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Gout vs Rheumatoid Arthritis: A Diagnostic Dilemma

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Background: Gout is an inflammatory arthritis caused by monosodium urate crystal deposition in joints, leading to acute, painful episodes (1). While typically presenting as a monoarticular arthritis, often in the first metatarsophalangeal joint, it can sometimes resemble rheumatoid arthritis (RA), a chronic autoimmune disorder causing symmetric, inflammatory polyarthritis (1, 2). The clinical overlap between gout and RA, particularly in cases of polyarticular involvement, can complicate diagnosis and management.

Case Presentation: A 50-year-old male initially presented with symptoms including metacarpophalangeal, knee, and hip swelling, erythema, and stiffness. Initial labs demonstrated elevated CRP (20.6) and normal ESR, RF and CCP. Ultrasound revealed excess synovium in the left wrist, but no erosions or inflammation in the wrist or 2nd-3rd MCP joints bilaterally. Imaging included a left-hand x-ray which showed degenerative changes in the wrist, particularly in the mid-carpal space laterally (see image 1). Based on these findings, an initial diagnosis of RA was considered, and the patient was started on a prednisone taper, however his symptoms persisted. An MRI of the left hand later suggested gout, with findings of erosive changes involving the distal scaphoid and scaphoid-trapezium articulation, along with a non-marginal aggressive enhancing erosion (see image 2). Uric acid was elevated at 7.9, for which treatment initially included allopurinol, later discontinued due to rash. As an alternative, the patient received febuxostat, in addition to corticosteroid injections bilaterally in his first MCPs and for De Quervain's tenosynovitis on the left, leading to improvement of his symptoms.

Conclusion: This case highlights the diagnostic complexity of gout and RA. This patient's initial presentation of symmetric polyarthritis with synovial excess was misleading, suggesting RA. A definitive diagnosis of gout was made when MRI demonstrated a non-marginal aggressive enhancing erosion. This case emphasizes the need for accurate diagnosis through clinical assessment, laboratory tests, and advanced imaging to guide effective management.

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