Jessner's lymphocytic infiltrate as a Koebner response to patch test

Contact Dermatitis 2007: 57: 197–199

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Key words: Jessner's lymphocytic infiltrate; Koebner isomorphic phenomenon; patch test.

Jessner–Kanof lymphocytic infiltrate of the skin is a well-accepted clinico-pathological entity, with features that distinguish it from lupus erythematosus and other related diseases. Women are more often affected than men, and the majority of cases occur in adults. It presents as 1 or more

erythematous papules, plaques, or nodules that occasionally adopt annular forms. Lesions are generally localized on the face, neck, upper trunk, or arms. The course is usually chronic, with periods of spontaneous remissions and eventual resolution without scarring. Occasionally, the lesions can exacerbate with sun exposure. Histological examination shows a superficial and deep perivascular and periadnexal infiltrate, mainly consisting of lymphocytes, without basal vacuolar degeneration or epidermal alterations (1–3).

Koebner isomorphic phenomenon has been described as a response to different forms of environmental stress, including patch testing. It occurs in the setting of different diseases, such as psoriasis, lichen planus, vitiligo, autoimmune blistering dermatosis, and other diseases, including lupus erythematosus. All of them are inflammatory dermatoses with frequent autoimmune phenomena (4).

Case Report

A 59-year-old woman, with a personal history of hypercholesterolaemia, intolerance to jewellery, and allergic reaction to wasp prick, attended our Service on March 2006. She suffered eczematous lesions on the dorsum of the hands, palms, and side of the fingers since 6 months ago. She also had prurigo eczema lesions on the arms and legs. All these data supported a diagnosis of atopic dermatitis and dyshidrotic eczema, and the patient was studied for possible aggravating sensitizations.

Patch tests were performed with Spanish Standard series (True Test® and Chemotechnique®), corticosteroids, rubber additives, tensioactive agents, fragrances, and caine series (Chemotechnique®). Positive reactions were observed 4 D later to nickel, potassium dichromate, caine mix, balsam of Peru, carba-mix, budenoside, and tetracaine.

17 days after the epicutaneous study, the patient showed oedematous persistent reactions on the previous positive patch test regions of her back (Fig. 1). A biopsy of one of these lesions showed a superficial and deep perivascular lymphocytic infiltrate without involvement of the epidermis, strongly suggesting a benign lymphocytic infiltration of the skin (Figs 2 and 3). All these lesions slowly disap-

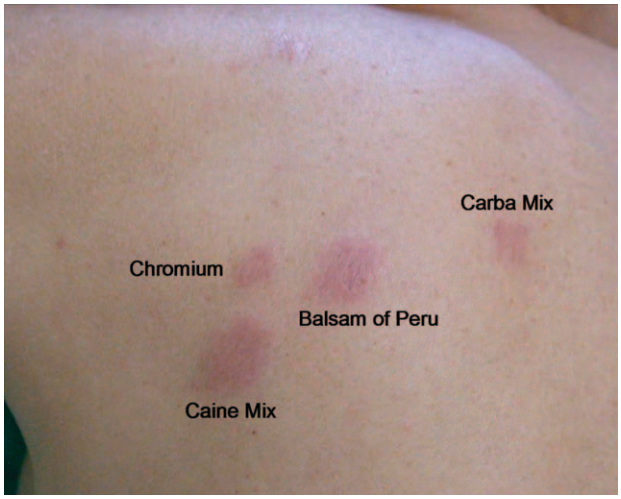

Fig. 1. Persistent indurate positive patch tests on D17. Biopsy was taken from caine mix result.

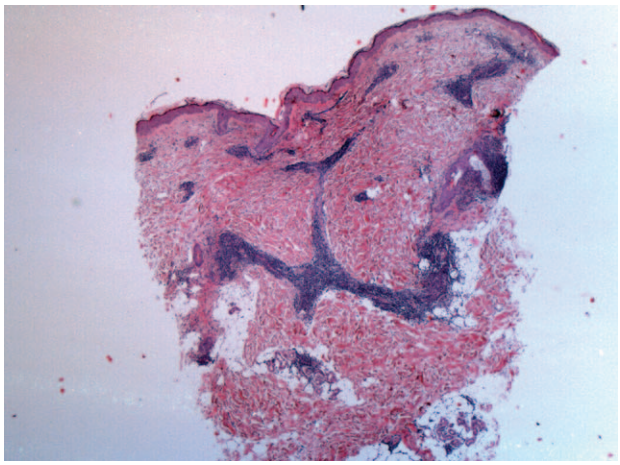

Fig. 2. Intense perivascular lymphocytic infiltrate in superficial and deep dermis. Epidermis without alterations (haematoxylin and eosin, ×2.5).

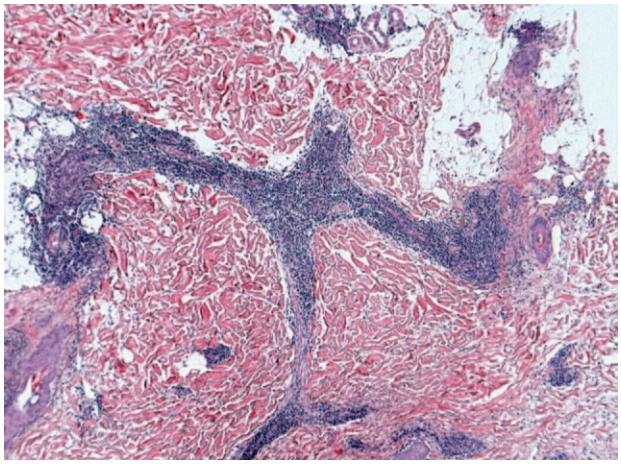

Fig. 3. Detail of the deep dermal infiltration (haematoxylin and eosin, ×5).

peared during the next 2 months, and no other lesions appeared out of the patch test regions of the skin.

The patient was reinterrogated, and she explained that 2 years ago, she had outbreaks of erythematosus lesions on the back, with periods of spontaneous remissions. A biopsy had been performed during those outbreaks in another centre, which showed the same histologic changes of Jessner's lymphocytic infiltration that we observed after the patch test.

Discussion

In the mentioned case, the positive reactions to the patch test after 4 D were the typical eczematous reaction, with erythema, vesicles, and slight oedema. 17 days later, the positive reactions to the patch test did not disappear. Instead of that, they turned into more elevated and harder plaques, without vesicles or scaling. The histopathological study showed a lymphocytic infiltration of the skin very suggestive of Jessner's disease. Therefore, she showed a Koebner isomorphic phenomenon of a Jessner's disease on the positive patch test results.

2 years ago, our patient had a history of Jessner's lymphocytic infiltration of the skin, which was clinically silent during the patch-test study of her dermatitis. Although Jessner's disease was in remission, the predisposition of the patient to suffer it explains the development of a lymphocytic dermal infiltrate over the positive patch test results.

In a review of the literature, we found a case of cutaneous lupus erythematosus at the patch test sites in a patient with the antecedent of lupus erythematosus (5). We did not find any reference to a Jessner's lymphocytic infiltrate as a consequence of a Koebner phenomenon.

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