Catastrophic Rheumatoid Arthritis

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A 53-year-old woman with a 10-year history of symmetric polyarthritis involving primarily the small joints of the hands bilaterally presented in our outpatient rheumatology clinic for evaluation. She reported not receiving any disease modifying antirheumatic drugs except paracetamol and occasionally nonsteroidal antiinflammatory drugs. She denied Raynaud's phenomenon, psoriatic rashes, mouth ulcers, or uveitis. Laboratory evaluation showed hemoglobin 9 g/dl, with features of anemia of chronic disease (low serum iron and normal ferritin levels). C-reactive protein (CRP) was 51 mg/l (normal < 6 mg/l) and erythrocyte sedimentation rate (ESR) 69 mm/h. Serum IgM rheumatoid factor (RF) was positive at titer 1/1280 (latex fixation test), anti-cyclic citrullinated peptide (CCP) was positive at 1208 U (normal < 100 U). Hand and wrist radiographs showed osteopenia and severe erosive changes of the wrists, metacarpophalangeal (MCP), and proximal interphalangeal (PIP) joints bilaterally (Figure 1A, 1B). There were severe resorptive changes, with whittled metacarpals and subluxation of MCP joints (Figure 1C). Finally, there were extensive erosive changes in PIP joints.

This was a case of resorptive rheumatoid arthritis, the most severe form of the disease[1]. Factors that may have influenced the disease progression and catastrophic changes in this patient include the longstanding untreated disease, polyarticular involvement, extraarticular manifestations like

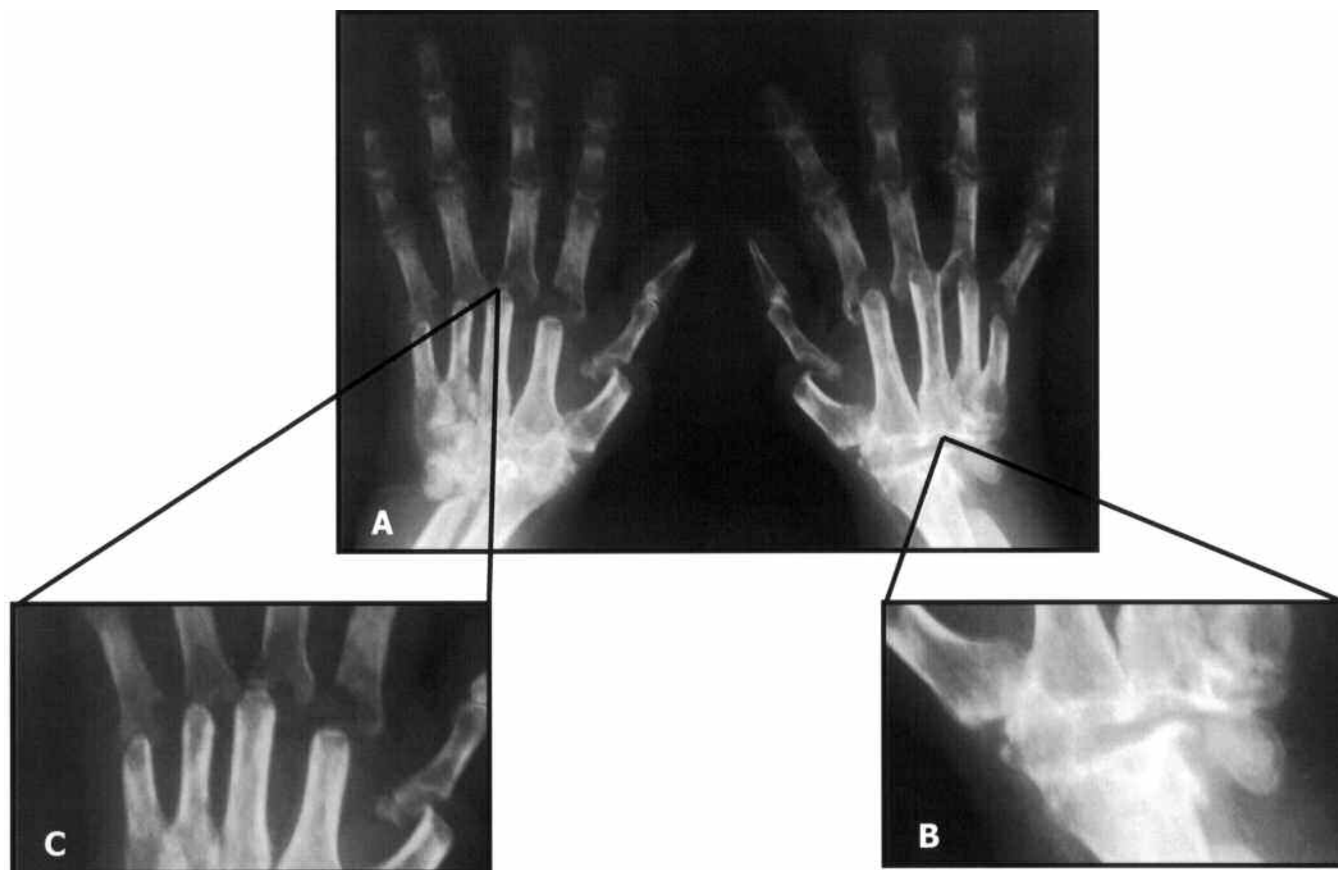

Figure 1. Osteopenia and severe erosive changes of the wrists, MCP, and PIP joints bilaterally (A). The carpal bones of both wrists are resorbed, especially the right wrist, and the distal ulna presented a whittled appearance (B). Severe resorptive changes with whittled appearance of metacarpals and subluxation of MCP joints (C).

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anemia of chronic disease, increased CRP and ESR, and high titers of IgM RF and CCP antibodies[2-4]. The patient was treated with methotrexate 12.5 mg/week and 10 mg prednisone per day. After 2 months of therapy, a substantial clinical and laboratory improvement was noted.

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