Psoriasisform Sarcoidosis

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Sarcoidosis is a systemic granulomatous disease of undetermined etiology and pathogenesis that involves the skin and many of the internal organs. It involves any organ of the body; however, the most common sites are the lung, lymph node, skin, and eye. Psoriasisform eruption is a rare morphologic manifestation of sarcoidosis.

We report herein a case of 36-year-old man with psoriasisform papules on the elbows, forearms and knees of 5-year duration. Histopathologic examination revealed sarcoid granuloma throughout the dermis. This is the second case of psoriasisform sarcoidosis in Korea. (Ann Dermatol 12(4) 303-305, 2000).

Key Words: Psoriasisform sarcoidosis

Sarcoidosis is a systemic granulomatous disease of undetermined etiology and pathogenesis that involves the skin and many of the internal organs with a persistent course interrupted by remissions and relapses. It involves any organ of the body. However, the most common sites are the lung, lymph node, skin, and eye.

Psoriasisform eruption is a rare morphologic manifestation of sarcoidosis. Psoriasisform sarcoidosis was first described in 1925 by Klauder1. In Korea, Chang et al.2 reported a case of psoriasisform sarcoidosis. We report herein the second case of psoriasisform sarcoidosis in Korea.

CASE REPORT

A 36-year-old man had a 5-year history of psoriasisform papules on the elbows, forearms and knees. The lesions were asymptomatic. He had no episodes of shortness of breath and dyspnea on exertion. Examination of the skin revealed multiple, well demarcated, erythematous, round or irregularly shaped, psoriasisform papules on the elbows, forearms and knees (Fig. 1,2). Laboratory tests revealed normal results except the elevated serum angiotensin-converting enzyme(ACE), 121.4 IU/L (normal 8-52 IU/L). Hemoglobin, hematocrit, white blood cell count, platelet count, erythrocyte sedimentation rate, serum calcium, urinalysis and liver function test were all normal. A chest x-ray showed prominent reticulonodular patterns affecting both lung fields, parenchymal fibrosis and bilateral hilar lymphadenopathy. Ocular involvement was not found. A skin biopsy specimen taken from the left elbow showed granulomatous infiltrate in the subepidermal and deeper portions of the dermis (Fig. 3). Numerous tubercles were made up of compact, radially arranged epithelioid cells, multinucleated giant cells and surrounding lymphocytes (Fig. 4). There was no caseation necrosis. Polarization for foreign material was negative. Special stains for fungi and acid-fast bacilli were negative. From these findings, the diagnosis of psoriasisform sarcoidosis was made. He was treated with intrale-
sional injection of triamcinolone acetonide (7.5mg/mL) every 2 weeks. After 6 weeks of treatment, skin lesions were cleared.

**DISCUSSION**

Sarcoidosis is a systemic granulomatous disease of undetermined etiology and pathogenesis. In addition to the skin, which is involved in between 9% and 37% of cases, other sites of involvement are lung, lymph node, eye, phalangeal bone, myocardium, central nervous system, kidney, spleen, liver, and parotid gland.

The cutaneous manifestations of sarcoidosis are quite varied. They may be classified as specific, which reveals granulomas on biopsy, or nonspecific, which is mainly reactive. The important specific lesions are lupus pernio, plaques, and maculopapular eruptions. The important nonspecific lesion is erythema nodosum. Other skin changes include nodule, subcutaneous nodule, scar sarcoidosis, erythroderma, ulceration, verrucose, erythema multiforme, ichthyosiform, dystrophic calcification, hypomelanotic, alopecia, and psoriasiform.

Okamoto performed histologic examinations of
the epidermis in cutaneous lesions of 62 cases of sarcoidosis. Seventy-nine percent showed epidermal changes including hyperkeratosis, parakeratosis, acanthosis, and epidermal atrophy. The epidermal changes overlying the granulomatous lesions contributed to the variety of clinical manifestations.

Psoriasiform eruption is a rare morphologic manifestation of sarcoidosis. Psoriasiform sarcoidosis was first described in 1925 by Klauder, who summarized the appearance of this patient's lesion as psoriasiform and infiltrated; some were annular and others followed the natural lines of cleavage of the skin. Only a few cases of psoriasiform sarcoidosis have been reported in the English literature. Burgoyn et al. reported a patient with systemic sarcoidosis who presented with skin lesions that were psoriasiform, both clinically and histologically. Mitsuishi et al. reported a case of psoriasiform sarcoidosis with ulceration. In Korea, Chang et al. reported a case of psoriasiform sarcoidosis. Psoriasis may occur in patients with sarcoidosis. However, the coincidental occurrence of these lesions is rare. Zimmer and Demis conducted a retrospective study of 647 patients recorded as having psoriasis, gout, or sarcoidosis. No unequivocal cases of sarcoidosis with either psoriasis or gout were identified.

More than one-third of patients with sarcoidosis complain of dyspnea, cough, chest pain and tightness of the chest. Interestingly, our case did not show respiratory symptoms despite the presence of the radiographic changes.

In sarcoidosis, the serum ACE level is raised in about 60% of patients. ACE activity is higher in patients with hilar adenopathy and pulmonary infiltration than in those with either hilar adenopathy alone or pulmonary infiltrate/fibrosis. An elevated ACE level is useful in monitoring the clinical course of the disease, but not diagnostic. In our case, the serum ACE level was raised.

We report a patient with sarcoidosis who presented psoriasiform eruption, clinically and sarcoid granuloma, histologically. When patients present with psoriasiform dermatoses, sarcoidosis should be considered as one of the possible diagnoses. Therefore, histopathological evaluation should be mandatory in these cases.

REFERENCES