

FEVER, BACK PAIN AND THE IMPORTANCE OF A SEXUAL HISTORY

The January 2004 edition of the *Medical Journal of Australia*¹ presents an unusual case of an epidural abscess. The authors report a previously well 30-year-old man presenting with severe progressive back pain, joint pain and fever. He also had a 5-day history of left knee pain. The back pain had occurred suddenly, after weight-lifting, and radiated to the right chest wall. He had tried paracetamol and chiropractic manipulation without success. He had no family history of rheumatological or inflammatory disorders, and had never used intravenous drugs. He also had no symptoms of fever, conjunctivitis, urethritis, rash, early morning joint stiffness or neurological dysfunction.

On examination the only abnormalities were a slightly raised temperature of 37.8°C, tenderness over the 5th to 7th thoracic vertebrae, and a warm, erythematous left tibiofibular joint.

Initial investigations showed a neutrophil leukocytosis and raised inflammatory markers — specifically C-reactive protein and ESR. Other haematological markers were normal, as were electrolytes, renal and liver function. Blood cultures were negative. He was admitted to hospital after an MRI of the thoracic spine showed an epidural mass at the level of T6/T7.

The epidural collection was biopsied and revealed an acute inflammatory exudate with neutrophils. Cytological examination showed no malignant cells, and no organisms were seen on Gram stain.

Within a day of admission, the patient's left wrist became swollen and painful, and an infectious disease consultation was arranged. A sexual history revealed that the patient had experienced mild anal itching, associated with a white anal discharge 3 months prior to presentation. He had previously had anal intercourse with multiple male partners, and it resolved on its own. Microscopic examination of the fluid aspirated from the wrist joint revealed numerous pus cells and Gram-negative diplococci. Urethral, rectal and throat swabs were taken.

The provisional diagnosis was of disseminated gonococcal infection with an epidural abscess. Therapy was started with ceftriaxone 2 g intravenously twice daily. A single dose of 1 g azithromycin was given orally to treat possible

associated *Chlamydia trachomatis* infection. Serological tests for other sexually transmitted infections were negative. The patient's regular partner was treated with the same medication, but further contact tracing was not possible.

Cultures of the wrist aspirate eventually revealed *Neisseria gonorrhoeae* that was fully sensitive to ciprofloxacin and ceftriaxone, but resistant to tetracycline and penicillin. The urethral swab, throat swab and epidural aspirate were sterile. Most of the patient's symptoms resolved within 12 hours of starting ceftriaxone.

Epidural abscesses are rare and usually caused by *Staphylococcus aureus*. The authors report this as the first recognised case of disseminated gonococcal infection presenting as an epidural abscess. They point out the importance of a sexual history in inflammatory conditions, particularly with an increasing incidence of gonococcus in Australia.

Disseminated gonococcal infection is a rare manifestation of *N. gonorrhoeae* infection. It generally follows asymptomatic mucosal infection and is more common in women. The reported incidence of disseminated infection ranges from 0.5% to 3% of mucosal infections. The incidence in Australia is rising, mainly in men who have sex with men. Patients typically present with either tenosynovitis, dermatitis and polyarthralgia without purulent arthritis, or purulent arthritis without skin lesions. However, the syndromes are not mutually exclusive. The most commonly involved joints are the knee, the elbow and joints distal to these. Other rare complications include osteomyelitis, meningitis and overwhelming sepsis.

1. Van Hal SJ, Post JJ. *Med J Aust* 2004; **180**: 40-41.

Bridget Farham