

Case Report

CUTANEOUS LEISHMANIASIS MIMICKING LUPUS VULGARIS

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ABSTRACT

Cutaneous leishmaniasis (CL) is a parasitic disease which is caused by Leishmania protozoans spreaded by phlebotomes. Because of the variety in cutaneous morphology, it can mimic many dermatoses, most commonly cutaneous cancers, discoid lupus erythematosus, lupus vulgaris and sarcoidosis and can lead to misdiagnoses and treatment in endemic areas. 45-year-old woman with an eight month' history of red nodules on her face which had been treated as cutaneous tuberculosis before applied our policlinic. Dermatological examination revealed approximately 2x2 cm centrally crusted red nodule on her nose, 0.5x0.5 cm red nodules on her forehead and right maxillary area. Patient history revealed that she had been treated with oral anti-tuberculosis drugs without treatment response in the first center she applied. The incisional skin biopsy showed a dense lymphohistiocytic inflammatory reaction throughout the entire dermis and in the cytoplasm of histiocytes and scattered in the tissue, amastigotes (Leishman-donovan bodies) were seen. The patient was treated with once a week intralesional meglumine antimoniate (Glucantime®) injections for six weeks. After six weeks, nodulo-ulcerative lesions were regressed.

Key words: Leishmaniasis, lupus vulgaris, treatment

ÖZET

Kutanöz layşmanyazis (KL) infekte flebotomların deriden kan emme işlemi esnasında bulaştırdıkları layşmanyazis protozoonlarının neden olduğu paraziter bir hastalıktır. Kutanöz morfolojideki çeşitlilik nedeniyle, deri maligniteleri, diskoid lupus eritematozus, lupus vulgaris ve sarkoidoz olmak üzere birçok dermatozu taklit edebilir ve endemik bölgelerde yanlış teşhislere ve tedavilere neden olabilir. Yüzünde sekiz aydır kırmızı renkli nodülleri mevcut olan, yanlışlıkla deri tüberkülozu olarak tedavi edilen klinik bulgular eşliğinde ve histopatolojik inceleme sonucu kutanöz layşmanyazis tanısı konulan 45 yaşında kadın hasta sunulmaktadır. Hastanın kliniğimize başvurusunda dermatolojik muayenesinde, burnunda yaklaşık 2x2 cm boyutunda, merkezi kurutlu eritemli nodül, alnında ve sağ maksiller alanda ise 0.5x0.5 cm boyutunda kırmızı nodüller izlendi. Hastaya ilk başvurduğu merkezde şikayetleri nedeniyle anti-tüberküloz tedavi uygulanmış, fakat yanıt alınamamıştı. Hastadan alınan insizyonel deri biyopsisinde, histopatolojik incelemede tüm dermisi dolduran ve yüzeysel ülser eden yoğun kronik yangısal hücre infiltrasyonu, histiyositlerin sitoplazmasında ve serbest olarak layşmanyazis amastigotları (Leishman-donovan cisimleri) izlendi. Hastaya altı hafta boyunca haftada bir kez intralezyonel meglumine antimoniate (Glucantime®) enjeksiyonu uygulandı. Altı hafta sonra, noduloülseratif lezyonlarda belirgin gerileme izlendi.

Anahtar kelimeler: Layşmanyazis, lupus vulgaris, tedavi

INTRODUCTION

Cutaneous leishmaniasis (CL) is a parasitic disease which is caused by *Leishmania* protozoans spreaded by phlebotomes. Because of the variety in cutaneous morphology, it can mimic many

dermatoses, most commonly cutaneous cancers, discoid lupus erythematosus, lupus vulgaris and sarcoidosis and can lead to misdiagnoses and treatment in endemic areas.

CASE REPORT

A 45-year-old woman with a eight months' history of red nodules on her face which had been treated as cutaneous tuberculosis before applied to our policlinic. Dermatological examination revealed approximately 2 x 2 cm centrally crusted red nodule on her nose, 0.5 x 0.5 cm red nodules on her forehead and right maxillary area (Figure 1A, B). There were no incomfort, pain or itch on the lesion. Patient history revealed that she had been treated with oral anti-tuberculosis drugs without treatment response in the first

center she applied. The incisional skin biopsy showed a dense lymphohistiocytic inflammatory reaction throughout the entire dermis and in the cytoplasm of histiocytes and scattered in the tissue, amastigotes (*Leishman-donovan* bodies) were seen. The patient was treated with once a week intralesional meglumine antimoniate (Glucantime®) injections for six weeks. After six weeks, nodulo-ulcerative lesions were regressed. (Figure 2 A, B, C).



Figure 1. A) Approximately 2x2 cm centrally crusted red nodule on her nose, 0.5 x 0.5 cm red nodules on her forehead and right maxillary area. **B)** Appearance after six week treatment

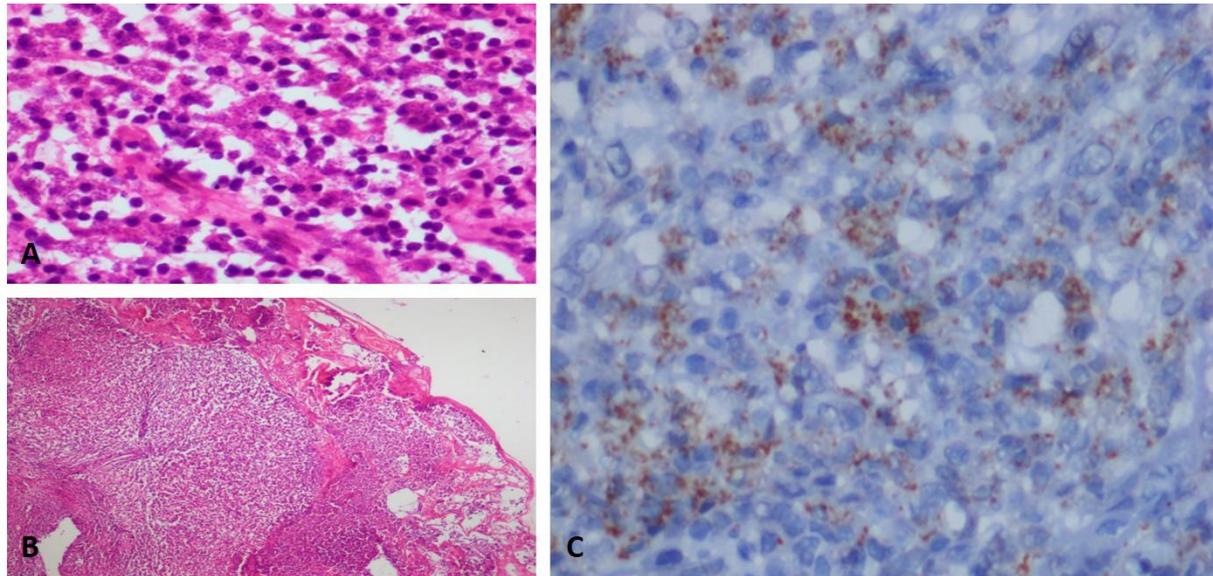


Figure 2. **A)** *Leishmania amastigotes* in the cytoplasm of the histiocytes (H & E x400). **B)** Ulceration on the surface and histiocytic infiltration of the dermis, **C)** Amastigotes with CD1a appear prominent.

DISCUSSION

Cutaneous leishmaniasis (CL) is an endemic disease, which is caused by some parasites of the *Leishmania* genus. This diagnosis should be considered in patients who present an infiltrated facial plaque with a tuberculoid granuloma on histology.¹ The diverse clinical spectrum of cutaneous leishmaniasis (CL) is dependent on a number of factors, such as the type and duration of clinical lesion, strain of organism, geographic location, parasitic load, disease reservoir and host immunocompetence. Lupoid CL has long been described as a unique form of CL characterized by unusual clinical features and a chronic relapsing course.²

Lupus vulgaris is the most common presentation of cutaneous tuberculosis and can present as papular, nodular, plaque, ulcerative, vegetating forms. Cutaneous leishmaniasis can mimic lupus vulgaris in some cases. In such cases, other granulomatous diseases are suspected, the most important and difficult to differentiate being lupus vulgaris.³ Only clinical findings may not be sufficient for the differential diagnosis of these two diseases. Due to the presence of many diseases in the differential diagnosis spectrum, diagnosis should be confirmed by at least one laboratory method in cases where clinical diagnosis of CL is made. CL lesions tend to spontaneously regress, but

remain untreated and cause source and risk of transmission. For this reason, early diagnosis and treatment are very

important to prevent scarring in areas with cosmetic preservation.^{4,5}

CONCLUSION

In lesions with possible infectious etiology; even in non-endemic regions, leishmaniasis should be kept in mind in the differential diagnosis. Early diagnosis of these

cutaneous leishmaniasis lesions with biopsy and other diagnostic techniques are going to be important to reduce morbidity and prevent unnecessary treatments.

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