

Pseudo-Pseudogout

Abstract:

Sir

Calcium pyrophosphate (CPP) arthritis was classically described in terms of a pseudo presentations including pseudo-gout, pseudo-rheumatoid arthritis and pseudo-osteoarthritis^{1,2}. We present here a case of rheumatoid arthritis (RA) presenting as apparent CPP arthritis, a case of pseudo-pseudogout.

Case Report

A twenty-eight year old woman presented with an eleven month history of right knee pain and swelling and a four month history of left wrist and knee pain and swelling. Right knee aspirate five months previously demonstrated CPP crystals. Her left wrist and knees were hot, tender and swollen. Routine haematology, biochemistry and urate were normal, erythrocyte sedimentation rate was 63mm/hr and C-reactive protein 46mg/L. Rheumatoid factor, anti-cyclic citrullinated peptide antibodies and metabolic screen were negative. Right knee radiograph was normal. Magnetic resonance imaging of the right knee demonstrated synovitis and diffuse cartilage loss. A diagnosis of chronic CPP crystal inflammatory arthritis was made and she was commenced on colchicine 0.5mg twice daily. On review two months later she had persistence of her previous symptoms and in addition had developed pain and swelling of the small joints of her hands and early morning stiffness of two hours. There was synovitis at the wrists, knees, ankles, metacarpophalangeal, proximal interphalangeal and metatarsophalangeal joints. Tender and swollen joint counts were 20/28. A diagnosis of seronegative RA was made. She commenced methotrexate and a prednisolone taper and has had significant symptomatic improvement.

Discussion

The presence of CPP crystals is commonly used to confirm the diagnosis of CPP arthritis¹. However CPP crystals have been described as occurring in patients with rheumatoid arthritis in up to 25.8% of cases. There is a strong correlation between patient age and disease duration in rheumatoid arthritis patients in whom CPP crystals are found, our case is unusual given the patient's youth and the short disease duration. Our case met the European League Against Rheumatism diagnostic criteria for chronic CPP crystal inflammatory arthritis and the 2010 American College of Rheumatology/European League Against Rheumatism classification criteria for rheumatoid arthritis^{1,5}. In our clinical judgement given the patient's age, lack of an identifiable metabolic precipitant or positive family history, and a typical clinical examination consistent with rheumatoid arthritis, this was the most likely unifying diagnosis. In conclusion we report here a case of rheumatoid arthritis presenting initially as apparent crystal confirmed CPP arthritis. Our case demonstrates the constant need to re-evaluate diagnoses in the light of symptom progression and through the prism of time.

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