

Vertebral Osteomyelitis that Developed During Chemotherapy for Lung Cancer

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A 68-year-old man with high-grade fever, chills, and low back pain was admitted to our hospital. He was previously diagnosed with advanced lung cancer and underwent chemotherapy with carboplatin and paclitaxel. Additionally, a few days prior, he was treated for dental caries. A chest radiograph and urine test results showed no signs of infection. The patient's laboratory examination results revealed elevated C-reactive protein level (18.60 mg/dL) and normal white blood cell count (6,100/ μ L). Blood culture yielded *Streptococcus intermedius*, indigenous bacteria of the oral cavity, and magnetic resonance imaging (MRI) scan of the lumbar vertebrae showed contrast enhancement in the lumbar and sacral vertebrae and a spinal epidural abscess (Figure 1). An echocardiogram revealed no infective endocarditis. Accordingly, the patient was diagnosed with vertebral osteomyelitis (VO). Optimal antibiotic therapy was administered for 6 weeks, and the patient's symptoms and MRI findings improved.

Almost all patients with VO have underlying diseases, including diabetes, immunosuppressive disorders, or cancer.¹ VO is mainly a hematogenous infection often complicated by infective endocarditis.¹ Our case may have been a hematogenous infection caused by dental caries treatment. When providing dental treatment for patients with cancer, particularly those undergoing anticancer chemotherapy, prophylactic antibiotic should be administered.²

REFERENCES

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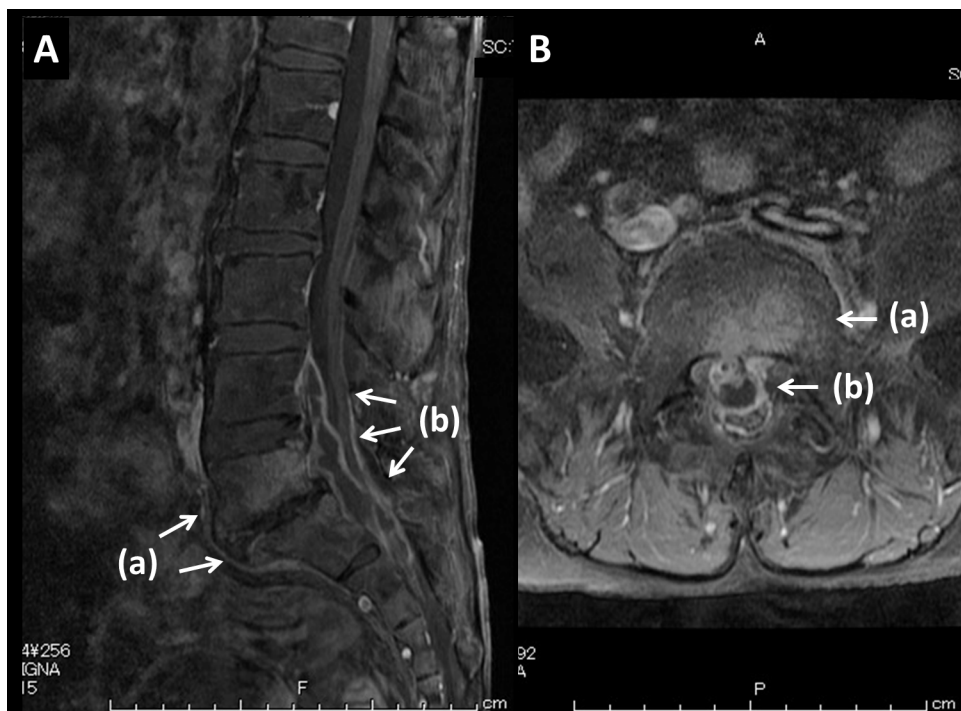


Figure 1. Magnetic resonance imaging (MRI) scan of the lumbar vertebrae showing sagittal **(a)** and horizontal **(b)** sections. An MRI scan showing contrast enhancement in the lumbar and sacral vertebrae (L5 and S1, arrow a), destruction of the L5/S1 intervertebral disc, and spinal epidural abscess at the L4–S1 level (arrow b).

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