LETTER TO THE EDITOR

Is X-ray Necessary to Diagnose Aberrant Skin and Subcutaneous Calcifications?

Aberrant calcifications of skin and subcutaneous tissue are seen in collagen diseases and in many localized skin diseases as a more or less characteristic feature. In systemic sclerosis, aberrant calcifications and teleangiectasia have been related to a more favorable prognosis (1, 2, 3).

We studied aberrant calcifications in 45 patients with systemic sclerosis having a mean age of 52 years (range 20–69) and a mean duration of systemic sclerosis of 7 years (range 3–30). The patients were first examined clinically for calcifications with special registration of calcifications of the hands and then radiologically of both hands in two standard projections.

Results are shown in Table 1.

Because of the specificity of the radiological method, it is sure that 6 cases of aberrant calcification were overlooked by clinical examination. On the other hand, provided the clinical diagnosis of calcification was correct, three cases of calcifications were overlooked by radiological examination. If small in size and number, calcifications may be covered by bone. If contractures are severe, optimal projections may not be achieved.

We found in this elective and prospective study that 38% and 44% of patients with systemic sclerosis have aberrant calcifications by clinical and radiological examination respectively. This is twice the frequency reported in previous studies, which in most cases were retrospective (4, 5, 6).

Radiological examination should always be performed once in patients with a skin disease where the presence of aberrant calcifications is relevant. Radiological examination should be supplemented with a careful clinical examination, which may reveal calcifications overlooked by radiological examination. Clinical examination has, furthermore, the advantage that the entire skin can easily be examined. Clinical examination is sufficiently precise to be used in the further control of patients with skin diseases with a predisposition to aberrant calcifications once documented, and radiological examination need not be repeated except if special problems such as ulcers or fistula occur.

REFERENCES

 Winterbauer RH. Multiple teleangiectasia, Raynauds's phenomenon, sclerodactyly and subcutaneous calcinosis: A syndrome mimicking hereditary hemorrhagic teleangiectasia. Bull Johns Hopkins Hosp 1964; 114: 361–83.

Table I. Aberrant calcifications of the hands of 45 patients with systemic sclerosis registered clinically and radiologically

	N	%	
Calcifications, clinically	17	38	
Calcifications, radiologically	20	44	
Calcifications, clinically but not radiologically	3	6	
Calcifications, radiologically but not clinically	6	13	
Calcifications, clinically and radiologically	14	31	
No calcifications, clinically and radiologically	22	49	
Discrepancy between clinical and radiological			
detection of calcification	9	20	

- Carr RD, Heisel EB, Stevenson TD. CREST-syndrome—a benign variant of scleroderma. Arch Dermatol 1965; 92: 519-25.
- Frayha RA. Calcinosis in scleroderma: a reevaluation of the CREST syndrome. Arthritis Rheum 1973; 16: 542.
- Muller SA, Brunsting LA, Winkelmann RK. Calcinosis cutis: its relationship to scleroderma. Arch Dermatol 1959; 80: 15-21.
- Jablonska, S. Scleroderma and pseudoscleroderma, 2nd ed. Warsaw: Polish Medical Publishers 1975.
- 6. Yune HY, Vix VA, Klatte EC. Early fingertip changes in scleroderma. JAMA 1971; 215: 1113-16.

Received September 16, 1983.

Hans Hagdrup, Jørgen Scrup and Birgitte Brun, The Department of Dermatology and the Department of Radiology X, Rigshospitalet, Copenhagen, Denmark,

Correspondence to: Hans Hagdrup M.D., Strandparksvej 10, DK-2900 Hellerup, Denmark.