

Leishmaniasis of the Feet Sole: A Case Report

Leishmaniasis of the Feet Sole: Bir Olgu Sunumu

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ABSTRACT

Here we report the case of a patient with cutaneous leishmaniasis, who was referred to our clinic in Yazd, Iran. On examining the patient, who was a housekeeper, we found a small plaque in the palmoplantar region due to cutaneous leishmaniasis. She had not any history from an identical case in this patient. After treatment, the lesions improved.

Keywords: Cutaneous leishmaniasis, Palmoplantar, Iran

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ÖZ

Bu çalışmada İran, Yazd'da kliniğimize yönlendirilen kutanöz leishmaniasisi olan bir hastayı sunmaktayız. Temizlikçi olarak çalışan hastanın muayenesinde, palmoplantar bölgede deri leishmaniasisinden kaynaklanan küçük bir plak saptandı. Hastanın özdeş bir vaka öyküsü yoktu. Tedavi sonrası lezyonlar iyileşti.

Anahtar Kelimeler: Kutanöz leishmaniasisi, Palmoplantar, İran

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INTRODUCTION

Leishmaniasis is a major problem in many parts of the world (1). The disease has different types from the self-limited and even self-healing cutaneous forms to fatal systemic disease (1, 2). Almost 1.5 million cases of cutaneous leishmaniasis (CL) are reported each year worldwide (1). The parasitic agent of leishmaniasis was discovered 100 years ago (2).

Sandflies, being the vectors of these parasites, determine the frequency of CL; they mainly belong to the genus *Phlebotomus* or *Lutzomyia* (3). These species live in damp, dark areas (4). Sandflies get infected when they feed on infected animals (5). Once infected, they can transmit the parasite to both animals and humans (3, 4).

Cutaneous leishmaniasis lesions may develop in all parts of the body, but the most likely sites are the exposed areas (6). The primary papule rapidly transforms into an ulcer (7). Le-

sions are commonly unique and often self-healing (6).

Some rare manifestations of CL have been described (3-5). Here we present an interesting case of CL because of the rare location of the lesion in the palmoplantar region.

CASE REPORT

A 36-year-old woman visited our hospital with a 3-month-old bite in the palmoplantar region (Figure 1). Initially, the lesion was and slowly expanded. She reported no history of trauma, drug intake, or allergies. Her occupation was housekeeping. In addition, the patient did not have a similar disease in the past. She also did not have any history of tuberculosis. She reported that she had no risk factors associated with human immunodeficiency virus (HIV) and no chills, pain, fever, or constitutional signs. A complete blood count, erythrocyte sedimentation rate, *C-reactive protein*, fasting blood glucose, and intradermal purified protein derivative

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Figure 1. A small plaque in the palmoplantar region

skin test and serology for HIV were all within the normal ranges. On physical examination, a small lesion was found in the palmoplantar region (Figure 1).

There were no palpable lymphatic cords or lymph nodes. Stains and cultures were negative for acid-fast bacteria, fungi, and other bacteria. The patient resided in an endemic place and was therefore asked to undergo CL test. Wright-Giemsa's stain was positive for *Leishmania*. The patient was treated with meglumine antimoniate (glucantime), a pentavalent antimonial, at a dosage of 20 mg/kg per day intramuscularly for 20 days, as suggested by the Center for Disease Control in Iran). After therapy, the lesions improved.

The ethics committee of our university approved the study. The patient was not in accessible to get an informed consent.

DISCUSSION

Cutaneous leishmaniasis is an infection caused by a protozoan of the genus *Leishmania* and is transmitted by sandfly bites (3-7). Because of the thickness of the skin on the palms of hands and feet and the head, sandflies generally do not feed on these skin areas. After thirty years of working experience, this is the first case wherein we have encountered leishmaniasis on the palms of the hands. Classical signs and numerous atypical forms have been described, such as annular, chancriform, acute paronychia, palmoplantar, zosteriform, and erysipeloid (1, 3, 7-9).

CONCLUSION

The present case is interesting because of the rare location of the lesion in the palmoplantar region. Some atypical variants were already described, such as chancriform, palmoplantar, zosteriform, and erysipeloid, and more recently the paronychia, annular, eyelid, chancriform, zosteriform, and palmoplantar that palmoplantar region reports were very rare (1, 3, 5, 7-9).

Informed Consent: Informed consent couldn't be obtained due to impossibility to reaching the patient.

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REFERENCES

1. Ceyhan AM, Yildirim M, Basak PY, Akkaya VB, Erturan I. A case of erysipeloid cutaneous leishmaniasis: atypical and unusual clinical variant. *Am J Trop Med Hyg* 2008; 78: 406-8.
2. Bari AU, Rahman SB. Many faces of cutaneous leishmaniasis. *Indian J Dermatol Venereol Leprol* 2008; 74: 23-7. [CrossRef]
3. Ayatollahi J, Fattahi Bafghi A, Shahcheraghi SH. Chronic zoster-form: a rare variant of cutaneous leishmaniasis. *Reviews in Medical Microbiol* 2015; 26: 114-5. [CrossRef]
4. Ayatollahi J, Fattahi Bafghi A, Shahcheraghi SH. Rare variants of cutaneous leishmaniasis presenting as eczematous lesions. *Med J Islam Repub Iran* 2014; 28: 71.
5. Ayatollahi J, Ayatollahi A, Shahcheraghi SH. Cutaneous leishmaniasis of the eyelid: a case report. *Case Rep Infect Dis* 2013. [CrossRef]
6. Iftikhar N, Bari I, Ejaz A. Rare variants of Cutaneous Leishmaniasis: whitlow, paronychia, and sporotrichoid. *Int J Dermatol* 2003; 42: 807-9. [CrossRef]
7. Chiheb S, El Machboub L, Marnissi F. Paronychia-like cutaneous leishmaniasis. *Dermatol Online J* 2015; 21.
8. Raja KM, Khan AA, Hameed A, Rahman SB. Unusual clinical variants of cutaneous leishmaniasis in Pakistan. *Br J Dermatol* 1998; 139: 111-3. [CrossRef]
9. Shamsuddin S, Mengal JA, Gazozai S, Mandokhail ZK, Kasi M, Muhammad N, et al. Atypical presentation of cutaneous leishmaniasis in native population of Baluchistan. *J Pak Assoc Dermatol* 2006; 16: 196-200.