

## Case Report



## Calcinosis cutis

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## ABSTRACT

A 45 years old woman presented with Reynaud's phenomena involving bilateral fingers and toes with chronic ulceration of right middle finger. She was diagnosed as having limited systemic sclerosis with calcinosis of fingers. Finger calcinosis was confirmed by x ray of hands.

She was treated with calcium channel blockers and intra-lesional steroid application. Medical therapy for calcinosis has limited benefit, and recurrence is also common after surgical excision. Patient was investigated for other organ involvement in systemic sclerosis.

**KEY WORDS:** Systemic sclerosis; Calcinosis

## INTRODUCTION

Calcinosis cutis is a condition where formed calcium deposits found in the skin. When this occurs on finger tips, lesions may be painful, while lesions at other sites may restrict joint mobility and limit movement due to stiffening of the skin.

## CASE

A 45 yrs old lady presented with Reynaud's phenomena involving fingers of both hands and also toes of both feet. On examination she had puffy fingers with extruding calcinosis cutis and digital pitted scars. Anti centromere antibody was positive, and she was diagnosed as a case of limited Systemic sclerosis according to the 2013 ACR/EULAR criteria. Her X rays of hands confirmed numerous foci of amorphous calcifications overlaying distal phalanges with erosions in the head of distal phalanx of right index finger.

This patient was treated with calcium channel blocker (diltiazem) and a steroid cream was prescribed for application on finger lesions. Patient was also investigated for other organ involvement in systemic sclerosis.

## DISCUSSION

Dystrophic soft tissue calcifications or calcification occurring in degenerated or necrotic tissue, could be seen in some pathologic conditions like infections, tumors, connective tissue diseases (dermatomyositis, systemic sclerosis, cutaneous lupus erythematosus), panniculitis and in inherited diseases of connective tissues (Ehlers-Danlos syndrome, Pseudoxanthoma elasticum,) [1]. Metastatic calcification could occur in primary or secondary hyperparathyroidism, paraneoplastic hypercalcaemia, Paget

disease, with excessive vitamin D intake, Sarcoidosis, chronic renal failure and in calciphylaxis. Apart from these, idiopathic calcinosis and iatrogenic calcinosis could also occur.



**Figure 1.** Black arrows point to nodular digital soft tissue calcifications. A focus of erosion at the head of terminal phalanx of right index finger is marked with a white arrow.

After clinical diagnosis of calcinosis cutis, a laboratory workup to rule out abnormalities of calcium and phosphorus metabolism, malignant processes, collagen vascular diseases, renal insufficiency, excessive milk ingestion, vitamin D poisoning must be carried out to detect the underlying cause of the disease.

Underlying problem should be corrected.

Probenecid, warfarin and colchicine have been beneficial in some individuals with calcinosis cutis. Ulcerative calcinosis cutis may respond to topical sodium thiosulfate 25% [2].

Ulceration and inflammation is usually reduced by Minocycline [3].

Electric shock wave lithotripsy is successful in treating calcinosis cutis associated with dermatomyositis, venous insufficiency and scleroderma with complete relieve of pain, although the reduction of the size of calcification was minimal [4, 5].

Intralesional corticosteroids may be useful due to their anti-inflammatory and inhibitory effects on fibroblast activity. Calcium-channel blocker diltiazem is thought to help by antagonism of the calcium-sodium ion pump [6].

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