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Widespread Idiopathic Calcinos Clis Cutis: A Case Report

The Editor,

Sir,

A three-month-old female patient presented with subcutaneous hardening of the skin on the back and lower left abdominal quadrant. The lesions had been present since birth and were spreading. She had no history of chronic disease, drug use or hospitalization. There was also no family history of similar complaint. On physical examination, body weight, height and head circumference measurements were normal. Her whole body was covered with plaquelike, immobile subcutaneous nodules, that had infiltrated the skin and were particularly apparent on the trunk and back (Fig. 1). Other systemic examinations were normal. At laboratory examination, serum calcium, phosphorus, alkaline phosphatase, parathormone, 25-OH vitamin D levels and measurement of 24-hour calcium excretion in urine were within normal range. Complete blood count, erythrocyte sedimentation rate, urine test, glucose, renal function tests, liver function tests, thyroid function tests, antinuclear antibody, anti-DNA, anti-SM, anti-neutrophil cytoplasmic antibodies and serum C3, C4 levels were also normal. Malignancy or pathologic signs were not found at radiological examination. Calcified nodules localized in the subcutaneous fat tissue were identified by ultrasound. Incisional biopsy was performed. The skin tissue was stained with haematoxylin and eosin (H&E) for pathological investigation. On light-microscopic examination, calcified nodules were seen in subcutaneous fat and dermis. The lesions consisted of granules of calcified material and/or amorphous masses of calcium. There was also a small amount of inflammatory infiltrate around the calcified nodule. Pathological investigation was compatible with calcinosis cutis (Fig. 2). Idiopathic calcinosis cutis was diagnosed on the basis of clinical, radiological and pathological results.

Calcinos cutis is a rare condition in childhood. Cutaneous lesions are generally in the form of nodules or plaques on the abdomen, thigh and hip regions (1). The pathogenesis of this condition is unknown and probably multifactorial. Calcinos cutis may be classified as metastatic, dystrophic, iatrogenic and idiopathic (1, 2). Idiopathic calcinosis cutis is a rare form and occurs in apparently normal tissue in the absence of known tissue injury, systemic metabolic effect or collagen vascular disease and percutaneous exposure to calcium. Clinical and laboratory findings are normal and there are no systemic diseases. Calcium deposits are present in subcutaneous tissues. The reason for

Fig. 1: Calcified lesions spread all over the body.

Fig. 2: Subepidermal calcified nodule.
calcium and phosphate collection is unclear. Calcium and phosphate excretion may be normal (1, 3). Serum calcium and phosphorus levels and calcium and phosphate expulsion were within normal limits in the index patient. Metastatic calcinosis cutis was excluded radiologically and by laboratory tests. There was no infection and connective tissue disease that might cause dystrophic calcification, and laboratory parameters that might suggest collagen tissue disease were negative. Thus, our patient was diagnosed with idiopathic calcinosis cutis. Calcinosis cutis is generally localized in one area, although rarely, as in our case, it can be spread over the entire body. Treatment for calcinosis cutis consists of the correction of the underlying pathology and treatments emerging complications. Spontaneous resolution of lesions has also been reported in idiopathic cases. Various treatments are used, such as bisphosphonates, a low calcium diet, intralesional corticosteroids, diltiazem, aluminum hydroxide, colchicine, warfarin, probenecid, salicylate, and minocycline, but are inadequate in the treatment of developed calcinosis cutis. Total excision has been reported to be superior to medical treatment in idiopathic calcinosis cutis, but this is the least favourable treatment option (4, 5). No medical and surgical treatment was applied to the patient. Instead, dietary recommendations were given to her mother. The patient was followed-up for 10 months and there was no change of the calcinosis cutis.

In conclusion, when subcutaneous calcified mass is determined, differential diagnosis should be performed and calcinosis cutis should be considered.

**Keywords**: Calcinosis cutis, child, skin

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