

- PASQUALINI R, BAMBARA LM: A case of Buerger's disease associated with high levels of lipoprotein (a). *Clin Rheumatol* 1999; 18: 59-60.
5. OLIN JW, CHILDS MB, BARTHOLOMEW JR, CALABRESE HL, YOUNG JR: Anticardiolipin antibodies and homocysteine levels in patients with thromboangiitis obliterans. *Arthritis Rheum* 1996; 39: S47 (abstract).
 6. MERCIÉ P, BASTE JC, SASSOUST G, GED C, PARROT F, COURI C: Factor V Leiden, mild hyperhomocyst(e)inemia and Buerger's disease. *Microvasc Res* 1998; 55: 271-2.
 7. CATTANEO M, VECCHI M, ZIGHETTI ML *et al.*: High prevalence of hyperhomocysteinemia in patients with inflammatory bowel disease: A pathogenetic link with thromboembolic complications? *Thromb Haemost* 1998; 70:542-5.
 8. WELCH GN, LO SCALZO J: Homocysteine and atherothrombosis. *N Engl J Med* 1998; 338: 1042-50.
 9. D'ANGELO A, SELHUB J: Homocysteine and thrombotic disease. *Blood* 1997; 90: 111.
 10. CLARKE R, DALY L, ROBINSON K, *et al.*: Hyperhomocysteinemia: An independent risk factor for vascular disease. *N Engl J Med* 1991; 324: 1149-55.
 11. HARKER LS, ROSS R, SLICHTER SJ, SCOTT CR: Homocysteine-induced arteriosclerosis. *J Clin Invest* 1976; 58: 731-41.
 12. RODGERS GM, CONN MT: Homocysteine, and atherogenic stimulus, reduces protein C activation by arterial and venous endothelial cells. *Blood* 1990; 75: 895-901.
 13. HEINECKE JW, ROSEN H, SUZUKI LA, CHAIT A: The role of sulfur-containing amino acids in superoxide production and modification of low density lipoprotein by arterial smooth muscle cells. *J Biol Chem* 1987; 262: 10098-103.

Septic arthritis caused by *Stenotrophomonas maltophilia* in a patient with acquired immunodeficiency syndrome

Sirs,

The Gram-negative bacillus *Stenotrophomonas maltophilia* is frequently isolated from clinical specimens in the absence of disease (1). Opportunistic infection occurs principally in individuals 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 *Salmonella* subgroup 1 in 1987, tuberculous osteomyelitis of the left tibia in 1990, cerebral toxoplasmosis in 1995, and HIV-associated encephalopathy in 1996. Both tibial osteomyelites were con-

firmed 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 leukocyte counts were $11.1 \times 10^9/l$ with 81% neutrophils and $35 \times 10^9/l$ with 85% neutrophils, respectively. The number of CD4 positive lymphocytes was $0.11 \times 10^9/l$. 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 *S. 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* bacteraemia studied by Muder *et al.* (3). Manfredi *et al.* (4) described 54 episodes of *S. maltophilia* infection in 52 HIV-infected patients: bacteraemia 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 aetiological 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.

J. BELZUNEGUI J.J. INTXAUSTI
J.R. DE DIOS J.A. IRIBARREN*

Rheumatology Unit and *Infectious Unit, Hospital N.S. Aranzazu, 20014 San Sebastian, Spain.

Please address correspondence and reprint requests to: Dr. J. Belzunegui, Rheumatology Unit, Hospital N.S. Aranzazu, 20014 San Sebastian, Spain.

References

1. PENZAK SR, ABATE BJ: *Stenotrophomonas (Xanthomonas) maltophilia*: A multidrug-resistant nosocomial pathogen. *Pharmacotherapy* 1997; 17: 293-301.
2. VAN COUWENBERGHE CJ, FARVER TB, COHEN SH: Risk factors associated with isolation of *Stenotrophomonas (Xanthomonas) maltophilia* in clinical specimens. *Infect Control Hosp Epidemiol* 1997; 18: 316-21.
3. MUDER RR, HARRIS AP, MULLER S *et al.*: Bacteremia due to *Stenotrophomonas (Xanthomonas) maltophilia*: A prospective, multicenter study of 91 episodes. *Clin Infect Dis* 1996; 22: 508-12.
4. MANFREDI R, NANETTI A, FERRI M, CHIODO F: *Xanthomonas maltophilia*: An emerging pathogen in patients with HIV disease. *Int J STD AIDS* 1998; 9: 201-7.
5. AGGER WA, COGBILL TH, BUSCH H JR, LANDERCASPER J, CALLISTER SM: Wounds caused by corn-harvesting machines: An unusual source of infection due to gram-negative bacilli. *Rev Infect Dis* 1986; 8: 927-31.
6. PAPADAKIS KA, VARTIVARIAN SE, VASSILAKI ME, ANAISSIE EJ: Septic prepatellar bursitis caused by *Stenotrophomonas (Xanthomonas) maltophilia*. *Clin Infect Dis* 1996; 22: 388-9.

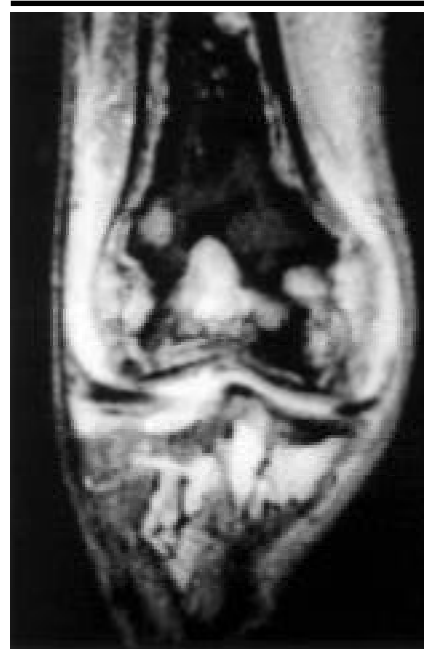


Fig. 1. MRI of the knee on T2-weighted images showing findings compatible with osteomyelitis of the femur and tibia.