

Commentary on the Article: Plantar Ulcer as an Atypical Manifestation of Cutaneous Leishmaniasis

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Description

We present here a short commentary of the article published in *Anais Brasileiros de Dermatologia* in 2021, intitled "Plantar ulcer as an atypical manifestation of cutaneous leishmaniasis". In that paper we presented the case of a young male, resident of endemic area of leishmaniasis in Bahia, Brazil, who presents a plantar ulcer, diagnosed as an atypical manifestation of Cutaneous Leishmaniasis. We claim that American Tegumentary Leishmaniasis is an infectious, non-contagious, endemic and neglected zoonosis in Brazil, characterized by various clinical manifestations resulting in mucocutaneous involvement. The disease is caused by several protozoa species of the genus *Leishmania* that is transmitted by the bite of phlebotomine sand fly. Affects about 2 million people per year and it's considered as priority amongst neglected diseases by the WHO. *Leishmania braziliensis* is main causative agent in Brazil's territory. The disease pathogenesis is the result of the interaction between the genetic polymorphism of the parasite, host immune response, and environmental conditions, resulting in different clinical presentations [1-4]. Cutaneous Leishmaniasis (CL) is the most prevalent clinical presentation and is characterized by one or more rounded ulcers, with a granular bottom and raised edges, located mainly in exposed parts of the skin, corresponding to the parasite inoculation site by the vector insect. In addition to localized cutaneous manifestation, ATL can affect mucous membranes (oral and nasal) or even disseminated lesions and atypical forms [4]. The presence of lesions in less accessible body areas constitutes an atypical manifestation of the disease, even if it doesn't fit in the classic description of atypical cutaneous leishmaniasis, which is erysipeloid, sporotrichoid, zosteriform and recidiva cutis [2]. Plantar ulcers, even in endemic areas of leishmaniasis should be differentiated from other etiologies including leprosy, deep fungal infection, atypical mycobacteriosis, gangrenous pyoderma, vasculitis and perforating disease associated with diabetes [3]. In the original article, we reported the case of a twenty-one-year-old male patient, who was referred to the Corte de Pedra Leishmaniasis Reference Center in the municipality of Presidente Tancredo Neves, in the state of Bahia, Brazil. He was previously healthy and had no previous chronic diseases or history of ulcerated skin lesions suspected of leishmaniasis. He observed sudden appearance of a papular and ulcerated lesion in the axillary region with approximately 35 days of evolution. Concomitantly, he had an ulcerated lesion with raised edges on the left plantar region, associated with fever and myalgia. He subsequently evolved with the formation of two erosive lesions in the groin and left buttock regions 20 days after the onset of the manifestations, with lymphadenopathy in the left inguinal region. The physical examination showed a rounded ulcer with a granular bottom on the plantar region of the left foot measuring 11 × 15 mm and three ulcerated papules in the left axilla, buttock, and groin region. The biopsy of the plantar ulcer edge showed positive PCR for *L. braziliensis* and the histopathological analysis showed the presence of amastigotes of *L. braziliensis*, confirming the diagnosis. A successful treatment with meglumine antimoniate was implemented for 30 days, evolving with complete regression of the skin lesions and full healing of the plantar ulcer [1]. In conclusion, we sustain that a round ulcer with raised edges and a granular bottom is the description of the classical presentation of CL, it is located mainly in exposed regions corresponding to the inoculation site of the parasite by the vector insect bite. Ulceration on the plantar region may be considered as an atypical manifestation

of ATL, once the plantar region is not usually accessible to the insect vector, and claims attention to other important differentials diagnosis, such as leprosy, diabetes ulcers and vasculitis. Few reports of CL presentation as plantar ulcers have been described in the literature since it represents an unexposed area of the skin and, furthermore, where the higher thickness of the corneal layer in the volar skin make the inoculation by the vector unfeasible. The histopathological analysis with visualization of the pathogen in the affected tissue and confirmatory PCR analysis are essential in these cases for diagnostic confirmation and implementation of adequate curative treatment. Atypical forms of leishmaniasis are a diagnostic and therapeutical challenge for dermatologists and clinicians around the world.

References

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