

Joint Destruction in Septic Arthritis

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Bacterial septic arthritis is the most rapidly destructive joint disease. Its yearly incidence varies from 2 to 10 per 100,000 in the general population to 30–70 per 100,000 in patients with rheumatoid arthritis and in patients with joint prostheses¹⁻³. We present the case of an acute septic knee arthritis leading to a rapid total loss of the joint space.

A 45-year-old, previously healthy woman presented with a 2-week history of spontaneous left knee swelling. She denied any history of trauma, injury, or fever. She was treated initially by her family physician with oral prednisone, with a starting dose of 50 mg daily. She presented to the emergency unit at the American University of Beirut Medical Center, where a knee aspiration drew thick purulent fluid that grew *Staphylococcus aureus*. This organism also grew in 2 blood

cultures. Knee radiographs (Figure 1) reveal complete loss of the joint space in both knee compartments on the left, as compared to normal knee joint spaces on the right side. These radiographs illustrate the rapidity of joint destruction in a patient taking prednisone with untreated septic arthritis.

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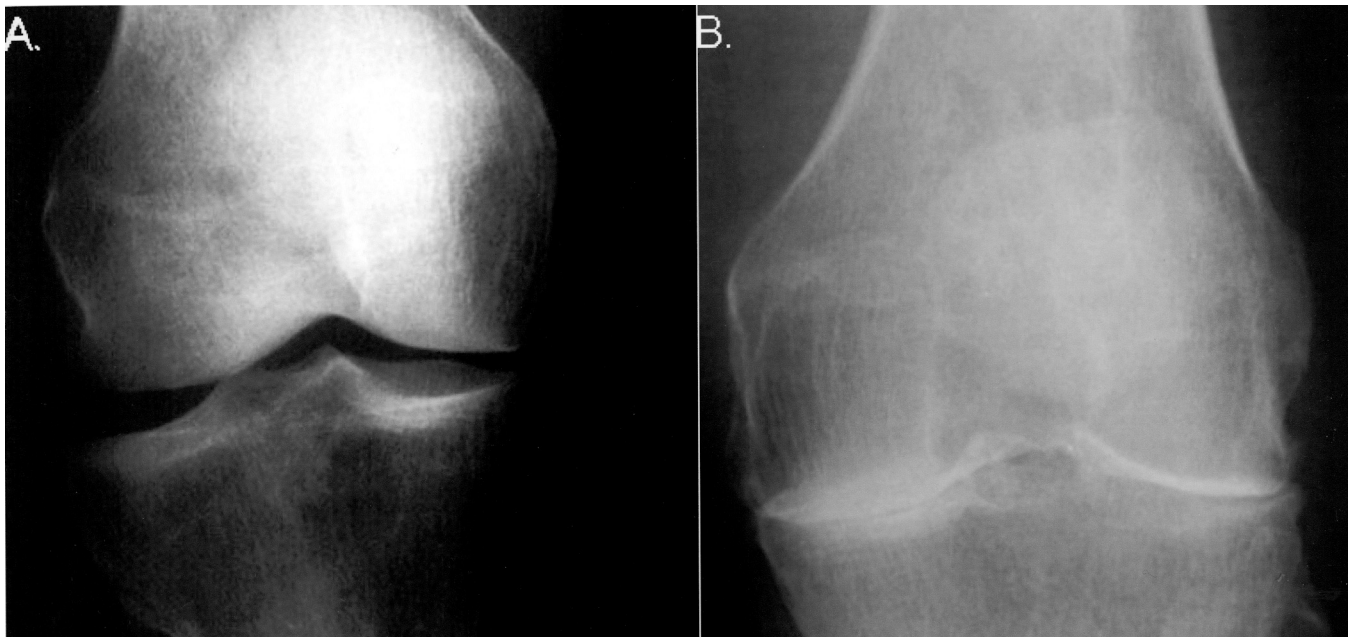


Figure 1. Bilateral knee radiographs (anterior view) showing complete joint destruction in the left knee compared to the right knee, 2 weeks following the onset of septic staphylococcal arthritis.