www.jsstd.org



Journal of Skin and Sexually Transmitted Diseases



# Primary cutaneous CD30+ Anaplastic large cell lymphoma

Eapen Thomas<sup>1</sup>, Latha K. Abraham<sup>2</sup>, Mobin Paul<sup>3</sup>

Departments of <sup>1</sup>Dermatology, <sup>2</sup>Pathology and <sup>3</sup>Clinical Heamatology, Rajagiri Hospital, Chunangamvely, Aluva, Cochin, Kerala, India.

#### \*Corresponding author:

Image

Eapen Thomas, Department of Dermatology, Rajagiri Hospital, Chunangamvely, Aluva, Cochin, Kerala, India.

eapenthomas10@gmail.com

Received :	28 February 2020
Accepted :	05 May 2020
Published :	15 October 2020

DOI 10.25259/JSSTD\_13\_2020

Quick Response Code:



A 58-year-old housewife presented with indurated asymptomatic skin lesions on the right arm and posterior aspect of the left leg for 4 months. From a nearby hospital, she received treatment with topical steroids without much response. Clinical examination revealed multiple erythematous indurated plaque and nodule distributed over the right arm [Figure 1] and posterior aspect of the left leg in popliteal fossa [Figure 2]. A crusted plaque was seen on the right thigh. Skin biopsy showed large lymphoid cells with moderate cytoplasm and scattered mitotic figures [Figures 3 and 4]. Inflammatory infiltrates extended up to the subcutaneous tissue. Immunohistochemistry showed diffuse staining for CD30 [Figure 5] and focal staining for CD4. The inflammatory cells were negative for CD3, CD8, CD20, CD15, and ALK (anaplastic lymphoma kinase). Ki67 index was about 80%–90% in large cells. With a diagnosis of primary cutaneous CD30+ anaplastic large cell lymphoma, she was started on the CHOP regimen from the hematology department.

Anaplastic large cell lymphoma (ALCL) represents a generally recognized group of large cell lymphomas. Defining features consist of a proliferation of predominantly large lymphoid cells with a strong expression of the cytokine receptor CD30 and a characteristic growth pattern. Cutaneous CD30 positive lymphoproliferative disorders may be primary (primary cutaneous ALCL) or secondary (systemic ALCL). Anaplastic large cell lymphoma can be CD30+ or CD30–. CD30 is a member of the cell surface receptors for tumor necrosis factor. The histologic

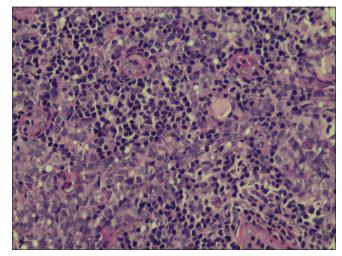


Figure 1: Indurated nodule on the forearm.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms. ©2019 Published by Scientific Scholar on behalf of Journal of Skin and Sexually Transmitted Diseases



Figure 2: Erythematous nodule on the posterior aspect of the leg.



**Figure 4:** Higher magnification showing the large lymphoid cells and the mitotic figures (H & E, ×400).

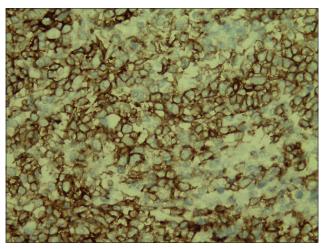


**Figure 3:** Large lymphoid cells with moderate cytoplasm and scattered mitotic figures. Inflammatory infiltrate extending up to the subcutaneous tissue (H & E,  $\times 100$ ).

clue to the diagnosis of ALCL, cutaneous or systemic, is the presence of large lymphoid cells, seen in the case presented and also known as "hallmark cells," with embryonal nuclei, multiple prominent eosinophilic nucleoli, and abundant cytoplasm.

### **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent.



**Figure 5:** Inflammatory infiltrate showing strong and diffuse staining for CD30 (immunohistochemistry, ×400).

## Financial support and sponsorship

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

How to cite this article: Thomas E, Abraham LK, Paul M. Primary cutaneous CD30+ Anaplastic large cell lymphoma. J Skin Sex Transm Dis 2020:2(2):144-5.