Enterococcus faecium Causes Vertebral Osteomyelitis And Paraverterbal Abscess – A Case Report

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Introduction
Enterococcus faecium is a Gram-positive, alpha-hemolytic or nonhemolytic bacterium in the genus Enterococcus. It can be commensal in the gastrointestinal tract of humans, but it may be pathogenic, causing disease such as neonatal meningitis or endocarditis. This bacterium can cause a range of different symptoms depending on the location of the infection including bloodstream, urinary tract infection and wound infection associated with catheters.

Clinical Case Report
We herein report the case of a 25-year-old Vietnamese lady, who stayed in Malaysia for past 2 years, presented with 4 months history of lower back pain which associated with progressively worsening weakness and numbness over bilateral lower limbs, and urinary incontinence as well. She denied any history of trauma.

Her laboratory results does not show much abnormal reading apart from the markedly increased erythrocyte sedimentation rate (69) and C-reactive protein (2.45). Mantoux test and sputum AFB were negative.

Radiographic images showed long segment paravertebral abscess (T9-T11) with extradural extramedullary extension (T8-L1) causing significant spinal canal stenosis. Without delay, surgery was performed in order to reduce the spinal cord compression by the space occupying lesion.

Intra-operative bone tissue sample was collected and grew Enterococcus faecium. Fortunately, the organism was sensitived to Vancomycin and Teicoplanin.

Discussion
Enterococcus faecium is an emerging pathogen responsible for post procedural infections in patients who have undergone spinal decompression surgery. But in this case, same strain of bacteria was detected in the bone tissue biopsy sample taken from the osteomyelitic column of the vertebral body, before surgery.

She was treated with posterior intrumentation and medical therapy administered until the infection resolved, where all infective markers are normalised. Surgical wound was well healed and symptoms of instability much reduced. Neurological improvement noted as well with the intensive training in the rehabilitation ward.

Conclusion
The management of vertebral osteomyelitis with paravertebral abscess is controversial, and various mono or combined surgical and/or anti-infective therapy with multidisiplinary approach should be taken into account.