

Images in Infectious Diseases

Spondylodiscitis caused by the *Burkholderia cepacia* complex

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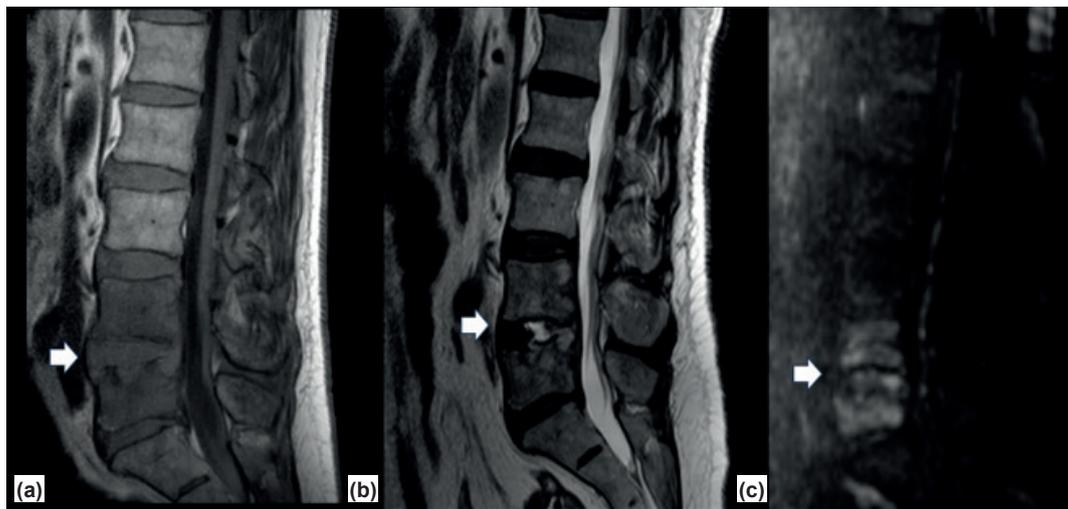


FIGURE 1: Sagittal images of spine MRI showing an infectious process in the intervertebral disc and vertebral bodies at L4-L5, characterized by hypointensity on T1 weighted images (WI) (A), hyperintensity on T2 WI (B) and restricted diffusion on diffusion WI (C). Gadolinium contrast medium injection was not indicated because the patient had a chronic dialytic kidney disease.

A 68-year-old man with dialytic chronic kidney disease presented with intense and progressive lower back pain extending to the lower limbs over the past four months. He also experienced episodes of intermittent fever.

Laboratory tests showed a white blood cell count of $6.10 \times 10^3/\mu\text{L}$, a C-reactive protein value of 150 mg/L, and a sedimentation rate of 43 mm/h. Spinal magnetic resonance imaging (MRI) was consistent with spondylodiscitis (Figure 1).

Blood cultures were positive for the *Burkholderia cepacia* complex, indicating hematogenous dissemination through the venous catheter. Treatment comprised catheter change,

meropenem 0.5 g q24h (dialysis day dose post-dialysis), and levofloxacin 0.5 g q48h. The patient showed improvement in clinical, laboratory, and imaging findings.

Spondylodiscitis most commonly occurs as a result of hematogenous spread to distant foci; however, it can result from direct spread from a nearby infection or from inoculation during spinal surgery¹.

The *Burkholderia cepacia* complex is an under-recognized Gram-negative bacillus that can cause pyogenic spondylodiscitis in patients with chronic kidney disease, malnutrition, substance abuse, HIV infection, diabetes mellitus, long-term steroid use, liver cirrhosis, and malignancy¹. This report highlights the importance of imaging investigations in patients undergoing hemodialysis with severe low back pain and fever. Owing to the debilitating nature of this disease and multidrug resistance of the bacterium², a precocious diagnosis is paramount.

Diffusion-weighted images are currently not used for spinal imaging; however, they may be an essential diagnostic tool for spinal infections³, particularly in patients with contraindications for gadolinium contrast medium injection.

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