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Scrotal Calcinosis in Juvenile Systemic Sclerosis

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Calcinosis cutis is the deposition of insoluble calcium in the skin and subcutaneous tissues, frequently associated with autoimmune connective tissue diseases, including systemic sclerosis (SSc). Calcinosis in SSc presents as subcutaneous nodules of variable size and shape, most frequently on the fingers, but can also affect other locations.²

An 18-year-old man with a 10-year history of juvenile SSc presented with multiple scrotal subcutaneous hard lumps. At the time of initial diagnosis, the patient had skin tightness, hand contractures, abnormal nailfold capillaries, and high-titer positive antinuclear antibody with nucleolar pattern. He was treated with methotrexate for several years, with significant improve-



Figure 1. Multiple calcified nodules of the skin of the scrotum.

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Figure 2. Multiple rounded dense bodies over the scrotum shadow on radiography of the pelvis.

ment of the skin and no internal organ involvement. Current physical examination revealed numerous palpable subcutaneous yellowish nodules on the scrotum (Figure 1), but not on other

sites. A pelvis radiograph showed extensive scrotal soft-tissue calcifications (Figure 2), consistent with a diagnosis of calcinosis cutis.

Although not described previously in the scrotum alone, calcinosis in SSc often presents at sites of recurrent microtrauma, which could potentially explain this unique location. Calcinosis is a long-term complication of SSc and is associated with significant impact on quality of life and functional disability.³ Given its low cost and comparable information to 3-D modalities, plain radiography is the initial imaging of choice for calcinosis.⁴

Currently, there are no approved treatments for calcinosis in patients with SSc. Several pharmacologic therapies have been tried in small case series with disappointing or modest results, and surgical excision of calcium deposits remains the mainstay of treatment. The patient was treated with minocycline and topical sodium metabisulfite without success and was referred for surgical excision.

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