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Case Report

An aberrant presentation of non-hodgkin's lymphoma as pus: A curious journey

Mayur Devraj[1,*], Chaitanya Kappagantu[1], Sushma Dugad[1], Ravidra Shinde[1], Komal Shah[1]

[1] *Dr. Vasantrao Pawar Medical College, Hospital & Research Centre, Adgaon, Nashik, Maharashtra, India*

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ABSTRACT

T-lymphoblastic lymphoma (T-LBL) is most commonly found in younger age group and rare. It is most aggressive form of non-Hodgkin's lymphoma. T-lymphoblastic lymphoma (T-LBL) response rate to chemotherapy is very good although relapse is common with poor survival rates.

A 25 years old female presented to emergency department of a tertiary care centre with dyspnoea and chest tube in left Hemothorax in situ. She had earlier history of pulmonary tuberculosis 3 years back and took anti tubercular treatment for 6 months. On general examination we found left supraclavicular lymphadenopathy of size 2 × 1.5cm and grade 2 clubbing.

The pleural fluid was sent for analysis. It was reported as exudative pleural effusion with low ADA and negative for malignant cells. Lymph node biopsy was sent for histopathological examination which was reported as T Lymphoblastic lymphoma.

NHL is a diverse category of cancers that originate from B or T cells at different stages of maturation. In relation to our case; earlier history of tuberculosis, pus from lymph node could mislead to infective aetiology; as lymph node necrosis is commonly found in Hodgkin's disease. This fact reiterates the fact that through clinical examination and history leads to proper diagnosis and management of the patient and can save time of the patients.

1. Introduction

Lymphoblastic lymphoma (LBL) is the most aggressive kind of non-lymphoma Hodgkin's (NHL), accounting for about 2% of all adult NHL cases.[1] T-lymphoblastic lymphoma (T-LBL) is an uncommon cancer that affects children and teenagers.[2] Large anterior mediastinal mass, pleural effusion, superior vena cava syndrome, airway obstruction, and pericardial effusion are typical symptoms, as are B symptoms and high serum lactate dehydrogenase (LDH), with liver and spleen involvement being less prevalent.[3] The response rate to chemotherapy is very good although relapse is common with poor survival rates.[4,5]

2. Case Report

A 25 years old female presented to emergency department of a tertiary care centre (Medical college & Hospital) with chest tube in left haemothorax in situ. She complained of chest pain in the last 6 weeks, dyspnoea and facial puffiness in the last 15 days. She also had history of weight loss in past 2 months. She had earlier history of pulmonary tuberculosis 3 years back and took anti tubercular treatment for 6 months. She was admitted at private hospital where thoracocentesis was done and later chest tube was inserted for recurrent pleural effusion which was exudative in nature.

On general examination we found left supraclavicular lymphadenopathy of size 2 × 1.5cm and grade 2 clubbing.

* *Corresponding author*.
E-mail address: mayurrdevraj@gmail.com (M. Devraj).

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On Systemic examination dull note with reduced TVF was found in left Hemothorax. Breath sounds were reduced on left side.

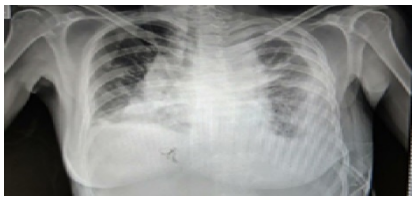

Fig. 1: Chest X ray showing left side ICD in situ and pleural effusion

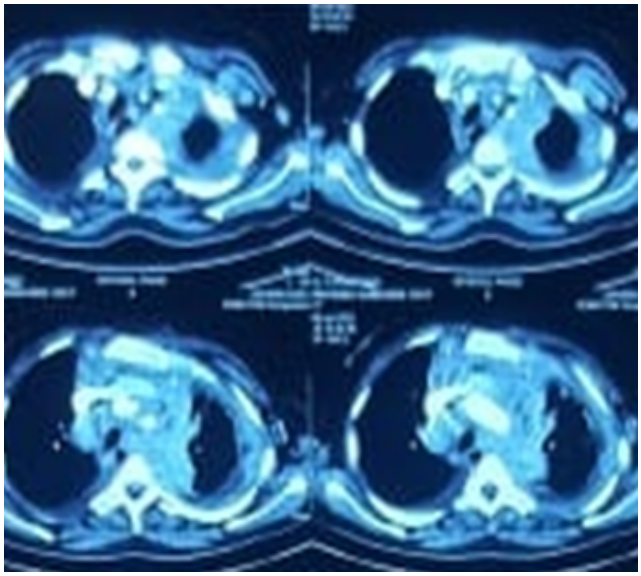

Fig. 2: HRCT- s/o bilateral pleural effusion, airway compression and mediastinal lymphadenopathy

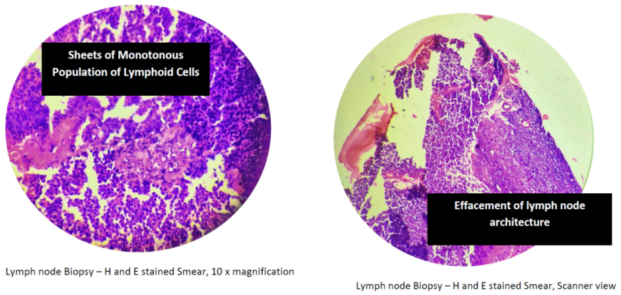

Fig. 3: Histopathological findings

The pleural fluid was sent for analysis. It was reported as exudative pleural effusion with low ADA and negative for malignant cells. Pleural fluid proteins – 2.1gm/dl, sugars – 50 gm/dl. Pleural fluid lymphocytes – 78%, polymorphs – 22%.

Fine needle aspiration cytology of lymph node was reported as atypical lymphoproliferative disorder. Further lymph node biopsy was sent for histopathological examination, mycobacterial culture and GeneXpert for tuberculosis. Histopathology (Figure 3) was suggestive of T lymphoblastic lymphoma. One of the lymph node was pus filled, hence was drained. Pus was reported as sterile for AFB smear, gram stain and culture sensitivity. Patient received single cycle of CHOP regimen chemotherapy.

3. Discussion

NHL is a heterogeneous group of cancers that emerge from two separate lymphocyte types, B and T lymphocytes, at different phases of differentiation.[6] these types of lymphoid neoplasms have been grouped together by the World Health Organization as precursor T-cell or B-cell lymphoblastic leukaemia/lymphoma. However, several recent investigations have revealed that T-LBL and T-ALL have different molecular profiles.[6–9] and T- LBL's response to therapy appears to be different from T- ALL's.[7]

In our case, before referral to our institute the past history of pulmonary tuberculosis could have suggested reactivation of the disease along with non-availability of thorough analysis of pleural fluid and no suspicion of malignancy lead to loss of time. In comparison with didn't found similar cases which were presenting with pus in lymphnode although the presentation were similar in respect to age group, gender and symptoms.

In clinical examination we found left cervical lymphadenopathy and it raised suspicion and through workup was done and it turned out to be malignancy.

In relation to our case; earlier history of tuberculosis, pus from lymph node could mislead to infective aetiology; as lymph node necrosis is commonly found in Hodgkin's disease.

This fact reiterates the fact that through clinical examination and history leads to proper diagnosis and management of the patient and can save time of the patients.

4. Conflicts of Interest

None.

5. Source of Funding

None.

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Author biography

Mayur Devraj, Professor

Chaitanya Kappagantu, Junior Resident

Sushma Dugad, Professor

Ravidra Shinde, Associate Professor

Komal Shah, Assistant Professor

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