A case of brucellar spondylitis with lumbar spondylololisthesis

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A 46-year-old man was hospitalized with a 6-month history of severe low back pain in addition to weight loss, fatigue, and intermittent febrile symptoms for the past 4 weeks. Physical examination revealed painful and restricted low back movement. His temperature was 37.5°C. Laboratory values were as follows: white blood cell count: 9,600/mm³, hemoglobin: 13.5g/dl, erythrocyte sedimentation rate: 45mm/h, and C-reactive protein: 58mg/L. The Rose-Bengal test was (++), and the Brucella agglutination test was positive with a titer of 1:320. Computed tomography (CT) revealed intervertebral destruction and narrowing at L4-5 and I° lumbar spondylolisthesis with posterior displacement[1]. There was isthmic spondylolisthesis, and there was marginal damage of the centrum as well as hyperostosis osteosclerosis. The margin of the centrum showed lace-like changes (Figure A and Figure B). Magnetic resonance imaging (MRI) showed signs compatible with osteomyelitis of the L4 and L5 vertebral bodies with accompanying discitis. L4-5 intervertebral disc tissues were hypointense, heterogeneous,
and heterogeneous on T1 weighted imaging (T1WI), T2 weighted imaging (T2WI), and Short time inversion recovery (STIR) MRI images, respectively (Figure A and Figure C). Antimicrobial therapy was continued for 6 weeks. Surgical intervention was planned for excision of the lesion and reduction of the spondylolisthesis\textsuperscript{(2)(3)}. Histopathological examination revealed tissular and cellular hyperplasia, a proliferating nodule, and granuloma in the focus. Giemsa staining showed positive Brucella (Figure B). On the control X-ray after surgery, the intervertebral height had been restored, and the lumbar spondylolisthesis was reduced (Figure C).

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REFERENCES