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Clinical Image: Calcinosis cutis universalis in a patient with polymyositis/scleroderma overlap syndrome

The patient, a 32-year-old woman with a known history of polymyositis/scleroderma overlap, presented for a second opinion regarding subcutaneous nodules. On examination, the patient had extensive subcutaneous painful nodules over multiple areas of the body, including bilateral arms, thighs, and hands. There were no open or ulcerative lesions. Workup demonstrated normal creatine kinase, parathyroid hormone, serum calcium, and serum phosphate levels and normal bone mineral density. Electromyography showed no evidence of active myositis. A frontal projection radiograph demonstrated extensive sheetlike soft tissue calcinosis consistent with calcinosis cutis universalis. Calcinosis cutis describes the deposition of insoluble calcium salts in the cutaneous and subcutaneous tissue (1). Five subtypes of calcinosis cutis exist on the basis of the etiology: dystrophic, metastatic, idiopathic, iatrogenic, and calciphylaxis. The dystrophic subtype results from tissue trauma or chronic inflammation due to autoimmune connective tissue disorders. Dystrophic calcinosis cutis develops in approximately 25% of patients with systemic sclerosis and 11% to 20% of patients with dermatomyositis (2,3). Calcinosis cutis universalis, as seen in this patient, is a rare presentation. Two types of calcinosis cutis universalis exist: diffuse deposits along myofascial planes and deep intramuscular tumoral deposits, as seen in this patient (4). Although multiple treatment modalities have been trialed, no effective treatment is known (5).

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