

Images in Infectious Diseases

Brucellar Cervical Spondylodiscitis Complicated by Epidural Abscess and Neurobrucellosis

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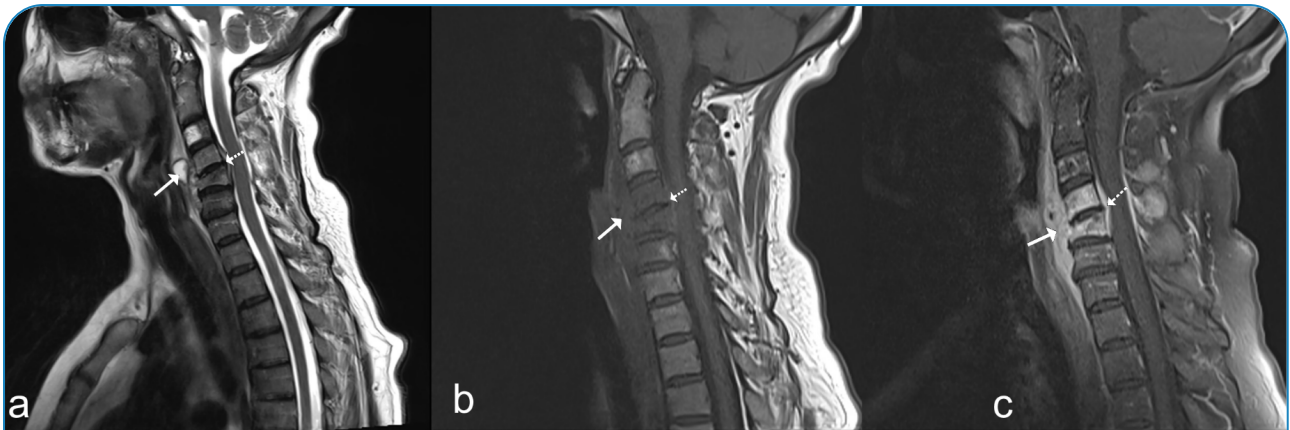


FIGURE 1: Pre-treatment cervical magnetic resonance images. (a) Non-contrast T1 AG without fat suppression. T1 AG images (b) Fat-suppressed contrast-enhanced; prevertebral abscess (arrow). (c) epidural abscess (dashed arrow).

A 59-year-old woman diagnosis with brucellosis was admitted to our clinic with complaints of severe headache, neck pain, and pain and weakness in the left arm despite receiving treatment for 2 weeks. The patient participated in animal husbandry and had a history of making and consuming cheese from unpasteurized milk. Physical examination revealed a body temperature of 37 °C, painful neck vertebrae on local palpation, weakness of the left arm, and nuchal rigidity. Her white cell count was $6.07 \times 10^3/\mu\text{L}$, C-reactive protein 57 mg/L, sedimentation rate 89 mm/h, Wright agglutination test 1/320, and *Brucella* IgM 0.40 and IgG 2.18 (cut-off value: 0.9–1.1). Cerebrospinal fluid (CSF) glucose was 64.6 mg/dL (blood glucose 120 mg/dL), microprotein 102.6 mg/dL, and lymphocyte count 4 cells/mm³. The patient was started on doxycycline 2 × 100 mg/day,

rifampicin 1 × 600 mg/day, streptomycin 1 g/day, and ceftriaxone 2 × 2 g/day. No regression occurred in the patient's shoulder and neck pain. The cervical magnetic resonance imaging results are shown in **Figure 1**. The CSF parameters were normal on day 20. After 6 months of treatment, almost complete regression was observed in abscess formation (**Figure 2**).

Brucella spondylodiscitis represents osteoarticular involvement of brucellosis and rarely involves the cervical region¹. *Brucella*-related epidural abscesses and neurobrucellosis are rare complications with a poor prognosis^{2,3}. Therefore, spondylodiscitis due to brucellosis, epidural abscess, and neurobrucellosis, which exhibits a wide range of clinical manifestations, should be

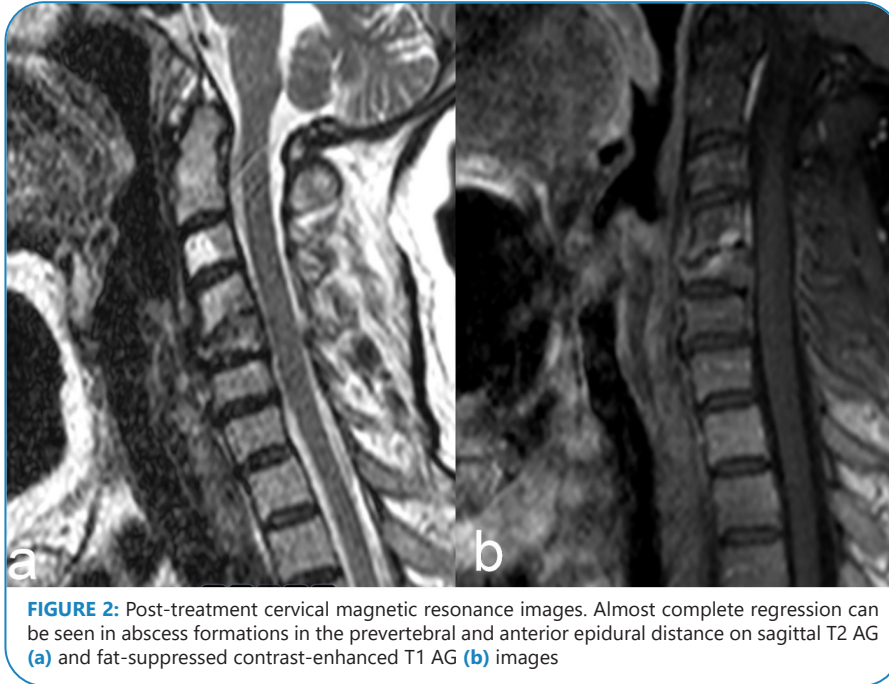
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considered in the differential diagnosis of individuals living in endemic areas.

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