Clinical findings, therapeutic approach, and outcome of brucellar vertebral osteomyelitis.

Colmenero JD, Ruiz-Mesa JD, Plata A, Bermúdez P, Martín-Rico P, Queipo-Ortuño MI, Reguera JM.

Infectious Diseases Service, Carlos Haya University Hospital, Málaga, Spain. jdccolmenero@telefonica.net

BACKGROUND: Osteoarticular complications are the most common focal complications of brucellosis. Although vertebral osteomyelitis is the most frequent location in adults >30 years of age, little information is available about this serious complication of brucellosis, and great confusion surrounds its prognosis and the most appropriate treatment. METHODS: We undertook a descriptive, retrospective, observational study of 96 patients who received a diagnosis of brucella vertebral osteomyelitis from September 1982 through December 2005 at a tertiary care hospital. All of the patients were treated for 3 months, after which they were followed up monthly for the first 3 months and then at 2-month intervals for the subsequent 6 months. RESULTS: The incidence of vertebral osteomyelitis was 10.4%. The mean diagnostic delay was 12.7 weeks. Inflammatory spinal pain (occurring in 94.8% of patients) and fever (91.7%) were the most relevant clinical characteristics. Eight patients (8.3%) had motor weakness or paralysis. Paravertebral masses, epidural masses, and psoas abscesses were detected in 45.8%, 27.1%, and 10.4% of patients, respectively. Sixty-three patients (65.6%) received medication only, and 33 (34.4%) required surgical therapy in addition to medication. Twenty percent of patients experienced therapeutic failure. Attributable mortality was 2.1%, and severe functional sequelae were apparent in 6.2% of the patients. No significant differences were seen between patients who were treated with doxycycline-streptomycin and those treated with doxycycline-rifampicin. CONCLUSIONS: Vertebral osteomyelitis is a serious complication of brucellosis. It generates a high rate of therapeutic failure and functional sequelae. In the absence of more-powerful controlled studies, the duration of treatment of brucellar vertebral osteomyelitis should be 3 months.

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