PALMOPLANTAR PUSTULOSIS AND ERUPTIVE PSORIASIS: A CASE REPORT

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PALMOPLANTARNA PUSTULOZA I ERUPTIVNA PSORIJAZA: PRIKAZ SLUČAJA

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ABSTRACT

This paper presents the case of a 50-year-old female patient with palmoplantar pustular changes within the course of eruptive (guttate) psoriasis. The diagnosis was based on the patient's history and clinical and histology findings. The patient was treated with an overnight local administration of betamethasone dipropionate and 3% salicylic acid applied twice daily to the palms and soles with occlusive dressings .

The therapy was continued with 25 mg of acitretin daily (in the morning, after breakfast), betamethasone ointment applied twice daily to the palms and soles, and mometasone furoate cream applied in the morning and evening. This treatment led to a significant improvement in the patient's condition.

Keywords: *psoriasis; palmoplantar pustulosis, betamethasone, salicylic acid.*

SAŽETAK

Ovaj rad predstavlja slučaj 50-godišnje bolesnice sa palmoplantarnim pustuloznim promenama u toku eruptivne psorijaze. Dijagnoza se zasniva na anamnezi pacijenta, kliničkih i histoloških nalaza. Pacijent je lečen od primenom lokalne terapije betametazon dipropionatom i 3% salicilnom kiselinom dva puta dnevno na dlanovima i tabanima, uveče sa olluzijom.

Terapija je nastavljena acitretinom od 25 mg dnevno (ujutru, posle doručka), betametazon mast dva puta dnevno na dlanovima i tabanima, a sa mometazon furoat kremom ujutro i uveče. Ovaj tretman je doveo do značajnog poboljšanja stanja pacijenta

Ključne reči: *psorijaza, palamoplantarna pustuloza, betametazon.*

INTRODUCTION

Palmoplantar pustulosis (pustular bacterid, bacterid Andrews) is a chronic inflammatory disorder that affects the palms and soles. The peak occurrence of this disorder is during the third, fourth and fifth decades of life. It remains unclear whether this disorder is a form of psoriasis or a separate disease entity, and only ~20% of patients with psoriasis also suffer from palmoplantar pustulosis (1).

The aetiology of palmoplantar pustulosis is unclear, although associations with focal infections elsewhere in the body have been reported. The sudden eruption of pustules on the palms and soles is followed by their coalescence, drying out and desquamation. The patients feel itching and burning on the affected skin, and in some patients, the nails become thickened and brittle (2). The disorder is typically treated with corticosteroids and photochemotherapy without great success.

Guttate psoriasis begins as tiny scaly papules, typically oval or circular in shape, that spread centrally. This form of psoriasis is more frequently associated with palmoplantar pustulosis and is designated as psoriasis pustulosa palmoplantaris. It manifests as the appearance of scaly plaques sprinkled with sterile pustules that are localised on the palms and soles. This form is most common in children and typically occurs after streptococcal infections, upper respiratory infections or influenza (3,4). This paper presents the case of a 50-year-old female patient with palmoplantar pustular changes within the course of eruptive (guttate) psoriasis.

The case

A 50-year-old female patient was admitted to the ward due to redness of the palms and soles and guttate scaly plaques covering the body surface. She had a 5-year history of festering blisters and redness on the soles of her feet

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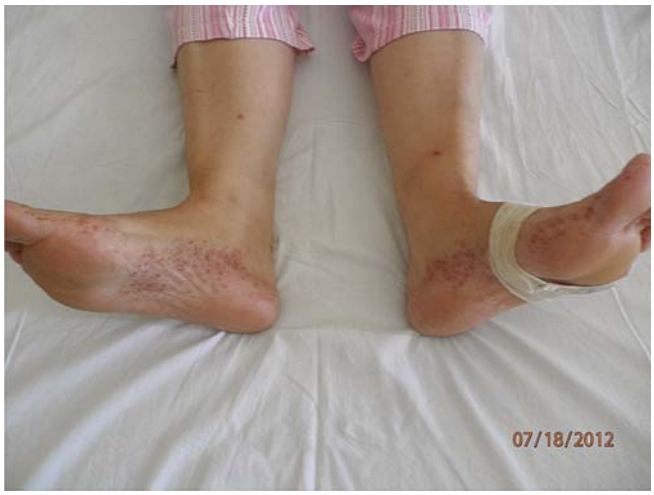

Figure 1. The pustules and the tarnished erythaema of the patient's soles.

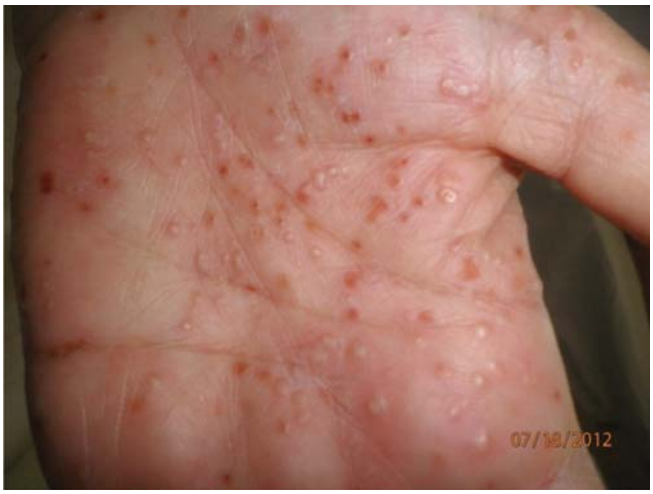

Figure 2. The pustules and residual lesions on the palms.

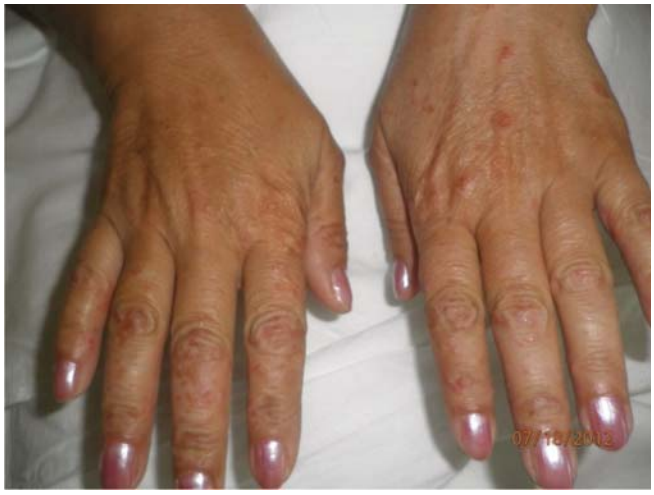

Figure 3. Scaly plaques on the dorsal side of the hands.

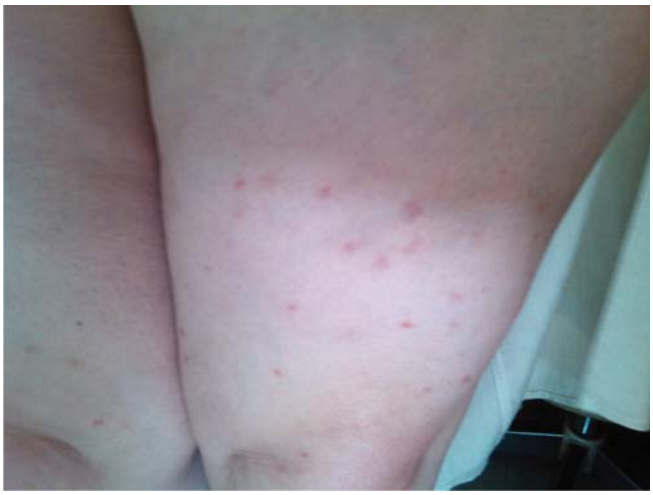

Figure 4. Scaly plaques on the thighs.

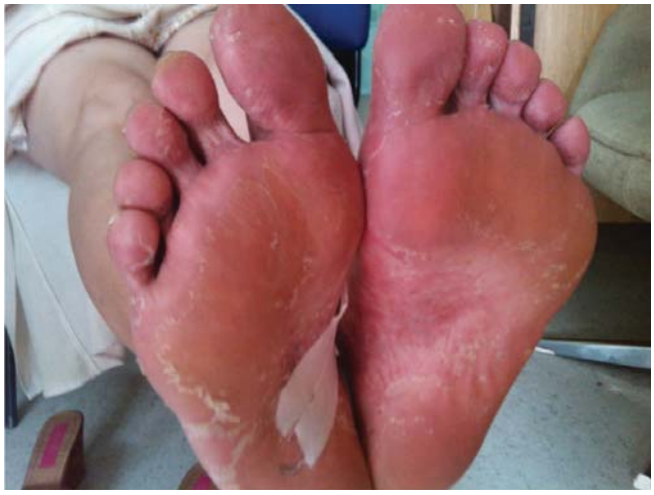

Figure 5. Exfoliative desquamation of the soles.

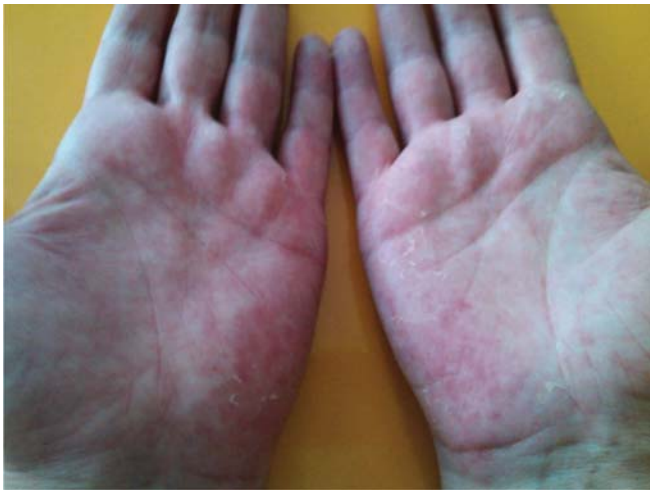

Figure 6. Diffuse erythaema and desquamation of the palms.

(Figure 1). The plaques appeared during the summer and disappeared during the winter, during which the patient was not treated. One month before her admission, the normal changes occurred on her palms (Figure 2), and less intensely coloured plaques appeared on her trunk and extremities (Figures 3 and 4). She had smoked for 28 years and denied any other symptoms, allergy, and other diseases. The skin of her palms and soles was covered with numerous pustules and dark remnants of erythaema followed by desquamation. There were scaly individual plaques, up to 1 cm in diameter, on the skin of her trunk and extremities.

The laboratory findings of the patient were as follows: erythrocyte sedimentation rate, 14 mm during the first hour; total cholesterol, 6.48 mmol/L; LDL cholesterol, 4.51 mmol/L; and normal blood glucose, urea, creatinine, total bilirubin, triglycerides, HDL cholesterol, AST, ALT, LDH, TSH, triiodothyronine, and thyroxine. The patch tests for standard allergens were negative. A skin biopsy was conclusive for psoriasis.

The patient was treated with an overnight local administration of betamethasone dipropionate and 3% salicylic acid applied twice daily to her palms and soles with occlusive dressings.

The therapy was continued with 25 mg of acitretin daily (in the morning, after breakfast), betamethasone ointment applied twice daily to the palms and soles, and mometasone furoate cream applied in the morning and evening. This treatment led to a significant improvement in the patient's condition and desquamation of the soles and palms (Figures 5 and 6).

DISCUSSION

Palmoplantar pustular psoriasis and pustular bacterid Andrews are separately defined in the literature according to their diagnostic, etiologic and therapeutic characteristics, although they appear to have many similarities. One important difference between these two conditions is their occurrence at different ages. Our patient experienced both guttate psoriasis and palmoplantar pustulosis concomitantly. In the medical literature, the association of these two rare diseases has been described in only 1-2% of patients with guttate psoriasis (3,4). In 2007, the International Psoriasis Council designated palmoplantar pustulosis as a condition separate from psoriasis. However, the existing literature on the aetiology, epidemiology and clinical and histological characteristics does not provide a clear distinction between these two conditions, which are most likely two presentations of the same underlying pathological mechanism (5).

Palmoplantar pustulosis is resistant to therapy. Effective treatment requires the combination of drugs and therapeutic procedures, which we performed for our patient with satisfactory results. Similar experiences have been reported by the other authors who followed small cohorts of such patients (6). Our case report provides a small contribution to better the understanding of this enigmatic condition and outline a more efficient therapy. This disease may adversely influence quality of life, which is the universal measure used to compare diseases and the effectiveness of therapies (7).

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