

Images in Infectious Diseases

Noncontiguous multiple-level brucellar spondylitis with subsequent relapse

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A 65-year-old man was admitted to hospital with a 2-year history of thoracic and lower back pain, weight loss, fatigue, and intermittent fever. Lumbar and thoracic movements were painful and restricted; his temperature was 38.5°C. The erythrocyte sedimentation rate, C-reactive protein concentration, Rose-Bengal staining, and *Brucella* agglutination test were 86mm/h, 116mg/L, (++) and positive (1:320), respectively. Magnetic resonance imaging (MRI) showed that T12-L1 and L4-L5 disks and vertebral bodies were hypointense (a), heterogeneous (b), and heterogeneous (c) on T1 weighted-imaging, T2 weighted-imaging, and Short-T1 inversion recovery, respectively.

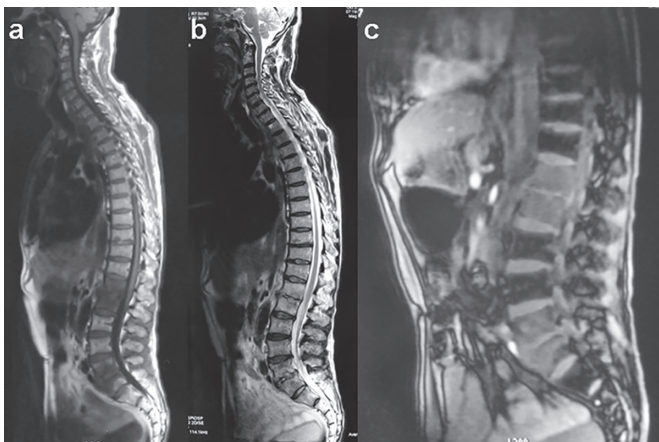


FIGURE A: Magnetic resonance imaging showed that the T12-L1 and L4-L5 disks and vertebral bodies were hypointense (a), heterogeneous (b), and heterogeneous (c) on T1 weighted-imaging, T2 weighted-imaging, and Short-T1 inversion recovery, respectively.

and vertebral bodies were hypointense on T1 weighted-imaging (T1WI) and heterogeneous on T2WI and short-T1 inversion recovery (STIR)¹⁻³ (Figure A: a, b and c).

A combination of doxycycline, rifampin, and streptomycin was administered for 6 weeks, and the lesion was surgically excised. Antimicrobial therapy was discontinued after 3 months. Radiographs revealed recovery of intervertebral height and stabilization of the lumbar vertebrae post-surgery (Figure B: a, b, c and d). MRI showed no signal intensity involving the T12-L1 and L4-L5 disks and vertebral bodies.

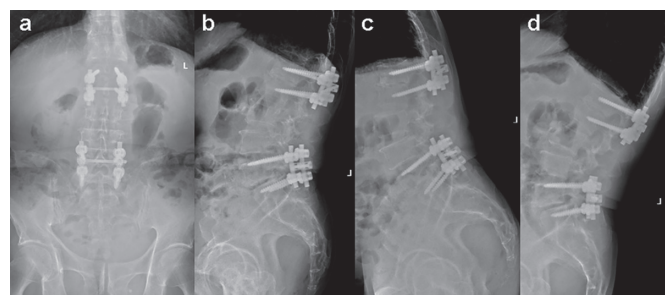
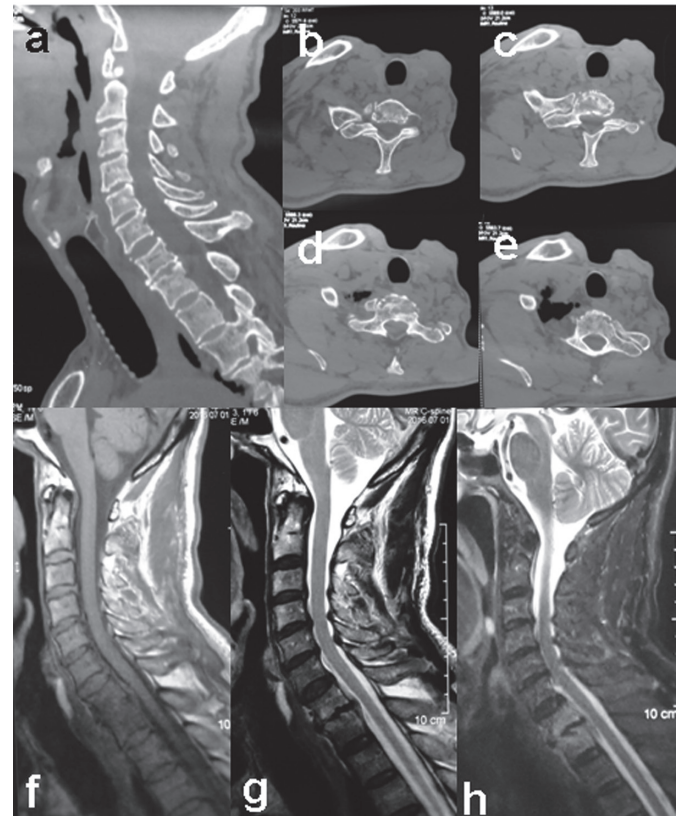


FIGURE B: Postoperative radiograph revealing recovery of intervertebral height, and stabilization of the lumbar vertebrae (a,b,c,d). L: the left.

FIGURE C: Computed tomography revealed intervertebral destruction and narrowing at C7-T1. There was marginal damage of the centrum, with lace-like changes, hyperostosis, and osteosclerosis (a,b,c,d,e). Magnetic resonance imaging showed that C7-T1 disks and vertebral bodies were hypointense (f), heterogeneous (g), and heterogeneous (h) on T1 weighted-imaging, T2 weighted-imaging, and short-T1 inversion recovery, respectively. CT: computed tomography; MRI: magnetic resonance imaging; T1WI: T1 weighted-imaging; T2WI: T2 weighted-imaging; STIR: Short-T1 inversion recovery.

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Relapse was observed at the end of the sixth month; his neck was stiff, with fixed flexion. Computed tomography (CT) revealed intervertebral destruction and narrowing at C7-T1. There was marginal damage of the centrum, with *lace-like* changes, hyperostosis, and osteosclerosis (**Figure C: a, b, c, d and e**). MRI showed that C7-T1 disks and vertebral bodies were hypointense on T1WI, heterogeneous on T2WI, and heterogeneous on STIR (**Figure C: f, g and h**).

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Conflict of interest

The authors declare that there is no conflict of interest.

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