

CASE REPORT

Primary cutaneous CD30+ anaplastic large-cell lymphoma mimicking cutaneous leishmaniasis

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ABSTRACT

CD30+ cutaneous large-cell lymphomas (CLCL) represent a heterogeneous subgroup of skin lymphomas including primary cutaneous CD30+ anaplastic large-cell lymphoma (CD30+ ALCL), lymphomatoid papulosis (LyP), transformed mycosis fungoides (T-MF) and Hodgkin's lymphoma (HL) with cutaneous involvement. Clinically it presents as nodules which could be ulcerated. Many cases have been reported with presentations simulating other clinical entities which posed diagnostic challenge. Here, we report a case of CD30+ ALCL, which before coming to us was diagnosed and treated as leishmaniasis for a long time.

INTRODUCTION

CD30+ cutaneous large-cell lymphomas (CLCL) represent a heterogeneous group of lymphomas including primary cutaneous CD30+ anaplastic large-cell lymphoma (CD30+ ALCL), lymphomatoid papulosis (LyP), transformed mycosis fungoides (T-MF) and Hodgkin's lymphoma (HL) with cutaneous involvement.¹⁻⁴ Clinically, patients present with an ulcerating, solitary, reddish-brown nodule, usually on the limbs or trunk. Clinical variants of the disease include the presence of satellite lesions around the primary tumour, simulating regional lymphomatoid papulosis. A clinical variant simulating keratoacanthoma has also been reported.⁵ We recently encountered a patient affected with CD30+ ALCL who has been diagnosed and treated as leishmaniasis before coming to us.

CASE REPORT

A 55-year old Egyptian, truck driver presented with multiple asymptomatic ulcerated and/or crusted nodules, tumors and plaques affecting upper and lower extremities of 6 months duration

(Fig. 1-3). The patient was diagnosed and treated as cutaneous leishmaniasis before admitting to our clinic. Complete blood count, full biochemi-



Fig. 1 Ulcerated, crusted plaque on the forearm.



Fig. 2 Ulcerated, crusted nodules and tumors on the lower extremities.

cal profile, urinalysis, stool examination, chest X-ray and abdominal ultrasonography did not reveal any abnormal findings. One of the lesions

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was biopsied which revealed a diffuse infiltration of the dermis with large, atypical lymphoid cells with pleomorphic nuclei, eosinophilic cytoplasm and frequent abnormal mitotic figures (Fig. 4). The infiltration goes deeply to the subcutaneous tissue. The cells were positive for CD3, CD30 and LCA (leukocyte common antigen) but negative for CD20. The findings were consistent with primary cutaneous CD30+ anaplastic large-cell lymphoma. The patient was referred to Kuwait Cancer Control Center (KCCC) for more work up and treatment.



Fig. 3 Well defined tumors with central crusted craters.

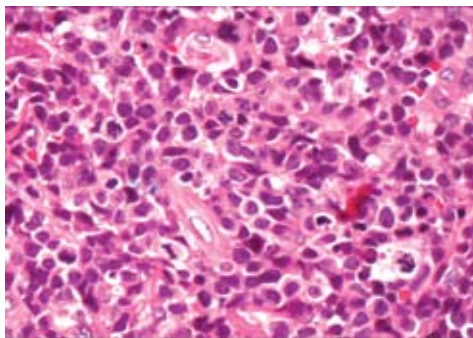


Fig. 4 Lymphoid cells showing abnormal mitotic figures.

DISCUSSION

Cutaneous anaplastic large cell lymphoma (ALCL) is a CD30+ large T-cell lymphoma presenting primarily in the skin and characterized by a good prognosis and response to treatment.⁵ Clinically, most C-ALCL patients present with limited disease characterized by solitary or localized skin nodules or tumors, while multicentric cutaneous disease is also seen in approximately 20% of

cases, and lesions may show partial or complete spontaneous regression in over 25% of patients with frequent relapses.^{3,4,6} Other clinical variants have been described including a keratoacanthoma-like variant.⁵ Our patient presented with some lesions simulating leishmaniasis and others suggesting keratoacanthoma. He has been diagnosed and treated as leishmaniasis before presenting to our clinic. Being a truck driver travelling to different countries some of which are endemic for leishmaniasis, made the clinicians treat him as leishmaniasis without taking a biopsy.

Primary cutaneous CD30+ ALCL is a relatively indolent neoplasm, with a 5-year survival of up to 95%. Complete spontaneous regression has been observed, but regression is more commonly partial. Usually, solitary or localized lesions may be treated by surgical excision, radiotherapy, or the combination of the two.³ Histologically, these lymphomas are characterized by a nodular or diffuse infiltrate within the entire dermis and superficial part of the subcutis, composed of sheets of cohesive large CD30+ atypical cells. Most of these tumors are composed of anaplastic cells, with large round or irregularly shaped hyperchromatic nuclei, prominent nucleoli and abundant slightly basophilic cytoplasm. Less frequently, large pleomorphic cells or immunoblasts are observed. The infiltrate sometimes contains small lymphocytes, histiocytes, neutrophils and eosinophils, but atypical lymphocytes should comprise at least 30% of the cellular infiltrate with at least 75% of the large cells reactive for CD30 in a membranous and paranuclear pattern.^{5,7}

Our patient was a truck driver who frequently travelled to Iraq and Saudi Arabia. In our region foci of zoonotic cutaneous leishmaniasis, caused by *Leishmania major*, occur in Saudi Arabia, Iran,

Iraq, Afghanistan, Pakistan, Syria, Palestine, Jordan and Yemen but not in Kuwait.⁸ We occasionally see these patients coming from endemic areas. In some of hyperendemic areas they may not utilize laboratory methods to confirm each case of leishmaniasis and treat on clinical suspicion only. Here we report a case of CD30+ ALCL which because he visited a skin clinic in endemic area for leishmaniasis was misdiagnosed. In conclusion, a diagnosis of lymphoma should be considered in cases of lesions with leishmaniasis morphology. Before treating a patient as leishmaniasis even with typical skin lesions in an endemic area the diagnosis should be confirmed by appropriate laboratory studies.

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