

## A Rare Case of Plantar Callus-Like Cutaneous Leishmaniasis

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**Key Words:** Cutaneous leishmaniasis- plantar callus

### Abstract

**Observation:** Cutaneous Leishmaniasis (CL) is a major world health problem that is growing epidemically in many areas of the world including our region Syria. It is a Great Imitator with various clinical presentations. We described the first case of plantar callus-like Cutaneous Leishmaniasis (CL) which up to our knowledge, has not been previously reported.

### Introduction

Cutaneous Leishmaniasis (CL) is a Great Imitator with various clinical presentations in the endemic areas. We described the first case of plantar callus-like Cutaneous Leishmaniasis.

### Case Report

A 2 year-old male was referred to us for evaluation. He had a hyperkeratotic plaque on the right planter since 4 months. He had received many topical antibacterial and keratolytic treatments with no response. No other similar lesion on the body and face as well as no other family member reported any similar lesions.

Physical exam revealed a planter callus like hyperkeratosis (**Figure 1**). Neurological examination was normal without any disturbance in pain sensation. Laboratory exam including fasting blood sugar were within normal rang. Foot X-ray was normal (**Figure 2**), So malum perforans pedis was excluded.

Skin smear from the lesion with Giemsa staining was positive for Leishmania bodies. A 3 mm punch

biopsy was performed. It revealed unspecific granuloma (**Figures 3a and b**). As the culture for Leishmania and PCR was not available, as well as the patient was living in an endemic area, we decided to treat him experimentally as rare form of Cutaneous Leishmania. Glucantime injections were added at a daily dose of 50mg/kg intramuscularly for 15 days with great improvement after the first course (**Figure 4**). So the final diagnosis was unusual clinical variants of CL (callus-like



**Figure 1.** Planter callus like hyperkeratosis



**Figure 2.** Foot X-ray imaging

plantar Cutaneous Leishmaniasis). More injections were recommended until he reached the complete clearance.

**Discussion**

Cutaneous leishmaniasis (CL) is a major world health problem that is growing epidemically in Syria. According to the World Health Organization (WHO), leishmaniasis is endemic in 88 countries with 350 million persons at risk. Approximately 1.5 million new cases of cutaneous leishmaniasis are reported annually, with two thirds of cases in six countries: Afghanistan, Algeria, Brazil, Colombia, Iran, and Syria [1, 2]. CL is the most common manifestation of leishmaniasis with approximately 1.5-2 million new cases per year [3]

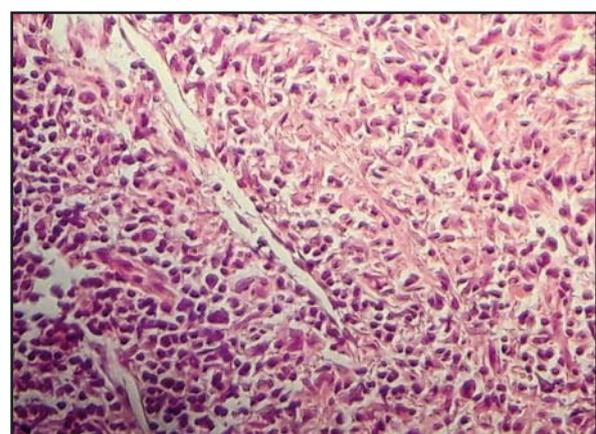
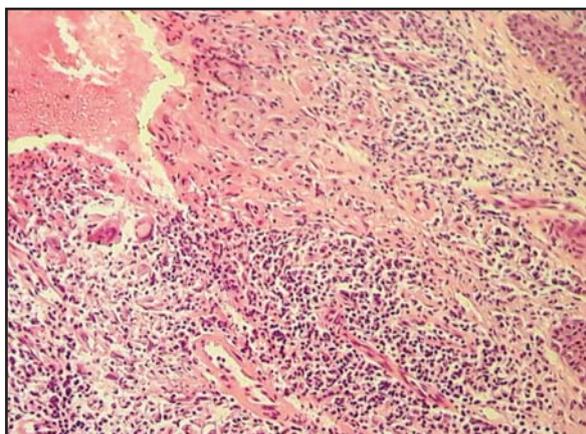
It is a parasitic disease caused by Leishmania and transmitted by the bite of some species of sandflies and it affects various age groups [4]. This disease is highly prevalent in Syria where Leishmania major and Leishmania tropica are

the known etiological agents. In 2011, more than 58,000 cases were reported in the country by the Ministry of Health [5].

Clinically cutaneous leishmaniasis is a Great Imitator with many faces : nodules, papules, ulcers ,as well as some unusual clinical variants . In a large study included 718 patients with cutaneous leishmaniasis, 5.7% of them were presented with unusual morphologies[4] The commonest was lupoidleishmaniasis 14 (34.1%), followed by sporotrichoid 5 (12.1%), paronychia 3 (7.3%), lid leishmaniasis 2 (4.9%), psoriasiform 2 (4.9%), mycetoma-like 2 (4.9%), erysipeloid 2 (4.9%), chancriform 2 (4.9%), whitlow 1 (2.4%), scar leishmaniasis 1 (2.4%), DLE-like 1 (2.4%), 'squamous cell carcinoma'-like 1 (2.4%), zosteriform 1 (2.4%), eczematous 1 (2.4%), verrucous 1 (2.4%), palmar/plantar 1 (2.4%) and mucocutaneous 1 (2.4%) [4].

Callus- like Cutaneous Leishmaniasis has not been previously reported . Callus is hard, thickened areas of skin that form as a consequence of rubbing, friction or pressure on the skin. It is very rare in infant but most cases of hyperkeratosis in this age group is diagnosed as malum perforans pedis which begins as circumscribed hyperkeratosis . The main cause of malum perforans pedis in infant is congenital insensitivity to pain. In our patient Neurological examination was normal without pain loss. Laboratory exam including fasting blood sugar were within normal range , and x-ray foot image was normal,so malum perforans pedis was excluded.

Because the positivity of Giemsa staining for Leishmania bodies ,and Cutaneous Leishma-



**Figures 3a and b.** Histopathological examination



**Figure 4.** Improvement after the first course of Glucantime injections.

niasis (CL) is a Great Imitator, and it is endemic in Syria [6]. we decided to treatment with glucantim in spite of the non-specific granuloma histologically. Glucantime injections were added at a daily dose of 50mg/kg intramuscularly. The rapid improvement confirmed the diagnosis of plantar cutaneous leishmaniasis (callus- like) which have not been previously reported in the literature.

**Conclusion:** Cutaneous Leishmaniasis (CL) is a Great Imitator with various clinical presentations in the endemic areas. It can resemble many skin lesions. Doctors should be aware In those areas, and Cutaneous Leish-

maniasis must be in differential diagnosis For many lesions.

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