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Zosteriform cutaneous leishmaniasis diagnosed with the help of dermoscopy

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ABSTRACT Cutaneous leishmaniasis is usually easy to recognize; however, several atypical features exist, which may pose a diagnostic challenge. Here we report a 55-year-old female patient, who presented with an itchy and painful eruption localized in a dermatomal distribution along the right upper chest. Although the clinical appearance of the lesions suggested the diagnosis of herpes zoster, dermoscopic evaluation revealed erythema, hyperkeratosis, burst star whitish appearance and hairpin vessels, compatible with the diagnosis of cutaneous leishmaniasis. Indeed, leishmania amastigotes were detected by smear from the lesions. Zosteriform presentation of cutaneous leishmaniasis, as exemplified by our patient, is especially rare. In our case dermoscopy has proven to be an accessible and easy tool to diagnose such atypical presentation of cutaneous leishmaniasis, and dermatologists in endemic areas should be familiar with its typical dermoscopic features.

Introduction

Cutaneous leishmaniasis is caused by transmission of the *Leishmania* spp. through the bite of the female sandfly [1]. While most of the clinical manifestations are characteristic and pose no diagnostic difficulties [2], there are several infrequent and atypical features of the disease which can delay correct diagnosis and proper treatment [3]. Here we report on a case of zosteriform cutaneous leishmaniasis, which was diagnosed with the help of dermoscopy.

Case report

A 55-year-old female, without known health-related problems, presented with an upper right chest and upper right back eruption for six weeks. The eruption was accompanied with mild to moderate itching and pain. She did not receive any treatment for these symptoms. The patient had traveled to an endemic area for cutaneous leishmaniasis inside Israel a month before the rash appeared. On examination, two erythematous nodules, with a central ulcer covered with a yellow

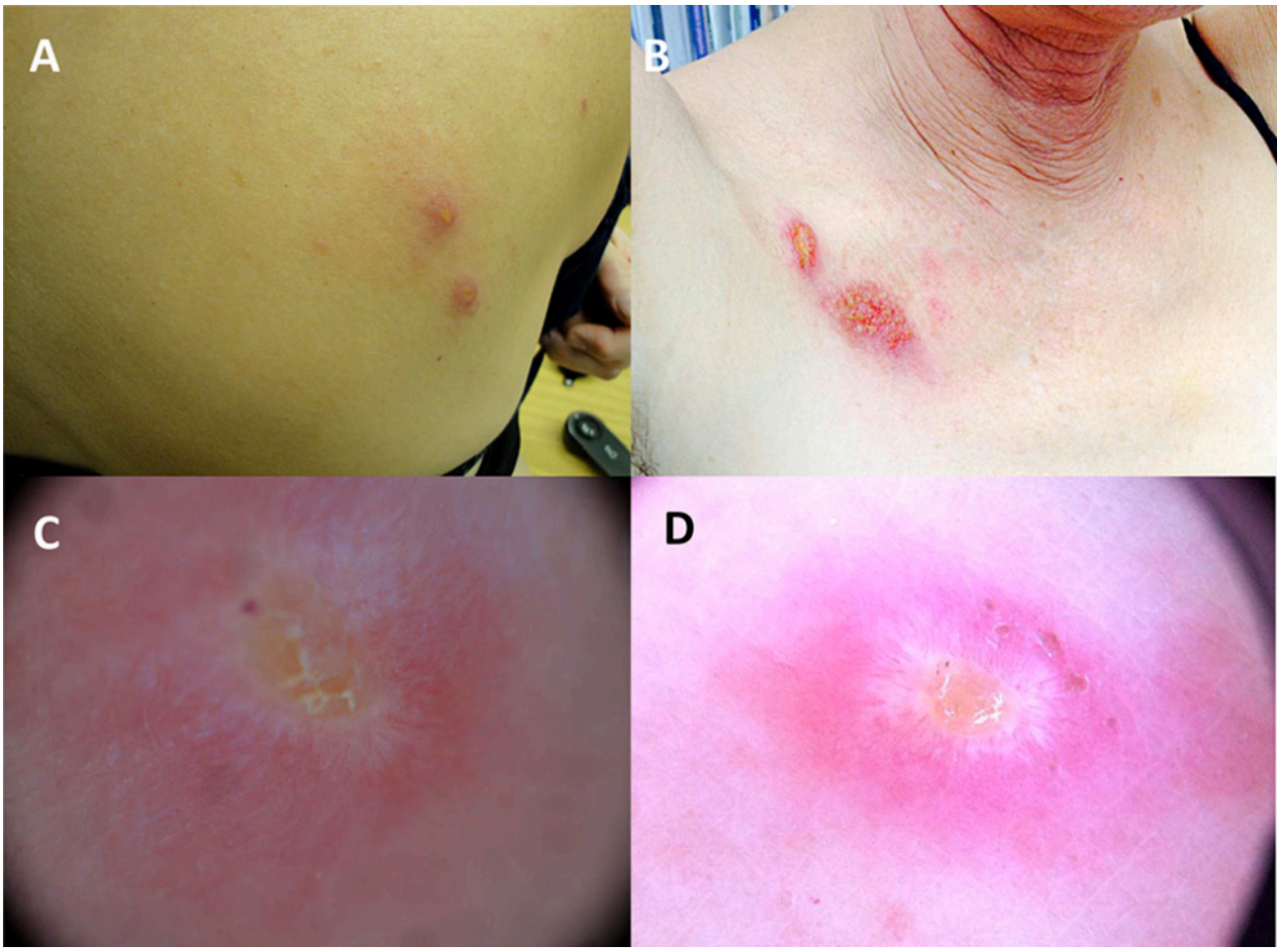

Figure 1. (A, B) Clustered erythematous nodules with a central crust arranged in a dermatomal distribution. (C, D) Dermoscopic features of the lesions, including erythema, hyperkeratosis, burst star whitish appearance and hairpin vessels. [Copyright: ©2014 Ramot et al.]

crust, were evident on the upper right back (Figure 1A). An erythematous papule was evident as a satellite lesion. Three similar additional lesions were found on the right upper chest (Figure 1B), forming a seemingly dermatomal distribution of lesions, leading to the clinical impression of herpes zoster. However, dermoscopic examination revealed erythema, hyperkeratosis, burst star whitish appearance and hairpin vessels (Figure 1C, D), compatible with cutaneous leishmaniasis. Leishmania amastigotes were detected by smear from the lesions.

Discussion

While several uncommon presentations of cutaneous leishmaniasis have been reported [3], a zosteriform presentation is especially rare, and has been described only anecdotally in the literature [3-6]. Our case posed a special challenge, since the patient reported on pain in the relevant region, while leishamania lesions are usually asymptomatic. The lesions were also arranged in a seemingly dermatomal distribution, without crossing of the midline. However, the chronic course of the rash raised the suspicion of a different diagnosis than herpes zoster, and dermoscopy proved to be a useful diagnostic tool.

Several dermoscopic findings have been described in cutaneous leishmaniasis, the most common ones include erythema, a large number of different vascular structures, white starburst-like patterns, central ulcers, yellow tears and hyperkeratosis [7-9]. Since erythema, hyperkeratosis and hairpin vessels can be observed in many dermatological conditions, they are not considered to be very useful or specific for diagnosing cutaneous leishmania [7]. However, the presence of a whitish starburst pattern was a strong indicator for cutaneous leishmaniasis in our patient.

Our case demonstrates the importance of including cutaneous leishmaniasis in the differential diagnosis of herpes zoster in endemic areas. Furthermore, since dermoscopy can be easily utilized to diagnose this condition, dermatologists in endemic areas should be familiar with its typical dermoscopic features.

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