We present the case of a 55-year-old woman who came to the clinic due to neck and lower back pain for the past 6 months. Physical examination of the locomotor system was normal.

A cervical spine X-ray was taken and showed a straightening of its physiologic lordosis. Lumbar spine X-ray showed a sclerotic pattern on sacroiliac joints (Fig. 1).

Laboratory tests showed an increase in alkaline phosphatase in the blood chemistry (485 UI/l) and normal serum calcium. Suspecting Paget's disease, the patient underwent a bone scan with Tc-99 (Fig. 2), which showed an increased uptake in dorsal vertebrae 10, the third left proximal interphalangeal joint and the left femur. A simple X-ray of these regions showed affection of the third left phalange, with the rest of the X-ray being normal (Fig. 3).

Treatment with non-steroidal anti-inflammatory drugs and calcitonin was given; she then was treated with oral bisphosphonate.

Discussion

Paget's disease is an illness of unknown origin characterized by excessive and abnormal remodeling, where the normal bone matrix is substituted by bland bone of larger size. It may be asymptomatic or cause pain and deformity. It affects the skeleton in a mono or polyostotic manner.  

Guàñabens et al. in 2008 performed a study of prevalence of approximately 1%, of a total of 4,528 X-rays studied in 13 different centers.  

Affection of the bones of the hand in Paget's disease is uncommon, affecting, by order of frequency, phalanges, metacarpus and carpus.
Fig. 1. Pelvic X-ray showing a sclerotic pattern of sacroiliac joints.

Fig. 2. Bone scan showing an increased uptake on D 10, third left proximal interphalangeal joint, pelvis and left femur.
Fig. 3. Posteroanterior X-ray of the hands showing affection of the third phalange of the left hand, with the rest of the image being normal.

References