

- diagnosis and management. *Clin Exp Dermatol.* 2005;30:209-14.
4. English JSC, Eedy DJ. Has teledermatology in the U.K. finally failed? *Br J Dermatol.* 2007;156:411.
  5. Eminovic N, de Keizer NF, Bindels PJE, Hasman A. Maturity of teledermatología: resultados del proyecto piloto *Telemedicina 2000. Actas Dermosifiliogr.* 2004;95: 289-94.
  6. Artiles Sánchez J, Suárez Hernández J, Serrano Aguilar P, Vázquez-Quiñoy C, Duque González B, de las Cuevas Castresana C. Evaluación cualitativa en matology evaluation research: a systematic literature review. *Br J Dermatol.* 2007;156:412-9.
  7. Finch TL, Mair FS, May CR. Teledermatology in the UK: lessons in service innovation. *Br J Dermatol.* 2007;156:521-7.

## Generalized Pustular Psoriasis Induced by Tuberculin Testing

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### To the Editor:

We describe a 39-year-old woman with a history of psoriasis who came to the internal medicine department for diminished appetite and weight loss. At that time, she did not present any cutaneous psoriasis lesions. In the tuberculin test requested, after 72 hours the application area on the forearm showed a severe erythematous, pruritic reaction (Figure 1) with the onset of generalized pruriginous papular lesions with predominance on the limbs (Figure 2) and abdominal area that progressed to desquamative pustular lesions within a few days. The patient was referred to the allergology and dermatology departments. She was treated with oral antihistamines for various weeks with no improvement. A skin biopsy was taken and topical corticosteroids were prescribed, which resolved the condition leaving residual hyperpigmentation. A skin biopsy of one of the lesions showed areas of confluent parakeratosis with neutrophil microabscesses, with slight thinning of the underlying epidermis and hypogranulosis, scant presence of neutrophils in the stratum spinosum, and slight spongiosis and exocytosis of lymphocytes. This alternated with areas of orthokeratosis where the epidermis presented a hyperplastic appearance with mild acanthosis, mild spongiosis, and occasional exocytosis of



**Figure 1.** Infiltrated plaque 72 hours after the tuberculin test.



**Figure 2.** Erythematous-desquamative eruption on the hands.

lymphocytes, along with mild perivascular lymphocytic infiltrate in the papillary dermis, with nuclear dust, some macrophages near the basement membrane, and small vessels in the papillary dermis with dilated lumens and swollen endothelia, and containing some polymorphonuclear cells. No bacilli were observed with the Ziehl-Neelsen technique and no fungal structures were seen with the Grocott technique.

A pustular eruption can occur in the course of psoriasis. Triggers include infections<sup>1,2</sup> and the use of topical medication.<sup>3,4</sup> More than 30% of patients with psoriasis have noticed lesions in trauma areas (Koebner phenomenon).<sup>5</sup>

Some patients with psoriasis develop psoriasiform lesions in areas of trauma. The tuberculin test injection could be considered a trauma that could trigger this type of phenomenon. In the literature consulted (MEDLINE), we found only 1 case of Koebner phenomenon in which a psoriatic papule developed after the intradermal injection of tuberculin,<sup>6</sup> but found no reports of generalized pustulosis after the tuberculin test. In addition, the Koebner phenomenon would not explain the appearance of generalized lesions at the same time as the severe reaction to the tuberculin test. One possible explanation for the pustulosis would be miliary tuberculosis, but there are no clinical, analytical, or

radiological data to support this hypothesis. Furthermore, the patient was not treated with antituberculous drugs and the cutaneous lesions healed with topical corticosteroid therapy alone.

In conclusion, we describe the case of a patient who presented an episode consistent with generalized pustular psoriasis after a tuberculin test, a possible trigger not previously reported in the literature.

## References

1. Cassandra M, Conte E, Cortez B. Childhood pustular psoriasis elicited by the streptococcal antigen: a case report and review of the literature. *Pediatr Dermatol.* 2003;20:506-10.
2. Sánchez MC, Rocamora V, Amengual I. Psoriasis pustulosa anular. *Actas Dermosifiliogr.* 2002;93:607-8.
3. Jo JH, Jang HS, Ko HC, Kim MB, Oh CK, Kwon YW, et al. Pustular psoriasis and the Kobner phenomenon caused by allergic contact dermatitis from zinc pyrrithione-containing shampoo. *Contact Dermatitis.* 2005;52: 142-4.
4. Wu JK, Siller G, Strutton G. Psoriasis induced by topical imiquimod. *Australas J Dermatol.* 2004;45:47-50.
5. Weiss G, Shemer A, Trau H. The Koebner phenomenon: review of the literature. *J Eur Acad Dermatol Venereol.* 2002;16:241-8.
6. Chowaniec O. Koebner's phenomenon in psoriasis. III. Development of psoriatic papula following intracutaneous injection of tuberculin in the light of clinical and histological studies. *Przegl Dermatol.* 1977;64:549-54.

## Psoriatic Erythroderma Treated with Etanercept

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### To the Editor:

The recent introduction of biological therapy has revolutionized the therapeutic management of psoriasis. Various studies demonstrating the efficacy and safety of these treatments have been published.<sup>1-4</sup> However, practically all of them studied patients with moderate-to-severe plaque psoriasis and, therefore, there is little experience with "special" clinical forms of psoriasis, including psoriatic erythroderma.

We describe a 69-year-old woman with a history of depression, osteoporosis, and hypertension, with no known drug allergies, who was diagnosed with psoriasis in 1989. Since 1995, rotational therapy had been provided with systemic medication.

In December 2004, she developed erythroderma with severe erythema, skin edema, and fever. The score on the Psoriasis Area and Severity Index (PASI) was 55/72. At that time, she was receiving cyclosporin at a dose of 4 mg/kg/d. Treatment was initiated with support measures that included plenty of fluids, a high-calorie, high-protein diet, and antibiotic coverage after bacteremia was



**Figure 1.** Patient's appearance before therapy. She presented erythroderma on 100% of the body surface, with severe erythema as well as edema and mild flaking of the skin. The score on the Psoriasis Area and Severity Index was 55/72.

demonstrated. Treatment with alitretinoin at doses of 50 mg/d was attempted with barely any improvement. After 1 month of treatment with no results, a decision was made to discontinue and initiate etanercept therapy at 50 mg twice weekly for 3 months, followed by 25 mg twice weekly until completing 6 months of treatment. The chest x-ray was normal (the Mantoux test had already been done and was negative). After 3 weeks of etanercept therapy,



**Figure 2.** Patient's appearance 9 weeks after the start of etanercept therapy. The skin was observed to have a completely normal appearance. The Psoriasis Area and Severity Index score was 0/72.

the PASI score had decreased to 33/72. The psoriasis continued to improve with a PASI score of 17/72 at 6 weeks and 0/72 at 9 weeks. No adverse effects were observed during etanercept therapy.

Psoriatic erythroderma is one of the most uncommon and serious clinical forms of psoriasis, with frequent complications. This is a real challenge