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Images in...

Juvenile gout: rare and aggressive

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DESCRIPTION

A 32-year-old male patient presented with an acute polyarticular gout attack. Gout diagnosis was made 16 years before by isolation of monosodium urate crystals in synovial liquid. He had a frequency of four to five attacks of gout per year. Acute attacks were treated with non-steroidal anti-inflammatory drugs (ibuprofen) and colchicine. He was on no long-term medications. There was no family history of gout. On examination he was hypertensive (blood pressure of 162/91 mm Hg) and his body mass index was normal, of 19 kg/m^2. He had important articular deformity of both hands (figure 1A,B) with inflammatory signs in multiple joints (interphalangeal and metacarpophalangeal joints, wrists and knees) and numerous tophi in hands and ears. Blood tests performed showed an elevated serum uric acid level of 10.3 mg/dl, elevated inflammatory markers (erythrocyte sedimentation rate 89 mm/h and C reactive protein 5.6 mg/dl), normocytic, normochromic anaemia (with haemoglobin of 10.1 g/dl) and a mild renal failure with creatinine of 1.6 mg/dl, urea of 67 mg/d (estimated creatinine clearance of 56 ml/min). Considering the association of gout with metabolic syndrome, a metabolic profile was performed: He had normal lipid levels, fasting blood glucose level of 92 mg/dl and HbA_{1c} of 5.4%. Hands x-ray revealed exuberant joint destruction predominantly in carpal and distal interphalangeal joints (figure 2). Genetic investigations were not performed. The acute attack was treated with non-steroidal anti-inflammatory drugs and corticosteroids. Subsequently, he was treated with allopurinol and antihypertensive therapy and has remained asymptomatic for approximately 6 months. Gout is the most common form of inflammatory arthritis, characterised by elevation in serum uric acid levels and deposition of uric acid crystals in the joints. The findings of several studies suggest that the prevalence and incidence of gout has risen in recent decades.[1] Juvenile chronic gout in its polyarticular destructive form has rarely been described in medical literature.[2] Elevations in serum acid uric levels in young individuals are often associated with other underlying diseases (for example, some genetic disorders, myeloproliferative and lymphoproliferative diseases) or allied, reversible conditions that include obesity, diabetes, chronic kidney failure or alcohol consumption.[3] Chen and Shen described an association of juvenile gout with overweight and hereditary background in a case series of 543 patients.[4] Considering the aggressiveness of the disease, early diagnosis and treatment of this subgroup of patients are essential, in order to prevent potential clinical consequences, including cardiovascular and renal disease.

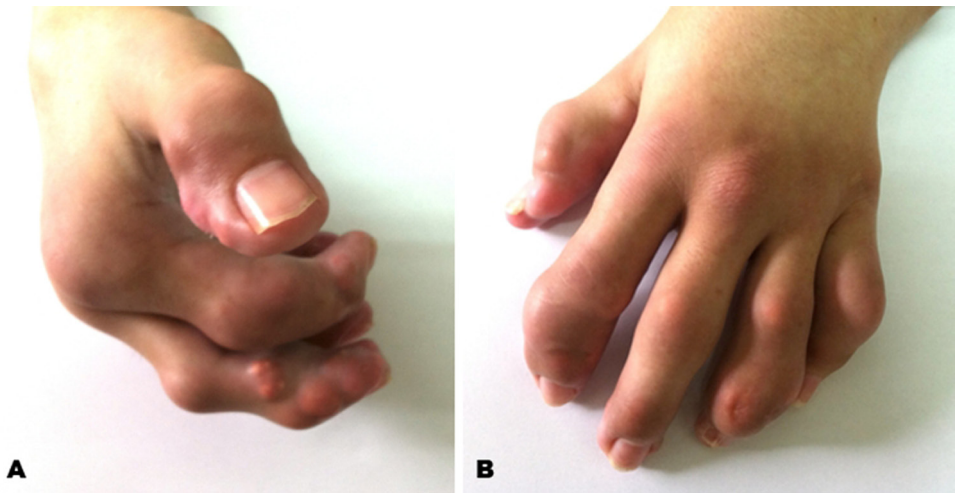

Figure 1 (A, B) Asymmetric articular deformity of both hands.

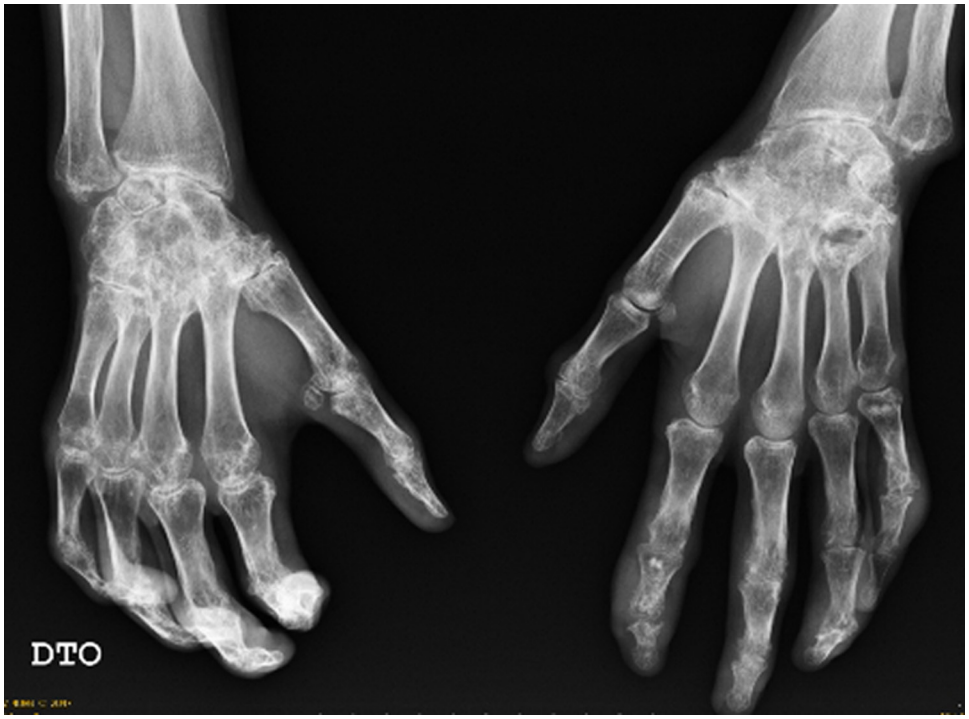

Figure 2 Hands x-ray revealing asymmetrical joint destruction in carpal and distal interphalangeal joints.

Learning points

- Gout is the commonest inflammatory arthritis.
- Juvenile arthritis is rare and may be associated with other underlying diseases or reversible disorders.
- The early diagnosis and treatment of gout may alter the clinical course of the disease and prevent progression to kidney and cardiovascular damage.

Competing interests None.

Patient consent Obtained.

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