A 36-year-old man presented with fever and pulmonary tuberculosis in 1987, osteomyelitis caused by Stenotrophomonas maltophilia in 1995, and HIV-associated encephalopathy in 1999. A Gram-negative bacillus, Stenotrophomonas maltophilia, was frequently isolated from clinical specimens in the absence of disease (1). Opportunistic infection occurs primarily in patients with hematologic malignancies receiving immunosuppressive therapy, with underlying malignancy or with indwelling venous catheters (2, 3).

A 36-year-old man presented with fever and swelling and pain of 14 days duration in the right knee. He had been tested for human immunodeficiency virus infection (HIV) in 1985 with a positive result. He developed pulmonary tuberculosis in 1987, osteomyelitis of the right tibia due to Stenotrophomonas maltophilia in 1995, and HIV-associated encephalopathy in 1999. Both tubial osteomyelitites were confirmed by bone biopsy. On examination the patient was febrile and the right knee was enlarged. ESR was 120 mm/hr and haemoglobin 104 g/l. Blood and synovial fluid leucocyte counts were 11.1 10⁹/l with 81% neutrophils and 35 10⁹/l with 85% neutrophils, respectively. The number of CD4 positive lymphocytes was 0.11 10⁹/l. Culture of the synovial fluid was negative. Simple x-rays and MRI showed findings compatible with osteomyelitis of the right femur and tibia and synovial fluid within the joint (Fig. 1).

Bacterial arthritis was suspected and the patient was empirically treated with intravenous (IV) gentamycin (180 mg/day for 2 weeks) and cloxacillin (2 g/day IV for 2 weeks followed by an oral regimen of 1 g/day for 4 weeks) with amelioration of the pain and swelling. Two weeks after the cessation of antibiotics the patient once again became febrile and the knee was newly enlarged. Synovial fluid was aspirated and a bone biopsy of the right tibia was performed. Blood cultures and cultures of the bone biopsy were negative. Culture of the synovial fluid yielded Stenotrophomonas maltophilia. The patient received oral trimethoprim (320 mg/12 hr) and sulfamethoxazole (1600 mg/12 hr) plus ciprofloxacin (750 mg/12 hr) for 6 weeks with resolution of the signs and symptoms.

HIV infection was present in 4 of 91 patients with S. maltophilia bacteremia studied by Muder et al. (3). Manfredi et al. (4) described 54 episodes of S. maltophilia infection in 52 HIV-infected patients: bacteremia in 44 cases, lower airway infection in 5 cases, urinary tract infection and pharyngitis in 2 cases each, and lymph node involvement in one case.

Osteoarticular infections caused by S. maltophilia are rare. Osteomyelitis due to this organism has been reported in patients with wounds caused by corn-harvesting machines (5). Prepatellar bursitis due to S. maltophilia has been described in an elderly alcoholic man with heart disease, lung disease and adenocarcinoma of the stomach treated by gastrectomy (6).

In our patient diagnosis was difficult because he had received antibiotics for 6 weeks. Two weeks after the cessation of cloxacillin, an aetiologic diagnosis was made and a synergistic antimicrobial combination was administered with good results. Trimethoprim-sulfamethoxazole has traditionally been the most active agent used against this organism; the addition of another agent (in our case, ciprofloxacin) to which the isolate is susceptible should be considered in immuno-compromised patients (3).

We conclude that S. maltophilia should be included as a possible causative agent of septic arthritis in immunosuppressed patients.

References