

LETTER TO THE EDITOR

Etanercept in the Treatment of Generalized Annular Pustular Psoriasis

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To the Editor:

Pustular psoriasis is a rare form of psoriasis characterized by an eruption of sterile pustules. It can be divided into both generalized and localized forms¹. Some authors consider a separate variant of generalized psoriasis, well described by Lapière, as recurrent circinate erythematous psoriasis. It presents with erythematous, annular or polycyclic lesions, and an eruption of small sterile pustules and fine desquamation. The patches extend from the center and resolve within some weeks, leaving scales and changes in pigmentation and pigmentary changes. Frequent relapses are described in the bordering areas^{2,3}. In this study, we report the case of a woman affected by generalized annular pustular (Lapière) psoriasis. This patient had previously been treated with conventional therapeutics, and demonstrated a significant improvement after treatment with etanercept. This 70-year-old Caucasian woman, described in our report, has a 35-year history of psoriasis. Physical examination revealed the presence of small erythematous papules, centered by a pustule, a few millimeters in diameter (Fig. 1). Histological examination showed Kogoj-Lapière spongiform multilocular typical pustules (an epidermal pustule formed by infiltration of neutrophils into necrotic areas of the epidermis, where the cell walls form a swampy network), features compatible with the clinical diagnosis of Lapière psoriasis.

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The patient had previously been treated with other topical and systemic drugs (colchicine, acitretin, ciclosporin, methotrexate) and ultraviolet B narrow band phototherapy, with partial and temporary benefits, side effects, and frequent relapses. Differential diagnosis of our case included other generalized pustular psoriasis: acute generalized exanthematous pustulosis (AGEP) was perhaps the most important differential diagnosis. AGEP, which occurs as an acute, spontaneously healing reaction to drugs (usually antibiotics), was excluded on the basis of the absence of vasculitis associated with spongiform pustules and based on the presence of psoriatic anamnesis. Lapière psoriasis can be differentiated from pustular lesions caused by prolonged application of topical steroids or tar ointments on the periphery of pre-existent psoriatic plaques. Unlike the Von Zumbusch generalized form, the general state of health is not compromised. The patient was treated with 50 mg of etanercept twice weekly subcutaneously for three months. There was an



Fig. 1. Clinical presentation on admission.



Fig. 2. Complete clearance of the pustular eruption after etanercept treatment.

extremely rapid response, noticeable from the second day, with complete clearance of the pustular eruption at the end of the first week. At week 12 of etanercept treatment, complete clearance of cutaneous lesion was achieved (Fig. 2), including erythema and scaling, with no significant side effects reported, concomitant infections, decreased blood granulocytes or other laboratory changes. Maintenance treatment with 50 mg of etanercept once a week subcutaneously was continued for another three months. No relapse was noted at week 35.

There are no universally accepted guidelines for management of Lapière psoriasis; no clinical trials have been conducted and no single agent has been approved for this indication. Only case reports or short series of patients have been published on the off-label use of biologic drugs for pustular psoriasis^{4,5}. In contrast, de novo paradoxical pustular flares induced by anti-tumor necrosis factor (anti-TNF- α) therapy have been described⁶.

Etanercept is a soluble recombinant human tumor necrosis

factor α (TNF- α) receptor that acts as a competitive inhibitor of TNF- α by binding to and inactivating endogenous TNF- α , thereby preventing its interactions with cell surface receptors⁷. Based on our experience, etanercept may be an effective therapeutic option in the treatment of Lapière psoriasis. In fact, in our patient, etanercept demonstrated a high efficacy with a rapid and significant clinical response associated with an excellent safety profile. The rapid clearance, the good maintenance of efficacy and the excellent tolerability suggest a role for etanercept in the management of Lapière psoriasis, especially in elderly patients with typical pathologies. Specifically, this may apply if other treatment modalities are contraindicated or proven to be ineffective.

REFERENCES

1. Tay YK, Tham SN. The profile and outcome of pustular psoriasis in Singapore: a report of 28 cases. *Int J Dermatol* 1997;36:266-271.
2. Bazex A, Dupré A, Chiristol B, Jalby J. Psoriasis with recurrent circinate erythema of the Bloch type. *Bull Soc Fr Dermatol Syphiligr* 1967;74:689-695.
3. Lapiere S. Deux cas de psoriasis recidivant a elements evoluant de facon anormalement rapide en quelques jours. *Arch Belg Derm* 1959;15:7-12.
4. Vieira Serrão V, Martins A, Lopes MJ. Infliximab in recalcitrant generalized pustular arthropatic psoriasis. *Eur J Dermatol* 2008;18:71-73.
5. Esposito M, Mazzotta A, Casciello C, Chimenti S. Etanercept at different dosages in the treatment of generalized pustular psoriasis: a case series. *Dermatology* 2008;216:355-360.
6. Daudén E, Santiago-et-Sánchez-Mateos D, Sotomayor-López E, García-Díez A. Ustekinumab: effective in a patient with severe recalcitrant generalized pustular psoriasis. *Br J Dermatol* 2010;163:1346-1347.
7. Weisenseel P, Prinz JC. Sequential use of infliximab and etanercept in generalized pustular psoriasis. *Cutis* 2006;78:197-199.