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Periarticular calcifications in dermatomyositis

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Correspondence to Chan Hong Jeon, M.D. Tel: +82-32-621-5195 Fax: +82-32-621-6950 E-mail: chjeon@gmail.com https://orcid.org/0000-0002-2430-7264 A 49-year old woman presented to rheumatologic clinic with a 3-month history of joint pain. Physical examination revealed erythematous flat lesions over the dorsal surface of metacarpals and interphalangeal regions. Swelling and tenderness were observed in the metacarpophalangeal and proximal interphalangeal (PIP) joints. There was no muscle weakness. Calcinosis cutis was absent. Serologic testing showed elevated rheumatoid factor of 31 IU/mL (reference value, < 15). Anti-cyclic citrullinated peptide antibody was negative. Anti-nuclear antibody was negative, but anti-Ro 52 was positive. Creatinine kinase levels were 54 U/L (reference value, < 270). There was no abnormality on the hand X-ray. A computed tomography scan of the chest showed ground-glass opacities and reported as interstitial lung disease (ILD). A diagnosis of amyopathic dermatomyositis was made according to the Gottron's papule, arthritis, and ILD. She was treated with prednisolone, hydroxychloroguine, and methotrexate. After treatment, joint pain was diminished, but hand stiffness and skin lesions were persisted. Bony joints in both hands showed progressive enlargement (Fig. 1A), and 2 years later, follow-up hand X-ray showed newly appeared multiple periarticular calcifications in the right 2nd, 3rd, 5th PIP joint and left 2nd to 5th PIP joint and right ulnocarpal joint/radiocarpal joint (Fig. 1B). Dual-energy computed tomography scan revealed periarticular calcifications in the PIP and wrist joints without monosodium urate crystal deposition (Fig. 1C). Thyroid hormones, parathyroid hormone, and vitamin D levels were within normal ranges.

Calcinosis cutis, calcium deposition in cutaneous and subcutaneous tissue, is rare complication of dermatomyositis. The interest of present case is calcinosis was localized only in periarticular space of hands. When patients with rheumatologic disease complained hand stiffness, synovitis is usually considered. It is a rare case of



Figure 1. (A) Gottron's papules and bony enlargement in both hands. (B) Hand X-ray showed multiple periarticular calcifications in both proximal interphalangeal joints. (C) Dual-energy computed tomography revealed calcifications without monosodium urate crystal.

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periarticular calcifications of both PIP joints in patients with dermatomyositis who complained of bilateral hand stiffness.

Informed consent was obtained from the patient for publication of this case report and accompanying images.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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