

A longstanding non-painful tumour of the back

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CASE REPORT

A 46-year-old Somalian man was referred to our outpatient clinic because of a longstanding non-painful tumour on his back. The patient reported gradual weight loss of 6 kg and night sweats. The patient was taking lamotrigine and valproic acid because of epilepsy.

On physical examination the patient had a temperature of 36.4 °C. At the lower back he had two subcutaneous swellings, with a diameter of 10 cm and 5 cm (*figure 1*). There was no loss of neurological functions.

Laboratory findings showed an erythrocyte sedimentation rate of 51 mm/hour, a mild leucocytosis ($11.1 \times 10^9/l$) and a C-reactive protein of 124 mg/l. HIV serology was negative.

WHAT IS YOUR DIAGNOSIS?

See page 420 for the answer to this photo quiz

Figure 1. Subcutaneous masses on the lower back



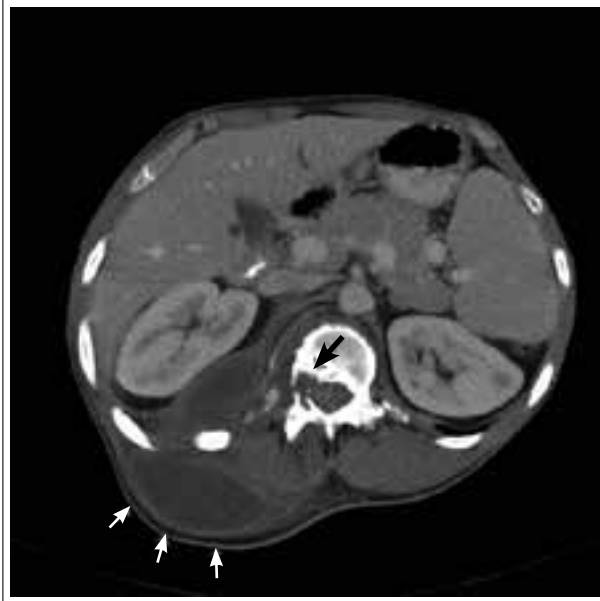
DIAGNOSIS

Skeletal tuberculosis (Pott's disease)

In this case of a Somalian man with a non-progressive disease history, the radiological findings were very suggestive for skeletal tuberculosis. Auramine of the aspirate was negative, but polymerase chain reaction for mycobacterium tuberculosis was positive, later confirmed by a positive culture. Antituberculous treatment was given for six months, after which he recovered fully.

In the Netherlands, around 1100 patients were diagnosed with tuberculosis in 2010. Of these cases, 43% were caused by extrapulmonary tuberculosis of which 11% involved bones and joints.¹ It is more common in children.²

Figure 2. Axial CT image showing bony destruction of L1 (large arrow). Also abundant fluid collections in close contact to the spine as well as extending along the long spinal muscles (smaller arrows) creating a clear swelling



When extrapulmonary tuberculosis manifests with vertebral osteomyelitis it is called Pott's disease. In contrast with pyogenic spondylitis, systemic symptoms are often absent.² In adults, the most frequently involved part of the spine is the lower thoracic spine, followed by the lumbar vertebrae.² Pathogenesis is related to reactivation of haematogenous and lymphogenous foci. Destruction of the intervertebral disc space and vertebral bodies causes the clinical symptoms.³ Early symptoms are back pain and stiffness. Weight loss, fever and drenching night sweats are less frequent signs. Neurological symptoms may occur, such as muscle weakness of the legs or sensory loss. In many cases a delay in diagnosis is common. Paraspinal 'cold' abscesses around the affected area occur in 50% of the cases, which means that there is little inflammation.² Radiologically, Pott's disease presents with characteristic signs of spondylitis with or without abscess formation. Definitive diagnosis is established by culture of *Mycobacterium tuberculosis* through aspiration or biopsy of the affected vertebra or abscess. The differential diagnosis includes spondylitis by other micro-organisms (pyogenic or fungal) and neoplasma. Treatment consists of antituberculous drugs for at least six months. Surgical involvement is necessary in refractory disease or unstable spine.^{2,4}

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