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A Case of Acute-Onset, Painful Acral Granuloma Annulare

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Dear Editor:

Acute-onset, painful acral granuloma annulare (GA), a rare variant first described by Brey et al.[1] in 2006, is characterized by sudden onset of painful lesions on the hands and feet, and scattered lesions at other sites. Patients may have associated arthralgia, diarrhea, and fever. The erythrocyte sedimentation rate (ESR) may be elevated[1].

A 57-year-old woman presented with painful lesions on the hands and legs 4 months ago. The lesions abruptly began as small erythematous plaques and slightly enlarged after beginning. The patient experienced febrile sensations, myalgia, and back pain a month before developing the lesions. Intermittent treatment of oral prednisolone from a local clinic alleviated her back pain, but new cutaneous lesions persistently develop. Physical examination revealed tender, erythematous, annular plaques on the palms, lateral sides of the fingers, and the legs (Fig. 1). Initial laboratory examination by a rheumatologist revealed an elevated ESR of 52 with otherwise unremarkable findings for rheumatoid factor, anti-neutrophilic cytoplasmic antibody, anti-cardiolipin antibody and thyroid function test. Biopsy specimen from the left second finger revealed a palisade of histiocytes surrounding degenerated collagen and mucin in the dermis (Fig. 2A, B). Alcian blue (pH 2.5) staining highlighted mucin in the center of the granuloma (Fig. 2C). Based on the clinical and histological findings, acute-onset, painful acral GA was diagnosed.

Although the occurrence of GA on the dorsum of the hands is frequent, the involvement of the palms appears to be very rare[2-5]. Generally, GA is characterized by asymptomatic or mildly pruritic lesions, but GA on the palms manifests variable clinical presentations, including painful or pruritic papules and plaques[2-4]. Acute-onset, painful acral GA also manifests unusual painful lesions similar to GA lesions on the palms. However, the former shows constitutional symptoms in addition to skin lesions, which may raise suspicion about an autoimmune disease. Therefore, unnecessary examinations and treatments may be performed and final diagnosis may be delayed. Brey et al.[1] reported 2 of 4 patients presenting with arthralgia, which increased authors' concern that the disease might represent an early manifestation of an autoimmune disease. However, extensive serologic and radiologic examinations for autoimmune diseases were negative. Our patient was initially also evaluated by a rheumatologist, but all serologic findings for autoimmune diseases were unremarkable except for an elevated ESR. From this clinical viewpoint, we assume that acute-onset, painful acral GA could be classified as a distinct variant of GA distinguishing it from GA on the palms. Acute-onset painful acral GA should be differentiated from conditions including Sweet's syndrome, interstitial granulomatous dermatitis with arthritis, palisaded neutrophilic and granulomatous dermatitis, and rheuma-

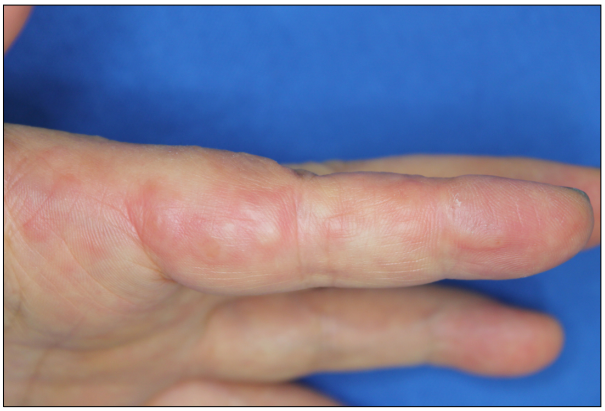

Fig. 1. Tender erythematous annular plaques on the lateral side of second and third finger.

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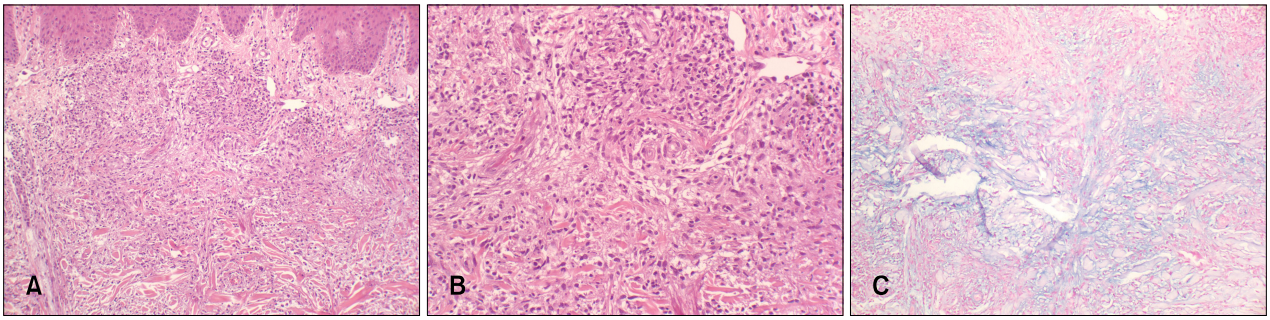

Fig. 2. (A) Palisade of histiocytes surrounding degenerated collagen and mucin in the dermis. A broad zone of mucinous degenerated collagen fibers with infiltrating lymphohistiocytic granuloma (H&E, ×100). (B) (H&E, ×400). (C) Alcian blue (pH 2.5) staining highlighted mucin in the center of the granuloma (×100).

toid nodule, which may present similar clinical presentations like painful papules or plaques and constitutional symptoms[1].

Herein, we report a very rare and interesting case of acute-onset, painful acral GA. Clinicians should be aware of the atypical clinical presentation of GA such as painful and/or tender acral eruptions with constitutional symptoms. To classify acute-onset, painful acral GA as a variant of GA, more reports of cases are needed.

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