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Images in Clinical Rheumatology

Gout Mimicking Soft Tissue Tumor☆

Gota que simula tumoración de partes blandas

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An 80 year-old male patient with a history of controlled high blood pressure, presented with a lesion in the dorsal region at the base of his third finger of the right hand, of several months duration. Physical examination of the lesion revealed that it was of solid consistency and partially deep layer attached. It was therefore diagnosed as a soft tissue tumor. An ultrasound scan was requested which detected a soft tissue mass with diffuse echotexture (Fig. 1A). In view of these findings, CT and MR scans were performed. From these tests we observed that the tumor had a lobulated morphology, contained calcifications and eroded the adjacent bony surfaces (Figs. 1B and 2). The tumor enhanced heterogeneously following the administration of intravenous line contrast dye. As a result of these findings, we decided to perform a biopsy in which uric acid crystals were detected, confirming the diagnosis of arthropathy by crystal deposits (Fig. 3).

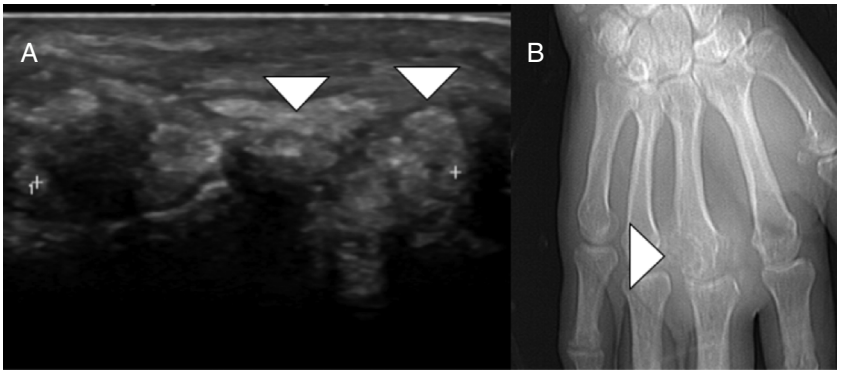

Fig. 1. (A) A soft tissue tumor is observed in the dorsal region at the base of the third finger, which is of diffuse echotexture (white arrow heads). (B) Image of CT locator: a lesion is observed which destroys the cortical of the head of the third metacarpal (white arrow head).

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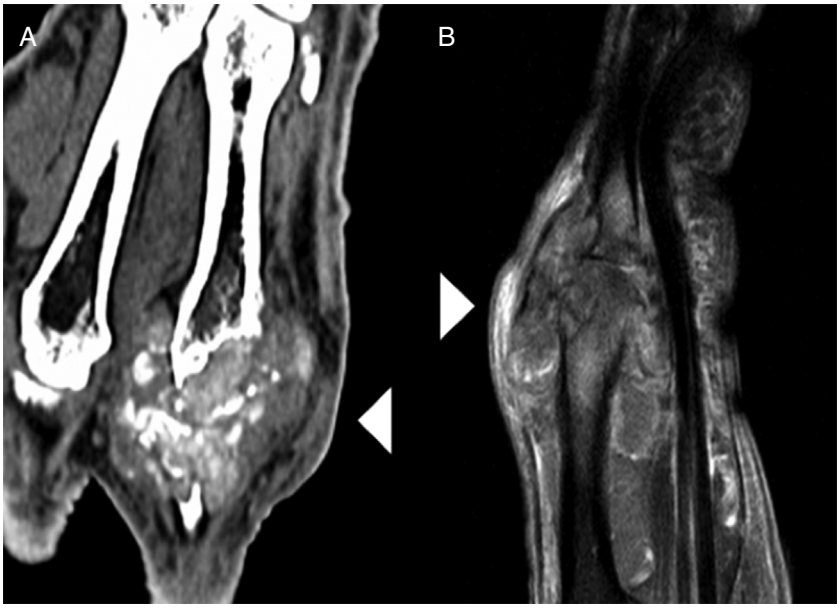

Fig. 2. CT image (A) and MR (B). The tumor is of lobulated morphology, a diffuse component with calcified areas inside which eroded the bony surfaces of the metacarpophalangeal joint (white arrow heads).

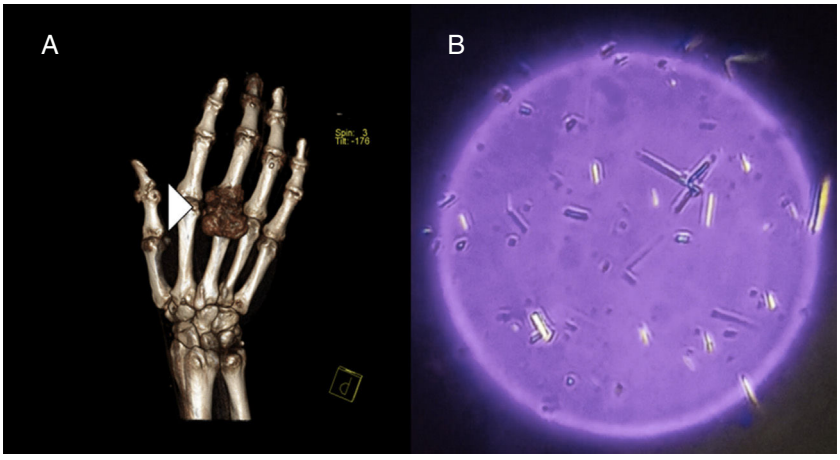

Fig. 3. (A) Reconstruction in volume rendering is observed which reveals a tumor of soft tissue in the metacarpophalangeal joint. (B) The study with an optic microscope detected needle-shaped monosodium urate crystals inside the tumor.

Gout is the most common inflammatory arthropathy in men and is caused by monosodium urate deposits in joints and soft tissues.[1,2] Although the first metatarsophalangeal joint is the most commonly affected, crystals may be distributed in any joint surface.[1] This pathology has been classically called "the great mimicker" because of the many clinical presentations it may be adopt, with diagnosis thus becoming a challenge for the medical team.[3] As a result, it is not surprising that there are reports of gouty tophi which mimic soft tissue tumors in regions like the hand, the forearm and the foot.[4] Radiologic tests are often insufficient to differentiate this pathology from a tumor, and ultrasound-guided tissue biopsy should therefore be used to obtain an accurate diagnosis.[3,4]

Ethical Disclosures

Protection of people and animals. The authors declare that for this research no experimentation has been carried out on human beings or animals.

Data confidentiality. The authors declare that they have adhered to their centre of work on the publication of patient data.

Right to privacy and informed consent. The authors declare that no patient data have appeared in this article.

Conflict of Interests

The authors have no conflicts of interests to declare.

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