

T-Cell lymphoma in Mediastinal Mass: An Arduous Entity

¹Ankita Pandey, Junior Resident, Sri Aurobindo Medical College and Post Graduate Institute, Indore, Madhya Pradesh.

²Ayushi Singh, Assistant Professor, Sri Aurobindo Medical College and Post Graduate Institute, Indore, Madhya Pradesh.

³Amit V Varma, Head of the Department, Sri Aurobindo Medical College and Post Graduate Institute, Indore, Madhya Pradesh.

Corresponding Author: Ayushi Singh, Assistant Professor, Sri Aurobindo Medical College and Post Graduate Institute, Indore, Madhya Pradesh.

How to citation this article: Ankita Pandey, Ayushi Singh, Amit V Varma, “T-Cell lymphoma in Mediastinal Mass: An Arduous Entity”, IJMACR- September - 2023, Volume – 6, Issue - 5, P. No. 10 – 11.

Open Access Article: © 2023, Dr. Ayushi Singh, et al. This is an open access journal and article distributed under the terms of the creative common’s attribution license (<http://creativecommons.org/licenses/by/4.0>). Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Type of Publication: Case Report

Conflicts of Interest: Nil

Introduction

T-Cell Lymphoblastic Lymphoma is comprising 20% of Non-Hodgkin Lymphoma (NHL)[1]. In late childhood and adolescence T- cell Lymphoblastic Lymphoma is more common and frequent with male predominance of 2:1 or greater [2]. T-cell Lymphoblastic Lymphoma often evolves as a mediastinal mass [3 Here we have presented a case of elderly female of T-cell Lymphoblastic Lymphoma with metastasis to Bone marrow which is a very rare finding.

Keywords: T- Cell, NHL, PET CT

Case Report

A 23 year female presented with chief complains of chest pain and breathlessness for two months. On examination anterior mediastinal swelling was found. Pedal edema and pallor was present since last seven days. On PET CT chest anterior superior mediastinal mass was found of 13.4 x 12.5 x 8 cm. On

histopathology of mediastinal mass malignant round cell tumor with IHC positive for CD 3, CD 4, CD 5, CD 7, CD 8, BCL 6, Tdt, and Ki- 67 giving final histopathology diagnosis as T – cell lymphoblastic lymphoma.

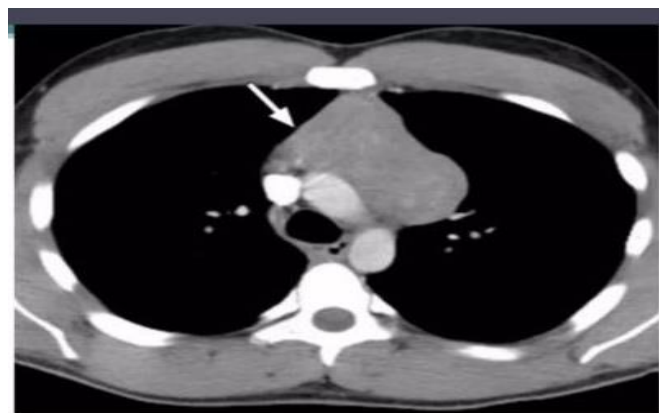


Figure 1: PET CT showing anterior mediastinal mass measuring 13.4 x 12.5 x 8 cm.

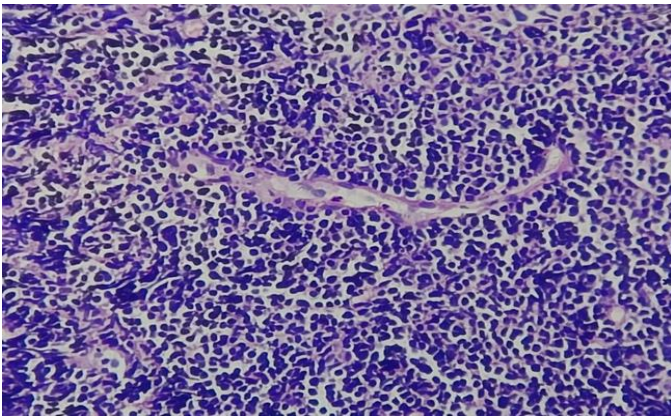
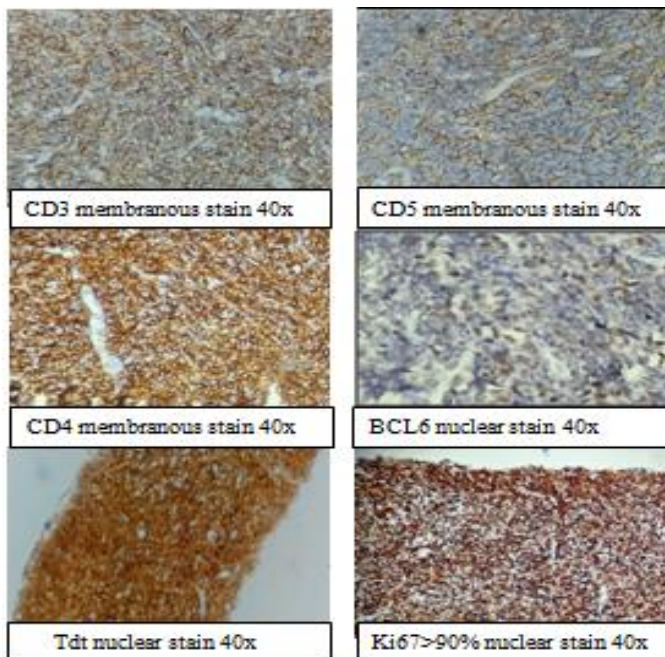


Figure 2: Histopathology image as round cell tumor
Bone marrow examination was suggestive of erythroid hyperplasia with normoblastic maturation along with lymphoblastic infiltration. Bone marrow biopsy suggestive of lymphoblastic lymphoma and flow cytometry also supported the diagnosis of T cell lymphoma.

On further evaluation - Hb 11.0 gm%, Total leukocyte count- 5170/mm³, Calcium- 7.9 mg/dl (slightly reduced), Creatinine - 0.34 mg/dl (slightly reduced).



Discussion

In the patient who is suffering from mediastinal T-cell lymphoblastic lymphoma, mediastinal recurrence is the

most common cause of failure[4]. Patients who were treated with mediastinal radiation therapy and who did not receive the same have same symptoms[5]. The 5 years overall survival rate was 66% and the freedom from progression rate was 64%. Mediastinal Chemotherapy had given significantly better mediastinal freedom from progression rate to the patients who were treated with hyper-CVAD regimen[6].

Conclusion

Hence this case report stated that the early diagnosis and treatment of metastasis of mediastinal mass with T-cell lymphoblastic lymphoma helps with increased survival and progression rate of this development. Although its very rare case as well as miscellaneous to be found and to be diagnosed.

Reference

1. Emma Kroeze et al. T-Cell Lymphoblastic Lymphoma and leukemia: different diseases from a common premalignant progenitor? (2020) 4(14);3466-3473
2. Renato Bassan et al. Lymphoblastic Lymphoma; an updated review on biology, diagnosis and treatment ejh.(2015) 12722
3. Maria R Ambrosio et al. Unusual presentation of primary T-cell Lymphoblastic Lymphoma; description of two cases. Diagnostic pathology.(2014) 9:124
4. Bouthainas et al. The role of local radiation therapy for mediastinal disease in adults with T-cell Lymphoblastic Lymphoma cncr.(2001) 10552
5. Picozzi VJ Jr. et al. Lymphoblastic Lymphoma. SEMIN Oncol.(1990);17(1):96-103.
6. Slater DE et al. Lymphoblastic Lymphoma in adults. J Clin Oncol. (1986);4(1):57-67.