

## Acute Presentation of Arthritis Mutilans

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Arthritis mutilans (AM) is a rare condition that develops in approximately 5% of patients with psoriatic arthritis (PsA)<sup>1</sup>. It is characterized by marked osteolysis, resulting in the classic “pencil-in-cup” radiographic appearance and clinical evidence of digit shortening. We describe a patient who developed AM after many years of psoriasis.

A 34-year-old woman, with psoriasis for 21 years, presented with a 3-month history of worsening rash and foot pain. Examination revealed extensive erythroderma and skin scaling. Her feet were swollen, with shortened toes and subluxed metatarsophalangeal joints (Figure 1). Radiographs confirmed AM (Figure 2). Other joint areas were normal apart from her left hand, which showed a flexion deformity of the fifth distal interphalangeal joint. Adalimumab resulted in improvement in her rash and foot pain. However, she retained difficulty in walking.

The somewhat paradoxical bony changes that occur in PsA include severe osteolysis, bone proliferation, and absence of periarticular osteoporosis<sup>2</sup>. Varied cytokine balances resulting in unique proteolytic environments may underlie these different presentations<sup>3</sup>. Although cyclic cit-



Figure 2. Radiograph of feet demonstrating changes of arthritis mutilans, with subluxation of the metatarsophalangeal joints, osteolysis, and “pencil-in-cup” deformities.



Figure 1. Reduction in foot size by 1.8 cm from peak of adult foot length (European size 7, 25 cm) to current foot length (European size 5, 23.3 cm). Note extensive erythema and shedding of copious skin flakes from psoriasis.

rullinated peptide antibodies have been suggested as potential biomarkers in AM<sup>1</sup>, they were negative in this patient. Magnetic resonance imaging has demonstrated higher bone proliferation and edema scores in AM compared with other forms of PsA<sup>2</sup>. Interestingly, such changes do not correlate with clinical indices of disease activity, suggesting that AM is a silent process<sup>2</sup>. This case, like others in the literature, highlights the late presentation of AM. Epidemiological studies of AM may help to identify prognostic markers at an earlier stage in the disease course.

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