cell lymphomas are assigned with favourable outcomes but early identification of the entity is crucial for initiating appropriate treatment and also to avoid over-aggressive therapy.

In conclusion, our case highlights the challenges that persist in the management of PLWHA even after widespread use of ART. Even after diagnosis, some patients get lost on follow up and present only when they have advanced disease. Adherence to treatment is mandatory for effective disease control. This case was presented for Unusual and hurricane progression of the CBCL in a retroviral non-compliant patient with a fatal outcome underlying the significance of Regular follow up and early diagnosis.

## FINAL DIAGNOSIS

Disseminated cutaneous B cell lymphoma with unusual presentation and fatal termination in a retroviral non-compliant patient.

## Consent

Written informed consent was obtained from the relatives for publication of this case report and any accompanying images.

## Authors' Contributions

Ravindran C provided the case information, treatment, operated on the patient, and was a major contributor to the discussion section of the paper. Gopika Sunil interviewed the patient, reviewed the medical records and wrote the case presentation. Priya Pratap provided major contributions to the case presentation and discussion sections and edited the final manuscript. Sharath Krishnan researched the subject and provided major contributions to the discussion section. Researched and wrote the pathology portion of the manuscript and prepared the histology figures. All authors read and approved the final manuscript.

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