# Chronic zosteriform cutaneous leishmaniasis

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#### **ABSTRACT**

Cutaneous leishmanasis (CL) may present with unusual clinical variants such as acute paronychial, annular, palmoplantar, zosteriform, erysipeloid, and sporotrichoid. The zosteriform variant has rarely been reported. Unusual lesions may be morphologically attributed to an altered host response or owing to an atypical strain of parasites in these lesions. We report a patient with CL in a multidermatomal pattern on the back and buttock of a man in Khozestan province in the south of Iran. To our knowledge, this is the first reported case of multidermatomal zosteriform CL. It was resistant to conventional treatment but responded well to a combination of meglumine antimoniate, allopurinol, and cryotherapy.

Key Words: Cutaneous leishmaniasis, Zosteriform

### INTRODUCTION

Cutaneous leishmaniasis (CL) is a common protozoal disease, caused by several species of *Leishmania*. CL, owing to *L. major* and *L. tropica*, is an important publichealth problem in Iran.<sup>[1]</sup> The common clinical types are the nodular and papular; rare variants are erysipeloid, annular, paronychial, palmoplantar, sporotrichoid, and genital forms.<sup>[2–5]</sup> We present a patient with a very rare and chronic variant—multidermatomal zosteriform CL. The patient was from the Khozestan province, which is in the south of Iran.

#### CASE REPORT

A 60-year-old man was referred to us with a large erythematous plaque,  $20 \times 30 \text{ cm}^2$  in size, studded with papules, pseudovesicles, and small nodules on the

right lower portion of the back and buttock since 3 years (Figure 1). There was also some crusting and slight oozing. He had been treated with many therapeutic modalities, including short courses of meglumine antimoniate and acyclovir (because of misdiagnosis as herpes zoster).

A Tzanck smear from the lesion did not show any feature of herpes zoster but numerous Leishman Donovan (LD) bodies were seen (Figure 2). A biopsy specimen showed a granulomatous infiltrate in the dermis. Culture on Novy-Nicolle-MacNeal medium was positive for *Leishmania*.

The patient's electrocardiogram (ECG), complete blood picture, chest X-ray, and serum urea, creatinine and electrolytes were within normal limits. He was given a combination of meglumine antimoniate in a dose of

How to cite this article: Omidian M, Mapar MA. Chronic zosteriform cutaneous leishmaniasis. Indian J Dermatol Venereol Leprol 2006;72:41-2

Received: November, 2004. Accepted: April, 2005. Source of Support: Nil. Conflict of interest: None declared.



Figure 1: Erythematous papulonodules and plaques on one side of trunk

20 mg/kg body weight intramuscularly daily for 20 days, 20 mg/kg body weight of allopurinol daily for 30 days (with monitoring of the ECG and routine hematological parameters), and liquid-nitrogen cryotherapy every 2 weeks. After 2 months almost all the lesions had cleared.

#### DISCUSSION

CL is a disease with different clinical features.<sup>[2–5]</sup> Many of the lesions are typical and present no diagnostic difficulties. However, a zosteriform presentation is rare, especially with multidermatomal involvement. The most commonly involved sites are exposed areas.<sup>[5]</sup> Our patient presented with an unusual lesion on a covered area. The lesion was zosteriform and multidermatomal, on the right lower part of the back, flank, and buttock with nodules, papules, and pseudovesicular lesions on an erythematous background.

Zosteriform CL has rarely been reported,<sup>[3,5]</sup> but a multidermatomal zosteriform pattern has not been reported. Our patient had been mistakenly treated for herpes zoster on several occasions. A Tzanck smear from lesions showed numerous LD bodies. The



Figure 2: Tzank smear with LD bodies

mechanism of multidermatomal involvement is not clear, but altered host immunity may be involved. The clinical pattern of the disease is determined by the interaction between the host immune responses and the strain of the parasite involved and, to some extent, on the site of involvement.<sup>[3,4]</sup> In an endemic area it is necessary for the physician to be aware that any atypical lesion should be investigated for CL.

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