

Coexistence of Subcutaneous Sarcoidosis of the Sole and Scar Sarcoidosis

Sir,

Sarcoidosis is a systemic granulomatous disease of still unknown etiology. Although cutaneous involvement is encountered in about one fourth of the patients with systemic sarcoidosis (1), subcutaneous nodules, which may occur in association with other cutaneous lesions, are rare (2-4). Most of these subcutaneous sarcoidal nodules occur in the forearm, lower leg, and trunk. The involvement of the palmoplantar skin is extremely rare (5-7). We here report a unique case of sarcoidosis associated with a subcutaneous nodule of the sole, which coexisted with scar sarcoidosis on the elbow.

CASE REPORT

A 33-year-old Japanese man was referred to us for evaluation of his skin lesions by an internist who suspected sarcoidosis because of the demonstration of bilateral hilar lymph node swelling on the chest X-ray examination. For the last 3 months, he had had an uncomfortable sensation on the sole of his left foot on walking because of the presence of a subcutaneous nodule. He had also a persistent inflammation in a scar on the left elbow, which had appeared after a scratch wound sustained 3 months before. There was no other special past history. Physical examination revealed two different types of skin lesions. One was a slightly elevated skin-colored nodule, about 1 cm in diameter, in the mid lateral portion of his left sole. It was palpated as a non-tender elastic firm nodule adherent to the covering skin (Fig. 1). The other type consisted of two well-defined, scaly, slightly elevated erythematous plaques about 1 cm in diameter, on his left elbow.

Laboratory examination demonstrated that complete blood cell count and electrolytes including serum calcium were within normal range, except for slightly raised serum angiotensin-converting enzyme at a value of 27.6 IU/l (normal <21.4). Intradermal tuberculin test showed an erythematous patch, 7 mm in diameter, after 48 h. Transbronchial lung biopsy revealed non-caseation epithelioid cell granulomas containing a few giant cells. Ophthalmologic examination yielded no evidence for sarcoidosis.

We performed biopsy in both of the skin lesions. In the histological specimen of the plantar lesion, we found epithelioid cell granulomas in the subcutaneous tissue without any alterations in the epidermis or the dermis. The elbow lesions also showed epithelioid cell granulomas containing a few giant cells in the thickened dermis, being covered by thin flattened epidermis. There was no caseation necrosis.

DISCUSSION

The case reported here is unique in that the lesion of subcutaneous sarcoidosis affected only the plantar skin. Moreover, there was also an association with scar sarcoidosis that developed on the elbow. Initially the patient complained of an uncomfortable sensation in the left sole only, but subsequently on physical examination we observed his inflammatory tiny scar in the left elbow developing after a recent scratch wound. Subcutaneous sarcoidosis may occur following trauma, as in scar sarcoidosis, but it is not clear if this was the case with our patient.

In this patient, the presence of bilateral hilar lymph node swelling detected in the chest X-ray prompted us to search for



Fig. 1. A slightly elevated skin-colored nodule in the lateral side of the left sole.

a further skin sign of sarcoidosis carefully. As a result we could detect the unusual subcutaneous plantar lesion as well as the small scar lesion. Cutaneous sarcoidosis is readily accessible for histological confirmation of the diagnosis of sarcoidosis. It will save more complicated procedures like the lung or mediastina biopsy. Veien et al. (4) reported that scar lesions are likely to be associated with severe systemic lesions. In the case of sarcoidosis a careful observation is required to find out even small lesions, as noted in our case, and such a precaution will increase the detection rate of cutaneous sarcoid lesions.

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Tomonori Ohi, Shinobu Saijo and Hachiro Tagami*
Department of Dermatology, Tohoku University School of Medicine,
1-1 Seiryō-machi, Aoba-ku, Sendai 980-77, Japan.

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