Case 1

Occupational History: Left school aged fourteen, following which he spent four years in an office.
R.A.F. 1939 - 1945 as armourer.
1945 - 1950 - Office worker.
1950 to present time, I.C.I. as autoclave cleaner in P.V.C.

Previous Illnesses: Diagnosed as a case of scleroderma by a dermatologist and a consultant physician in 1957. At this time he apparently had Raynaud's phenomenon and puffiness of the face with some thickening of the skin of the fingers, hand and left forearm.
Barium swallow and chest x-ray negative.

Present condition: No constitutional symptoms. States that his hands usually feel cold, but apparently does not have true Raynaud's phenomenon. Keen piano player, but now has some difficulty in playing because of the difficulty of getting his fingers between the black keys.

Examination: The only abnormalities to be found are:-

1) 'Pseudo' clubbing of his fingers. This involved all fingers, but was especially marked in the index and middle fingers of both hands and the right little finger. This differed from true clubbing in that, although the end of the finger was bulbous, the angle between the base of the nail and the adjacent skin was not obliterated.

2) The liver was palpable on inspiration.

Investigations:

X-rays.

Hands - There are periarticular erosions of all proximal interphalangeal joints. The proximal interphalangeal joint of the left little finger is disorganised. There are erosions of the middle two thirds of the terminal phalanges of the index and middle fingers of both hands. The appearances resemble pseudo fractures.

Feet - The 5th proximal phalanges of both feet show erosions on their distal ends. The 5th proximal interphalangeal joint is disorganised on the left. There is a cystic area in the subarticular region of the head of the 1st right metatarsal.

Chest - Normal.

Skull - Normal.

Right femur - Calcification in femoral artery. No bone change.

Teeth - Normal. Periodontal membrane intact.

Cervical spine - Normal.

Straight abdomen - Widening of the joint space of the sacro-iliac joint with cystic marginal sclerosis.

Full blood count: Haemoglobin 114% (16.65 gms%)
Leucocyte count 8,100.
Polymorphs - 63%
Lymphocytes - 31%
Monocytes - 6%
RBC's appear normal.

Liver function tests: The serum bilirubin was persistently elevated (1.9 mgm%, 1.7 mgm%, and 1.8 mgm%). The remaining liver function tests, including flocculation and turbidity tests and serum transaminase levels, were repeatedly normal.

Serum calcium (corrected) - 9.9 mgm% and 10.2 mgm%.

Serum phosphate - 3.5 mgm% and 3.0 mgm%.

24 Hour Urinary calcium - 240 mgm (normal).

Serum uric acid - 5.2 mgm%.

Serum cholesterol - 210 mgm%.

Blood sugar - 80 mgm%

B.U.N. - 17 mgm% (normal).

Serum Acid Phosphatase 0.7 K.A. units.
Serum Alkaline Phosphatase - 7.1 K.A. units and 7.9 K.A. units.

Serum Na^+ - 140 mEq/1.
Serum K^+ - 4.4 mEq/1.
Serum Cl^- - 103 mEq/1.

M.S.S.U. Normal

Electrophoresis of plasma proteins - Normal

E.C.G. Normal.

Summary: The points of interest are therefore the bony changes in the hands, feet and sacro-iliac joint, and the persistently raised serum bilirubin with enlargement of the liver.

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