Isomorphic Phenomenon in Morphea

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To the Editor

Koebner's phenomenon or isomorphic response is a common finding in various dermatological conditions. In fact, although this phenomenon is typical of 3 skin diseases (i.e. psoriasis, lichen planus, vitiligo), it has also been described in viral warts, Darier's disease, pityriasis rubra pilaris, cutaneous mastocytosis, mul-ticentric reticulohistiocytosis, and lichen sclerosus and atrophicus [1-3]. Here we report the case of a woman affected by morphea who developed further typical lesions in the sites of trauma.

Case Report. A 58-year-old woman consulted our department because of an indurated oval patch, 7×10 cm large, localized in the sacral region, which had been present for 3 years. The skin covering the patch, which presented a lilac-colored edge, was ivory in color, thickened, smooth, shiny and hairless.

A diagnosis of morphea was performed and confirmed by the histological examination. The biochemical and hematological analyses, including C3 and C4 levels, immunoglobulin dosage, and rheumatoid factor were all normal; serology for *Borrelia burgdorferi* (antibodies against *B. burgdorferi* by ELISA) [4] was negative, as was indirect immunofluorescence for non-organ-specific autoantibodies. No esophageal, pul-monar or cardiac involvement was detected, a treatment was started with penicillin 1,000,000 IU. i.m. once a week. One month after commencing treatment, two typical patches of active morphea, 3 and 4 cm in diameter, respectively, appeared in the right gluteus at the site of the first two injections.

Skin biopsy revealed a histological picture typical of the early inflammatory stage of morphea. In the following months, the plaques hardened, became white in the center and slightly depressed.

Discussion. The striking localization of the lesions in the site of intramuscular injections strongly suggests isomorphic response. Although cases of morphea preceded by a trauma have been described in the literature [5], a true Koebner phenomenon in this condition has not previously been reported.

Since the literature also records cases of hypoder-matitis sclerodermiformis due to various drugs (vitamin K, pentazocina, bleomycin and other foreign substance injections) [6], it cannot be excluded that the drug was not at least partially responsible, together with the trauma, for the lesion in our patient, although we feel that this is unlikely.

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