

Unusual Case of Pemphigus Vulgaris Mimicking Localized Pustular Psoriasis of the Hands and Feet

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We report a case of a 70-year-old man with a history of chronic plaque psoriasis presenting with new-onset vesiculopustules of the hands and feet. Hematoxylin and eosin stain as well as direct and indirect immunofluorescence were all consistent with a diagnosis of pemphigus vulgaris. Unusual presentations of pemphigus vulgaris have been reported in the literature. Our case easily could have been clinically misdiagnosed as pustular psoriasis.

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Case Report

A 70-year-old man with a history of biopsy-proven chronic plaque psoriasis presented to our dermatology office in December 2003 for evaluation of new-onset blistering lesions located on the palms and soles. Psoriatic involvement at the time included approximately 30% body surface area, which was well-controlled with topical clobetasol propionate. The patient had no history of treatment with phototherapy and no history of acral involvement. Dermatologic examination of the hands and feet revealed a few scattered vesiculopustules located on the proximal nail folds and periungual regions as well as several erythematous coin-shaped papules (Figure 1). Punch biopsies of the right hand were performed for hematoxylin and eosin stain and direct immunofluorescence. The results of the hematoxylin and eosin stain revealed sections with intraepidermal and suprabasilar acantholytic dyskeratosis with many neutrophils and eosinophils (Figure 2).

Direct immunofluorescence showed deposits of IgG between the keratinocytes in the lower epidermis consistent with pemphigus vulgaris. Indirect immunofluorescence showed cell surface antibodies of IgG positive for monkey esophagus and negative for rat bladder. Paraneoplastic pemphigus was ruled out by immunofluorescence and there was a negative workup for malignancy in collaboration with the primary care physician. The patient was placed on oral prednisone with improvement of his skin lesions. In June 2004, he presented for follow-up and reported painful oral erosions. Examination of the oral mucosa revealed multiple erythematous erosions located on the buccal mucosa. Perilesional biopsies of the oral lesions were consistent with pemphigus vulgaris. The patient was placed on a combination treatment with oral prednisone and mycophenolate mofetil for his pemphigus vulgaris and continued with topical corticosteroids for his psoriasis. He admitted to a decreased necessity for clobetasol propionate after the initiation of oral prednisone and mycophenolate mofetil.

Comment

Pemphigus vulgaris belongs to a group of autoimmune blistering diseases of the skin and mucous membranes that are histologically characterized by intraepidermal blisters due to acantholysis. Pemphigus vulgaris is more common in Jews as well as individuals of Mediterranean and Middle Eastern descent.¹ The skin lesions of pemphigus vulgaris often are painful flaccid blisters that evolve into erosions, and mucous initially presents in the mucous membranes and spreads to the head, neck, groin, and trunk.^{2,3}

Unusual presentations of pemphigus vulgaris have been reported in the literature. Tan and Tay³ reported a case of pemphigus vulgaris presenting as

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Figure 1. Proximal nail folds and periungual regions with erythematous crusting papules (A). Right foot with a few scattered resolving vesiculopustules (B).

foot ulcers in a bilateral distribution. Other unusual manifestations include nail dystrophy, paronychia, or granulation tissue-like lesions.² Marinović et al⁴ reported a case of atypical pemphigus vulgaris occurring on the periungual region and eye without mucosal involvement. Other bullous disorders such as bullous pemphigoid and epidermolysis bullosa acquisita associated with psoriasis have been well-documented in the literature.⁵⁻⁸ There are even reports of pemphigus vulgaris after initiation of UV therapy for psoriasis.⁹⁻¹¹

According to a PubMed search of articles indexed for MEDLINE using the terms *pemphigus*, *pemphigus* and *psoriasis*, *pemphigus vulgaris* and *psoriasis*, and *atypical pemphigus*, only 2 cases reported in the literature were similar to ours. Milgraum et al¹² reported a case of pemphigus vulgaris masquerading as dyshidrotic eczema. Their

patient initially presented with vesiculobullous pustular lesions on the feet and hands, but unlike our patient, she did not have a history of psoriasis.¹² Borradori and Harms¹³ reported a case of pemphigus vulgaris presenting as pompholyx of the left foot after a 7-year disease-free interval. The patient was previously diagnosed with tinea pedis.¹³

Our patient initially presented with atypical vesiculobullous lesions of the hands and feet that mimicked pustular psoriasis. Unlike some of the other atypical presentations of pemphigus vulgaris, our patient never developed the typical truncal and intertriginous eruptions. After a 6-year follow-up and treatment with a combination of oral prednisone and mycophenolate mofetil, our patient occasionally had flares of his hands, feet, and oral mucosa.

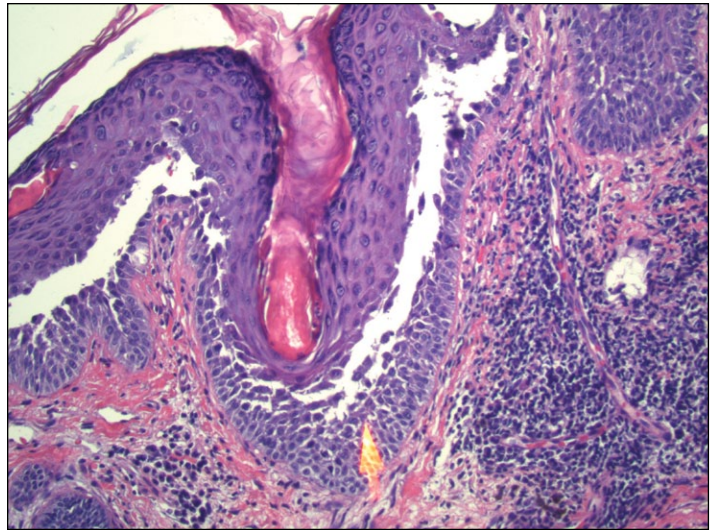


Figure 2. Intraepidermal and suprabasilar bullae (arrow) formation with acantholysis (H&E, original magnification $\times 40$).

Conclusion

Patients with chronic plaque psoriasis may develop palmoplantar psoriasis throughout their lifetime. Herein we describe a patient with chronic plaque psoriasis who presented with palmoplantar eruptions of pemphigus vulgaris. Unusual variants of pemphigus vulgaris involving the distal extremities have been reported in the literature. Atypical presentations of pemphigus vulgaris involving the distal extremities may mimic ulcers, paronychia, dyshidrotic eczema, tinea, and pustular psoriasis, which may delay the diagnosis of pemphigus vulgaris.

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