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Case Report

# Calcinosis of the Soft Tissues Secondary to Scleroderma: A Case Report

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## Abstract

A 66-year-old patient who has been seen for arthralgias in the hands and shoulders that have been evolving for 4 months and for whom the standard radiographs have revealed calcinosis of the soft tissues.

In view of the clinical and radiological aspect of the patient, the diagnosis of scleroderma was suspected, confirmed later by other biological examinations.

## Introduction

Scleroderma is an autoimmune disease with vascular and fibrotic expression, with variable scalability and prognosis; It affects three women for a man, rarely begins before the age of 20 years with a peak frequency between 40 and 60 years[1]; Soft-tissue calcinosis observed during scleroderma is quite rare and may in some cases guide the diagnosis. We present the case of a patient whose diagnosis of scleroderma was directed by calcinoses of the hands, confirmed later by biological examinations.

## Case Description

A 66-year-old patient, who has been consulting for arthralgias of the hands and shoulders that have been evolving for 4 months and whose history has been marked by the occurrence of a RAYNAUD phenomenon.

Clinical examination revealed pulpal ulcerations, a pinched nose, limited opening of the mouth and vitiligo of the face.

A radiograph of the two hands showed multiple masses of calcium tone interesting the soft parts opposite carpals, metacarpals, and Distal Interphalangeal (DIP), realizing a cluster appearance by juxtaposition of small dense images, rounded and well limited, associated with a pinch of DIP and acro-osteolysis of distal phalanges (Figure 1).

The clinical and radiological aspect suspected calcinosis secondary to scleroderma confirmed later by biological examinations.

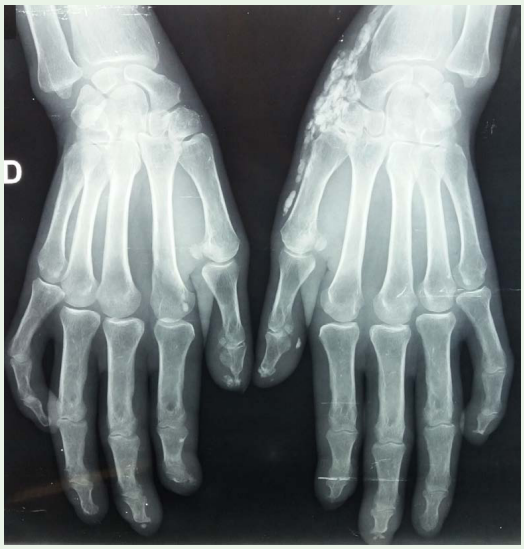


**Figure 1:** A radiograph of the two hands showed multiple masses of calcium tone interesting the soft parts opposite carpals, metacarpals, and DIP, associated with a pinch DIP and acro-osteolysis of distal phalanges.

## Discussion

Scleroderma is characterized by involvement of connective tissue, arterioles and microvessels leading to fibrosis and vascular obliteration [2].

Calcinosis in scleroderma occurs in tissues affected by mechanical stress, hypovascularity and tissue hypoxia [3]; it corresponds to aggregates of apatite crystals whose physiopathogeny is debated and whose evolution is most often to ulceration with externalization of chalky material.

There is a diffuse and progressive form and a form more limited to the skin tissues or CREST syndrome (calcinosis, RAYNAUD syndrome, esophageal dysfunction, scerodactyly and telangiectasia) [2].

Osteoarticular involvement can be manifested by erosive and destructive arthritis, particularly in the wrist [4] with epiphyseal erosions, articular narrowing and distal acro-osteolysis which can progress in the most severe cases to the total disappearance of the distal phalange [5].

Soft-tissue calcinoses observed during scleroderma can simulate a broad spectrum of essentially benign conditions, but the main differential diagnosis is dermatomyositis.

Treatment with warfarin, colchicine, probenecid, bisphosphonate, diltiazem, minocycline and surgical excision has been reported, with little effect [3].

## Conclusion

Calcinosis of the soft tissues may correspond to difficult diagnoses, especially in the absence of history of trauma; the clinical examination is of paramount importance, the anatomical localization and the radiological aspect allow directing the diagnosis.

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