ISSN:2476-2377

Case Report

International Journal of Cancer Research & Therapy

# Angioimmunoblastic T-cell Lymphoma: Case Report of a Diagnostic Challenge Presented as a Lymphoproliferative Syndrome

**Letícia Alves Antunes* and André Paternò Castello Dias Carneiro**

*Internal Medicine Residents – Santa Casa de São Paulo*

***Corresponding author**

Leticia Alves Antunes, Internal Medicine Residents – Santa Casa de São Paulo, Avenida Capitao Anselmo Barcelos, 449, Vila Rio Branco, Sao Paulo–SP, Brazil, 03874-000, Brazil, E-mail: le.alvesantunes@gmail.com

**Submitted**: 25 June 2018; **Accepted**: 11 July 2018; **Published**: 16 July 2018

## Introduction

Angioimmunoblastic T-cell Lymphoma (AITL) is a rare malignancy that only represents 2% of all non-Hodgkin lymphomas, however this is the most common subtype of all the peripheral T-cell Lymphomas (15-20%). Most patients are elderly, and the median patients' age is around 60-years-old. The most prominent symptoms at the time of presentation are generalized lymphadenopathy, hepatosplenomegaly, fever and weight loss. The clinical presentation may mimic inflammatory, autoimmune and infectious diseases, or even other lymphoid neoplasms. Most of the patients usually have simultaneous extranodal disease in spleen, liver, skin, lungs and bone marrow. The definite diagnosis is usually tricky, and can only be achieved by lymph node biopsy.

## Case Report

Brazilian patient PPMS, female, 51-year-old, born in the State of Bahia, rural worker, married, catholic, was living in São Paulo for 2 months. She was admitted to the Emergency Department at Santa Casa of São Paulo in October/2014 complaining of abdominal pain, nausea, vomiting, lymphadenomegaly, fever, night sweats and weight loss (10kg) that had begun about 3 months before. She smoked 1 pack-per-day for 36 years, however she denied any past medical history or agrotoxic exposure. The complete blood count (CBC) showed anemia, eosinophilia and thrombocytopenia. All the serologies for infectious diseases were negative, except for IgM EBV, that was positive. Abdominal ultrasound showed homogeneous hepatosplenomegaly, periportal lymphadenomegaly, simple cyst in the right kidney and small amount of ascites. CT scan of the chest showed small nodules in the lungs, small amount of pericardial effusion, increased number of lymph nodes in mediastinal, tracheal and infracarinal regions, increased size of lymph nodes in hilar region bilaterally as well as in the chains of diaphragm, clavicles, and in the axillaries chains. Myelogram ruled out Leishmaniasis. The bone marrow biopsy was only hypercellular, showing hyperplasia of the three myeloid types. Lastly, the cervical lymph node biopsy was done with immunophenotyping: CD45 diffusely positive; CD3 positive in the small and medium cells; CD20 positive in immunoblasts; CD4 positive in most of the lymphocytes – T-cell lymphoma with angioimmunoblastic features.

Lastly, the cervical lymph node biopsy was done with immunophenotyping: CD45 diffusely positive; CD3 positive in the small and medium cells; CD20 positive in immunoblasts; CD4 positive in most of the lymphocytes – T-cell lymphoma with angioimmunoblastic features.

## Discussion

The case reported above was remarkable because it did not have bone marrow involvement, what initially drove us away from the correct diagnosis. The AITL is known to frequently involve bone marrow, however the histologic and immunophenotypic features at this site are poorly defined. Therefore, we conclude that the lymph node biopsy is always indispensable for elucidating cases like this, that are marked by a lymphadenopathy that persists for more than 4 weeks or that also have symptoms suggesting malignancy (eg, fast increase in lymph node size, fever, night sweats or weight loss).

## References

1. Freedman AS, Aster JC (2015) Clinical manifestations, pathologic features, and diagnosis of angioimmunoblastic T cell lymphoma. UpToDate.
2. Fletcher RH (2015) Evaluation of peripheral lymphadenopathy in adults. UpToDate.
3. Zago MA, Falcão RP, Pasquini R (2013) Tratado de Hematologia. São Paulo: Editora Atheneu.
4. Khokhar FA, Payne WD, Talwalkar SS, Jorgensen JL, Bueso-Ramos CE, et al. (2010) Angioimmunoblastic T-cell lymphoma in bone marrow: a morphologic and immunophenotypic study. Human Pathology 41: 79-87.
5. Iannitto E, Ferreri AJM (2008) Angioimmunoblastic T-cell lymphoma. Critical Reviews in Oncology/Hematology 68: 264-271.