nodule in a young man that was diagnosed as coccygeal pad on the basis of clinical, histological, and imaging tests. The nodular lesion seems to be related to chronic irritation in the coccygeal area.

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A Case of Sarcoidosis Presenting as Livedo

Sayaka Shibama, Ken Igawa, Takichi Munetsugu, Kunitaro Fukuyama, Aya Nishizawa, Kaoru Takayama, Hiroo Yokozeki

Department of Dermatology, Tokyo Medical and Dental University, Graduate School of Medicine, Tokyo, Japan

Dear Editor:

A 57-year-old woman presented to our hospital in April 2012 with a chief complaint of a 2-month history of swelling and erythema of both lower extremities. Her medical history was significant for bilateral uveitis, which had been followed by physicians in Department of Ophthalmology, Tokyo Medical and Dental University. Her family history was unremarkable. Physical examination revealed inarticulate erythema with edema, subcutaneous nodules, and livedo of her lower extremities (Fig. 1A). Her laboratory values were within reference limits, except for serum lysozyme (17.2 μg/ml; reference, 4.2～11.5 μg/ml) and angiotensin-converting enzyme (ACE, 32.8 IU/L; reference, 7.7～29.4 IU/L), which were slightly elevated. Plain film roentgenography and computed tomography of the chest revealed bilateral hilar lymphadenopathy (BHL) and nodules in the inferior lobe of the right lung.

A biopsy was obtained from the subcutaneous nodule within an area of the livedo on her left lower extremity. Histologically, the epidermis appeared normal. The middle and lower dermis, as well as the subcutaneous tissue, contained disseminated noncaseating epithelioid granulomas, surrounded by a mixed infiltrate of lymphocytes (Fig. 1B). Moreover, the center of many granulomas contained damaged blood vessels. The lumina of the blood vessels were narrowed and occluded with fibrin (Fig. 1C～E).

The patient's condition was diagnosed as sarcoidosis and livedo because of the presence of obliterative changes to the vessels and surrounding granulomas. Treatment with oral prednisolone (30 mg/day) resulted in prompt improvement in the patient's cutaneous lesions and BHL, as well as normalization of the serum levels of lysozyme and ACE.

Thus, the patient in our case report appears to have a rare cutaneous presentation of sarcoidosis, the so-called livedo-

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Corresponding author: Ken Igawa, Department of Dermatology, Tokyo Medical and Dental University, Graduate School of Medicine, Yushima 1-5-45, Bunkyo-ku, Tokyo 1138519, Japan. Tel: 81-3-5803-5286, Fax: 81-3-5803-0143, E-mail: k.igawa.derm@tmd.ac.jp

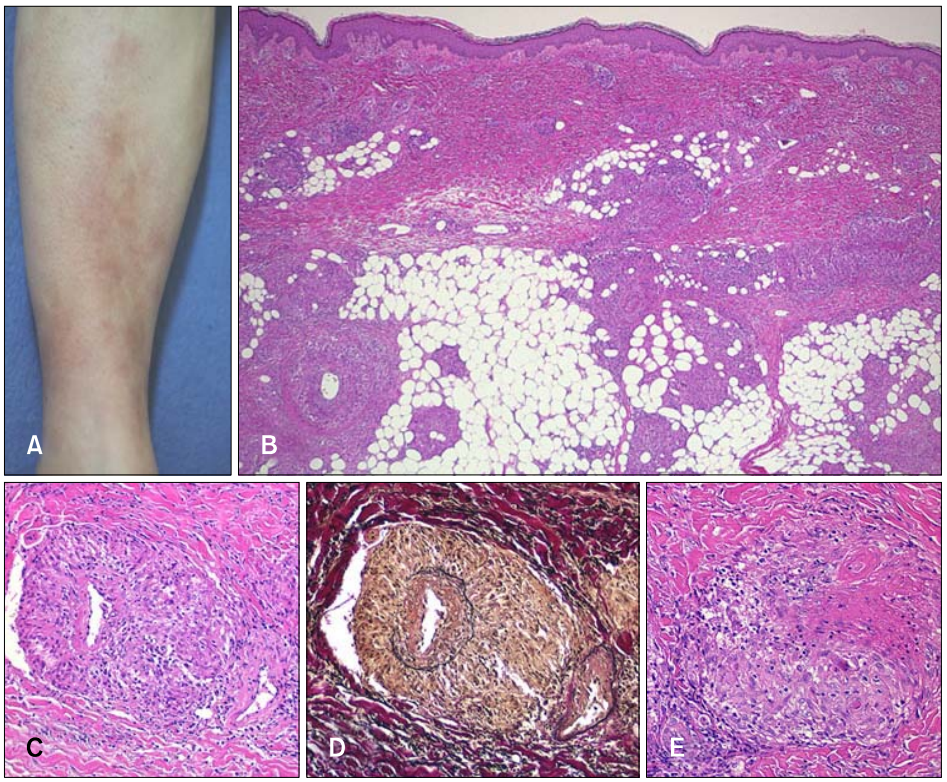

Fig. 1. (A) Erythema with subcutaneous nodules and livedo reticularis of the lower extremities. (B) Nodules of noncaseating epithelioid granulomas and diffuse dense mixed infiltrate of lymphocytes in the middle and lower dermis, and in subcutaneous tissue (H&E, ×20). (C) Granulomas surrounding damaged and narrowed blood vessels (H&E, ×100). (D) Granulomas surrounding damaged and narrowed blood vessels (Elastica van Gieson stain, ×100). (E) Some vessels were occluded with fibrin (H&E, ×100).

type sarcoidosis; this type of sarcoidosis was not mentioned in a recent review on sarcoidosis[1]. There have been a few similar cases reported to date[2,3]. Others have previously reported sarcoidosis presenting as vasculitis (described as "granulomatous vasculitis")[4,5]. However, in cases of sarcoidosis presenting with livedo, as in our case, granulomas surrounding blood vessels resulted in obliterative changes to blood vessels, not vasculitis[2,3]. Damage to blood vessels from dense populations of sarcoidal granulomas may have compromised circulation and caused the clinically apparent livedo in the patient in our case report, as well as those in other related case reports.

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