

CASES FOR DIAGNOSIS

Palmoplantar Hyperkeratotic Plaques

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Patient History

A 56-year-old man consulted for pruriginous hyperkeratotic plaques that affected the palms and soles symmetrically and had lasted 3 weeks. The patient had presented erythematous-desquamative plaques on the trunk 7 years earlier.

Physical Examination

The physical examination showed plaques with a hyperkeratotic appearance and some painful cracks in both soles (Figure 1). Likewise, the palms had symmetric pruriginous psoriasiform plaques, accompanied by flaking on the sides of the fingers, but with no vesicles (Figure 2). No nail involvement or lesions at other integument sites were observed. The rest of the physical examination was normal.

Additional Examinations

A punch biopsy was taken from a border of the plaque on the left palm (Figures 3 and 4).

Histopathology

The histopathological examination showed psoriasiform epidermal hyperplasia, with a dermal infiltrate of large atypical lymphocytes with convoluted nuclei and mitotic figures, lymphocyte exocytosis, and lymphocyte exocytosis with abscess formation. The immunohistochemical study showed expression of CD3, CD4, and CD8, but was negative for CD30.

What is your diagnosis?

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Manuscript accepted for publication November 15, 2006



Figure 1.



Figure 2.

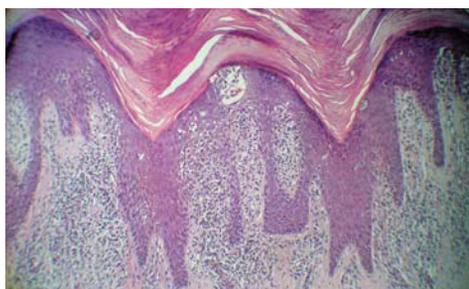


Figure 3.
Hematoxylin-eosin stain,
×100.



Figure 4.
Hematoxylin-eosin stain,
×200.

Diagnosis

Mycosis fungoides palmaris et plantaris (MFPP)

Course and Treatment

As mentioned, 7 years earlier the patient had presented erythematous-desquamative plaques on the trunk, with a histological diagnosis consistent with mycosis fungoides (MF). Analysis of extension was then negative and the patient was treated with psoralen-UV-A (PUVA); the therapeutic response was good and the patient had remained disease-free since then. The initial diagnostic impression of the new palmoplantar lesions was eczema. Because of therapeutic failure with 0.05% clobetasol propionate and urea cream, as well as the patient's history, biopsy was performed immediately and a diagnosis was obtained. The physical examination showed no enlarged lymph nodes and the extended study was again negative. The patient was treated with PUVA on the hands and feet, leading to disappearance of the lesions after 4 months of treatment, and no lesions remain at the time of writing.

Comment

Palm and sole involvement is not uncommon in a patient with generalized MF and occurs in about 11.5% of cases. MFPP is a rare type of cutaneous T-cell lymphoma with a prevalence of 0.6%. This entity was classified for the first time in 1995 by Resnik et al.¹ The lesions are located exclusively on the palms and/or soles or may spread to the fingers, toes, feet, or arms. MF may also initially present in this form.

The clinical manifestations of MFPP are extremely varied and include hyperkeratotic plaques, psoriasiform plaques, verrucous and dyshidrosiform lesions, pustules, ulcers, or dystrophia unguium.^{2,3} The differential diagnosis includes mycotic infections, palmoplantar psoriasis, dyshidrotic eczema, warts, hypertrophic lichen planus, granuloma annulare, and contact eczema.

The histopathological findings are often consistent with typical MF, although a T-cell receptor gene rearrangement study can also be used when the histological diagnosis is unclear.⁴

The course of MFPP is normally indolent. The lesions are usually confined to the initial presentation site, but can

spread to the limbs or trunk. No cases of extracutaneous involvement have been reported.⁵

Various therapeutic options are available, including PUVA, narrow-band UV-B, methotrexate, topical nitrogen mustard, bexarotene, radiotherapy, electron-beam radiation, surgical removal, or CO₂ laser. Some publications support the use of UV-A radiation in MF in the macula or plaque stage, on the basis that it would be effective but without the adverse effects of psoralens.^{4,6}

In conclusion, the clinical symptoms of MFPP can emulate a wide variety of conditions. In our case, the initial clinical impression was eczema despite the patient's history. The patient's history meant that biopsy was not delayed after therapeutic failure with topical corticoids and urea cream; hence, the diagnosis was relatively early with good therapeutic response. However, diagnosis is often delayed because the entity has no specific clinical characteristics, thus hindering the diagnosis in the absence of mycosis fungoides lesions at other sites. As a result, this diagnostic possibility should be considered and skin biopsy should be included in the assessment of refractory palmoplantar dermatoses.

Conflicts of Interest

The authors declare no conflicts of interest.

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