

CASE REPORT

Arthritis mutilans: A rare phenomenon

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A 67-year-old woman presented to the Department of Surgery, Charlotte Maxeke Johannesburg Academic Hospital, South Africa, with an incarcerated umbilical hernia and a history of hypertension and psoriasis. Gastroscopy revealed a prepyloric ulcer. She had generalised plaque psoriasis and arthritis of the small joints of the hands, wrist and feet.

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A 67-year-old woman presented to the Department of Surgery, Charlotte Maxeke Johannesburg Academic Hospital, South Africa, with an incarcerated umbilical hernia and a 12-year history of hypertension and psoriasis. She received indomethacin for her arthritis and steroid creams for her psoriasis. Gastroscopy revealed a prepyloric ulcer. She had generalised plaque psoriasis and arthritis of the small joints of the hands, wrist and feet.

Investigations revealed a C-reactive protein of 46 mg/L (0.0 - 10) and an HbA_{1c} of 6.7%. Her full blood count showed a white cell count of $6.7 \times 10^9/L$ (4 - 10), a haemoglobin of 12.2 g/dL (12.1 - 16.3) and platelets $314 \times 10^9/L$. Urea and electrolytes revealed a prerenal uraemia, with a urea of 8.5 mmol/L and creatinine of 198 $\mu\text{mol/L}$. Liver function tests were normal. Her lipid profile was unremarkable and her uric acid was 0.3 mmol/L.

The radiographic findings are shown in Figs 1 and 2.

Psoriatic arthritis is a member of the

spondyloarthropathy family and may be defined as an inflammatory arthropathy associated with psoriasis, usually negative for rheumatoid factor.^[1] Plaque psoriasis is the most common skin phenotype in patients with psoriatic arthritis.^[1] Plain radiography remains the gold standard for assessing bony changes in peripheral joints in patients with this condition.^[1] Between 5% and 30% of psoriasis patients develop arthritis.^[2] Wright and Moll describe the five clinical patterns of psoriatic arthritis as follows:^[2]

- asymmetric oligoarthritis
- symmetric polyarthritis
- predominant distal interphalangeal joint involvement
- predominant spondyloarthritis
- destructive arthritis (arthritis mutilans).

Reports have shown that the Classification Criteria for Psoriatic Arthritis (CASPAR) are more sensitive than those of Wright and Moll in classifying early psoriatic arthritis.^[3] In 50% of cases, there is an association with human leukocyte antigen (HLA)-B27.^[4] Psoriasis manifests after arthritis in 15% of patients.^[5]

The literature reports that arthritis mutilans is a rare phenomenon. Dactylitis and enthesitis are typical features of psoriatic arthritis, and there is no known laboratory test that is diagnostic of the condition. The absence of rheumatoid factor and associated elevation of inflammatory markers are suggestive of psoriatic arthritis; however, 5 - 16% of patients have low levels of rheumatoid factor and 5% are positive for cyclic citrullinated peptide antibodies. The incidence of arthritis mutilans is reported as 1 - 5%, although it is sometimes given as 16%. Radiographic features of psoriatic arthritis are erosions, asymmetric involvement of the joints of the fingers and toes, resorption and pencil in the cup deformity, joint space narrowing, bony spurs, periostitis and asymmetrical spinal involvement. There is an associated increased risk of cardiovascular morbidity and mortality in patients with psoriasis.

Management of psoriatic arthritis comprises the treatment of skin and joints and control of the associated comorbidity. In our patient it was of paramount importance to control the metabolic profile, especially the new-onset diabetes. Various medications have been administered, i.e. methotrexate, cyclosporine, leflunomide and biologics. For most rheumatologists, methotrexate is the drug of choice. The take-home message is to control the coronary artery disease risk factors, taking into account the abovementioned reason.



Fig. 1. Radiograph of the hands, showing the changes characteristic of arthritis mutilans.



Fig. 2. Radiograph of the feet, showing the changes characteristic of arthritis mutilans.

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