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Emergence of radiographic signs of chondrocalcinosis over 4 years of follow-up

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The patient, a 45-year-old white woman, presented with long lasting arthritis of the wrists and inflammatory arthralgia of knees, ankles and elbows. An extensive laboratory investigation including antinuclear antibodies, rheumatoid factor, and cyclic citrullinated peptide antibody was negative. X-ray images of the hands and wrists made in January, 2011 showed no remarkable findings (Figure 1, A). A diagnosis of seronegative rheumatoid arthritis was made based on clinical findings. The patient received treatment with prednisone and a combination of DMARDs (methotrexate, leflunomide, and hydroxychloroquine), without exhibiting clinical response. A new X-ray made in April, 2012 (Figure 1, B) showed narrowing of the wrist joint space and incipient scapholunate dissociation (arrow). Eventually, anti-TNF agents (etanercept and adalimumab, one at a time) were added to the therapeutic scheme. After several unsuccessful treatments, the X-ray was repeated in March, 2015 (Figure 1, C) and the following findings were observed: scapholunate dissociation (also known as Terry Thomas sign¹, Figure 1, C, arrow), chondrocalcinosis of the triangular fibrocartilage (Figure 1, C, asterisk), and pressure erosion at distal end of the radius (Figure 1, C, circle). X-ray of knees and pelvis were normal. We diagnosed probable calcium pyrophosphate dihydrate crystal deposition (CPPD) disease, but



Figure 1. Evolution of radiographic signs of chondrocalcinosis over 4 years in the left wrist.



Figure 2. A- Dorsal longitudinal scan of left wrist showing grade 2 synovial proliferation and intrarticular hyperecoic images (small asterisks).

B- Lateral longitudinal scan of the left wrist showing hyperecoic enhancement of the triangular cartilage (large asterik).

an investigation of endocrine and metabolic diseases did not reveal a specific etiology. Colchicine 0.5 mg twice a day was initiated with limited therapeutic response. Ultrasonography (US) confirmed features suggestive of CCPD (intraarticular calcifications in right wrist and second metacarpophalangeal [MCP] joints bilaterally; calcification of triangular cartilage in left wrist and knee menisci bilaterally; absence of articular erosions; osteophytes in MCP and metatarsophalangeal joints). Abnormalities suggesting calcifications in the left wrist on US are shown in Figure 2.

Conflicts of interest

The authors declare no conflict of interest.

Reference

 Tischler BT, Diaz LE, Murakami AM, Roemer FW, Goud AR, et al. (2014) Scapholunate advanced collapse: a pictorial review. *Insights Imaging* 5: 407-417. [Crossref]

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