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CASE AND RESEARCH LETTERS

Psoriasis and Pitiriasis Versicolor: Together But Separate[☆]

Psoriasis y pitiriasis versicolor: juntas pero no revueltas

To the Editor:

Psoriasis is a dermatosis, the pathogenesis of which is characterized by activation of the helper T cell (T_H) subpopulations $T_{H}1$ and $T_{H}17$ and the expression of inflammatory mediators such as interleukins and antimicrobial peptides involved in fighting infection.^{1,2} In contrast to atopic dermatitis, the likelihood of superinfection of psoriasis plaques is low.³ However infectious triggers, such as streptococcal pharyngeal infection, are common in certain forms of psoriasis.⁴

A 50-year-old man with a history of psoriasis vulgaris since youth was seen at our clinic for a rash affecting the trunk and arms. The clinical examination revealed 2 distinct dermatoses: reddish-brown, desquamative, confluent macular plaques that covered large areas of the trunk and were indicative of pityriasis versicolor (Fig. 1, blue arrows); and erythematous, keratotic plaques suggestive of psoriasis vulgaris (Fig. 2, red arrows). As shown in the images,



Figure 1 Reddish-brown, desquamative, confluent macular plaques covering large areas of the trunk, indicative of pityriasis versicolor (blue arrows).



Figure 2 Erythematous, keratotic plaques suggestive of psoriasis vulgaris (red arrows).

the 2 dermatoses coexisted, but the pityriasis versicolor lesions spared the psoriasis plaques, with a margin of 5 mm to 10 mm.

The presumptive diagnoses of pityriasis versicolor and psoriasis vulgaris were confirmed by direct microscopic examination of a potassium hydroxide preparation and by histopathology of a skin biopsy of an adjacent keratotic plaque, respectively. Periodic acid-Schiff (PAS) staining revealed no fungal elements in the stratum corneum of the biopsied psoriasis lesion.

The patient was treated with a combination of oral itraconazole (100 mg/d for 7 days) and narrowband ultraviolet B phototherapy, and achieved remission of both dermatoses 1 month after treatment.

Reports have described the colonization of psoriasis lesions by *Malassezia* species, which have been proposed to trigger lymphocyte activation, as described for other microorganisms.⁴⁻⁶ In some reported cases, *Malassezia* infection appears to trigger psoriasis via the Koebner phenomenon and the 2 dermatoses co-occur,⁷ albeit without sparing the areas affected by the concomitant dermatosis, as was observed in our patient. It is likely that psoriasis can co-occur with *Malassezia* colonization, which in some cases acts as a trigger and in others is merely an innocent bystander, depending on the equilibrium between the host's immune response and the microorganism's ability to produce a mycelium and proliferate. Likewise, different *Malassezia* species may provoke distinct immune responses, and associated Koebner responses of greater or lesser intensity.⁸ The present case supports the theory that psoriasis is the result of aberrant activation of immunological pathways originally expressed in the human species for the control of infection.⁹ The T_H17 /interleukin 17 axis, which is

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activated in psoriasis, is a component of the immune system that is crucial in the defense against fungal infections.¹⁰ Although our patient presented both dermatoses concomitantly, the psoriasis lesions were strikingly separated from the pityriasis versicolor lesions. The interaction between the skin microbiome and the immune system is an attractive theory to account for the appearance of certain dermatoses, including psoriasis.^{11,12} While dysbiosis can lead to activation of the cutaneous immune system, even in the absence of clinical infection, in our patient the psoriasis was very clearly delimited from the pityriasis versicolor.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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Primary Kaposi Sarcoma of the Subcutaneous Tissue: A Rare Clinical Variant[☆]

Sarcoma de Kaposi subcutáneo primario, una rara variante clínica

To the Editor:

Kaposi sarcoma (KS) is a vascular tumor associated with human herpes virus 8 (HHV-8) infection. We describe a case of primary KS of the subcutaneous tissue, a rare clinical manifestation, and review the literature.

A 78-year-old woman with no remarkable past history presented with nodular lesions of 2 years' duration on both



legs. The lesions were asymptomatic, and while they had not grown, they had increased in number. Physical examination showed multiple nodules measuring less than 2 cm covered by normal-appearing skin on both legs and a few nodules on the thighs. The nodules were soft on palpation and not fixed to the deep layers (Fig. 1). There was no associated edema or mucosal involvement. The general blood test results were normal and serology for hepatitis C virus (HCV), HBV, and human immunodeficiency virus (HIV) was negative. Ultrasound showed numerous solid subcutaneous lesions in both legs. The findings were heterogeneous, with a mixture of hyperechogenic and strongly hypoechoic lesions without detectable flow. Histologic examination showed a well-circumscribed nodule composed of spindle cells with varying degrees of atypia (Fig. 2) in the subcutaneous tissue, in addition to large irregular, dilated vascular channels with a prominent endothelium and abundant hematic content (Fig. 3). Immunohistochemistry was positive for CD31 and HHV-8. Positron emission tomography-computed tomography (PET-CT) ruled out lymph node and visceral involvement and confirmed exclusive involvement of the subcutaneous tissue. A diagnosis of primary KS of the subcutaneous tissue was established. Considering the absence of disease spread and severe symptoms, it was decided to adopt a watch-and-wait approach.

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