

Benign calcinosis cutis

Cite this article as: Randhawa MS, Varma TH, Dayal D. Benign calcinosis cutis. Turk Pediatr Ars 2018; 53(4): 267-68.

Dear Editor,

Calcinosis cutis is a condition characterized by the deposition of calcium salts in the skin and subcutaneous tissue. There are five main types of calcinosis cutis, namely dystrophic, metastatic, idiopathic, iatrogenic, and calciphylaxis (1). The most common type is the dystrophic type, which is associated with systemic diseases such as systemic lupus erythematosus, systemic sclerosis, dermatomyositis, mixed connective tissue disease, and sarcoidosis (1, 2). Metastatic calcification occurs in the presence of abnormal serum calcium and phosphorus levels. In the iatrogenic type, precipitation of calcium salts occurs after administration of a calcium or phosphate-containing agent, whereas calcification of small and medium-sized vessels associated with chronic renal failure or dialysis is termed calciphylaxis (1). The idiopathic variety has no underlying tissue damage or abnormal laboratory values and includes tumoral calcinosis, subepidermal calcified nodules, and scrotal calcinosis (1). The idiopathic type is extremely rare in children and occurs without any predisposing factors. Unlike adults who may have recurrence after therapy, the condition runs a relatively benign course during infancy (3). We report an infant who showed spontaneous regression of cutaneous lesions over a few months of follow-up.

A 7-month-old infant presented with multiple subcutaneous nodules on the back of the trunk and thigh. First noticed at 5 months of age, these painless lesions progressively increased in size over the subsequent 2 months. There were no systemic symptoms or family history of a similar disorder. No previous trauma was

reported. An examination revealed subcutaneous irregular nodules on two sites on the back and on the medial aspect of left thigh (Figure 1a). There were no signs of inflammation around the lesions. The physical examination was otherwise unremarkable. The hematologic and biochemistry tests including calcium, phosphorus, alkaline phosphatase, 25-dihydroxy-vitamin D, parathyroid hormone, and lipid profile were normal. Fine needle aspiration cytology of the lesions showed features of tumoral calcinosis. A watchful waiting strategy expecting spontaneous resolution was followed. A gradual decrease in size at 8 months followed by complete regression of lesions at 10 months of age was observed (Figure 1b). Written informed consent was obtained from the parents of the patient.

Calcinosis cutis may mimic cutaneous xanthomas, mycetoma, myositis ossificans and osteomalacia cutis. Cutaneous and tendon xanthomas usually occur in children with familial hypercholesterolemia (4). The other differential diagnoses were excluded by histopathology. The idiopathic variety of calcinosis cutis is usually benign and is diagnosed after excluding conditions associated with abnormal calcium deposition by history, examination and appropriate investigations (1). The treatment of tumoral calcinosis can be quite challenging and includes the use of drugs such as diltiazem, bisphosphonates, probenecid, aluminium hydroxide aimed at altering the serum calcium-phosphorus levels, and surgical excision or curettage (1). However, spontaneous regression of lesions has been noted previously, especially when it occurs during infancy (3, 5). Hence, some authors recommend a period of obser-



Figure 1. a, b. Nodular swellings on the back (a), photograph showing complete regression of lesions (b)

vation when calcinosis cutis is detected during infancy without an underlying disease or family history (3, 5). Similar to previous observations on infants with tumoral calcinosis, our patient also showed spontaneous improvement and therefore benign calcinosis cutis may be the preferred term in this age group.

Manjinder Singh Randhawa, Tandra Harish Varma, Devi Dayal

Department of Pediatrics, Postgraduate Institute of Medical Training and Research, Chandigarh, India

Conflict of Interest: The authors have no conflicts of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

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Corresponding Author: Devi Dayal
E-mail: drdevidayal@gmail.com

Received: 21.02.2018

Accepted: 24.04.2018

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DOI: 10.5152/TurkPediatriArs.2018.6792

