

## Case report

# Cryptococcal sacroiliitis

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**SUMMARY** Disseminated cryptococcal disease is known to occur in patients with altered immune status. We have reported an unusual case of cryptococcal disease manifested solely by sacroiliitis, which occurred in a patient on chronic steroid therapy for autoimmune haemolytic anaemia. This case stresses the importance of considering unusual organisms as a cause of sepsis in patients with altered immune status.

**Key words:** infectious arthritis, mycoses, antifungal agents.

A 26-year-old woman born in Australia (of Asian descent) had been maintained on prednisolone 10 mg per day for the treatment of a severe idiopathic Coombs-positive haemolytic anaemia. Twenty months later she presented with a four-week history of severe left sacroiliac pain which was worse at night.

Examination revealed temperature 37.6°C, pulse 88/min, blood pressure 130/80 mmHg, and marked localised tenderness over the left sacroiliac joint. The ESR was 31 mm/h (Westergren), Hb 12.1 g/dl, leucocytes  $8.1 \times 10^9/l$  (polymorphonuclear  $6.48 \times 10^9/l$ , lymphocytes  $0.72 \times 10^9/l$ ), and platelets  $133 \times 10^9/l$ . X-rays revealed diffuse erosion of the lower half of the left sacroiliac joint. A  $^{99m}$ technetium bone scan was strongly positive in the region of the left sacroiliac joint and adjacent ilium.

Purulent fluid obtained at operation grew *Cryptococcus neoformans*. Subsequent lumbar puncture was normal; in particular cryptococcal antigen was not detected and no organisms isolated. Chest x-ray was normal. The patient was anergic to delayed hypersensitivity skin testing with multiple antigens.

A six-week course of combined intravenous amphotericin B (total dose 0.65 g) and oral 5-fluorocytosine was instituted.<sup>1</sup> A mild febrile reaction and nausea complicated the amphotericin treatment, and transient thrombocytopenia ( $47 \times 10^9/l$ ) attributed to 5-fluorocytosine<sup>2</sup> occurred. At cessa-

tion of treatment a bone scan revealed significantly less isotope uptake. The patient remains well three months after cessation of therapy.

## Discussion

The commonest infecting organism in septic sacroiliitis is *Staphylococcus aureus*,<sup>3</sup> and more recently there have been increasing reports of *Pseudomonas aeruginosa* sacroiliitis associated with intravenous drug abuse.<sup>4</sup>

The yeast genus *Cryptococcus* has only one pathogenic species *C. neoformans*, which is widespread in nature, particularly in soil and bird droppings. It has also been identified in man, in the respiratory and gastrointestinal tracts and as a saprophyte on skin.<sup>5</sup>

Bone disease is an uncommon presentation of cryptococcal infection and is usually associated with evidence of disseminated infection.<sup>6</sup> It is likely that the initial infection was in the metaphyseal region of the ilium with spread to the sacroiliac joint.<sup>7</sup> A significant number of patients with cryptococcal infection have compromised host defence mechanisms, as is demonstrated in this case by the lymphopenia and absolute cutaneous anergy.<sup>2 8 9</sup>

Corticosteroids are known to be associated with an abnormal response to cutaneous stimulation. However, it was thought that the underlying autoimmune disease in this patient was itself a significant contributory factor.

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