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Generalized erythematous scaly rash after glucocorticoids

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1. Case description

A 65-years-old woman with a medical history of idiopathic thrombocytopenic purpura and psoriasis in treatment with topical glucocorticoids presented with a three-month history of burning, generalized erythematous, scaly rash, and chills. A few weeks before the rash, the patient presented petechiae on her thighs due to a low platelet count (28.000 platelets per microliter), for which she started treatment with prednisone 25 mg/week. The rash was initially treated with topical ointments including clobetasol, urea, salicylic acid, ammonium lactate, and propylene glycol without improvement. The physical examination showed generalized erythroderma (Fig. 1A) from neck to feet (Fig. 1B), with thick silvery desquamation respecting the face and back of the legs (Fig. 1C), involving more than 90% of the patient's body surface area and erythematous scaly plaques on the scalp. Laboratory test results were normal. A punch biopsy specimen obtained from an arm area showed increased keratinization at the level of the corneal layer with compact parakeratosis with abundant polymorphonuclear cells. The epidermis presented psoriasiform hyperplasia with significant spongiosis. What is the diagnosis?

2. Discussion

Erythrodermic psoriasis (EP) is a severe variant characterized by widespread skin erythema. Patients with this psoriasis subtype present with erythema involving more than 75 percent of the body surface area and associated scale, pustules, or skin exfoliation [1]. EP is the least common psoriasis subtype and occurs in less than 3 percent of patients. Like other psoriasis variants, EP results from a complex interaction between the skin, environmental and genetic factors, and the immune system. Immunopathogenesis is not fully understood [1,2]. The primary risk factor for erythrodermic psoriasis is medication. The most critical medication-associated trigger of EP is treatment with systemic glucocorticoids or the abrupt withdrawal of systemic antipsoriatic medications such as methotrexate and cyclosporine. The diagnosis is based on recognizing features of psoriasis, physical examination, and skin biopsy without other causes of erythroderma. Cyclosporine and infliximab are the preferred first-line therapies for EP. However, data on the comparative efficacy of these agents are lacking [1,3]. The patient was diagnosed with EP triggered by systemic glucocorticoids and successfully treated with cyclosporin. She completely recovered the skin with some residual hyperpigmentation in her arms at a follow-up visit two months later. Alternative therapies, such as intravenous immunoglobulins or thrombopoietin receptor agonists, should have been used to manage thrombocytopenia. This case, therefore, reminds the clinicians about systemic glucocorticoids triggering effect in psoriasis causing EP and treatment considerations.

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Ethics

The patient provided informed consent for this report.
The authors contributed equally to this work.

Declaration of Competing Interest

The authors declare that they have no known competing financial

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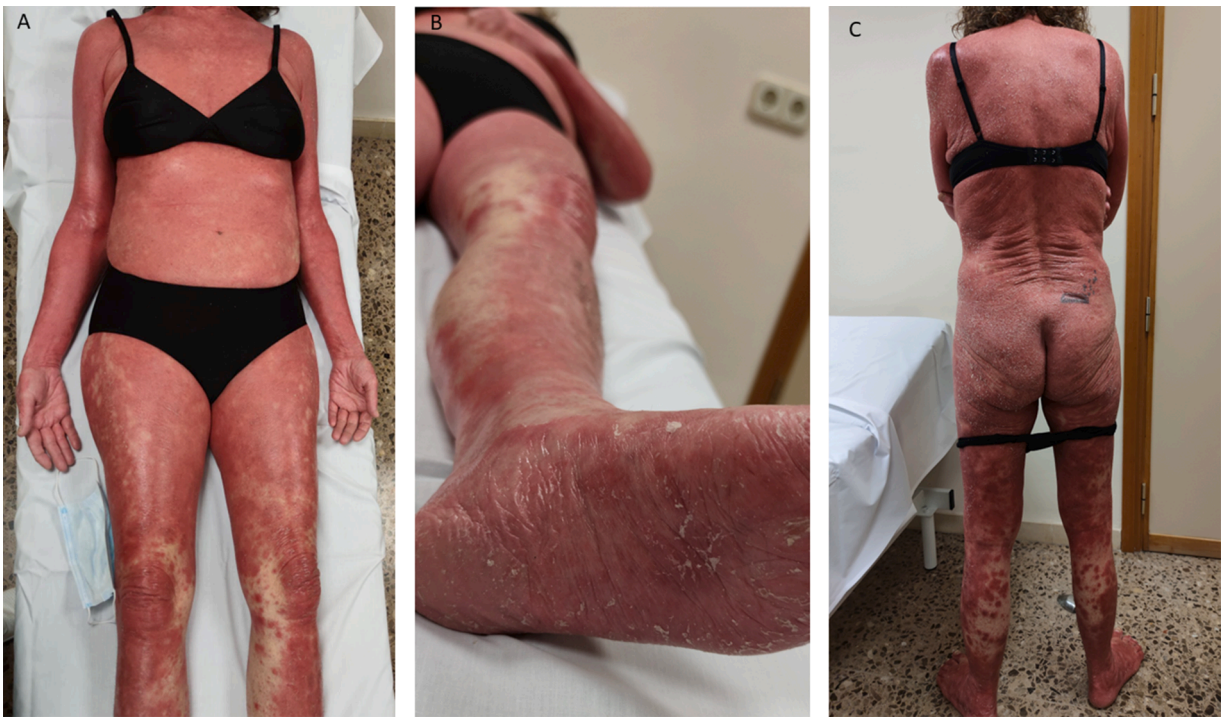

Fig 1. Generalized erythroderma from neck to feet (A), thick silvery desquamation from neck to feet (B), respecting the legs (C).

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References

[1] Shao S, Wang G, Maverakis E, et al. Targeted treatment for erythrodermic psoriasis: rationale and recent advances. Drugs 2020;80:525–34.
[2] Psoriasis LM. Lancet 2003;361:1197.
[3] Rosenbach M, Hsu S, Korman NJ, et al. Treatment of erythrodermic psoriasis: from the medical board of the National Psoriasis Foundation. J Am Acad Dermatol 2010; 62:655–62.