

Multilevel Disc Sparing Pyogenic Vertebral Osteomyelitis Mimicking Neoplasm

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INTRODUCTION:

Vertebral osteomyelitis is a cause of back pain, most commonly caused by pyogenic or granulomatous infection.¹ It is typically associated with the involvement of the intervertebral disc and adjacent vertebral body.² The diagnosis is difficult due to its insidious start and indolent course. We report a case of tumour mimicking pyogenic vertebral osteomyelitis in our centre.

REPORT:

A 50 years old Indonesian lady with no known medical illness presented with the complaint of upper back pain with worsening of both lower limbs weakness for the past 3 months. Clinical examination lower limbs suggestive of upper motor neuron lesion. Her blood investigations were unremarkable with only slight raised in total white cell count and erythrocyte sedimentation rate. She was started on high dose of intravenous cloxacillin. MRI done suggestive of multilevel thoracic metastatic deposits worse at level of T4 with significant cord compression (*Figure 1*). We performed posterior stabilisation and decompression surgery for her 2 weeks later and intra-operative biopsy suggestive of pyogenic infection. All cultures taken were negative as antibiotic was started prior to surgery. Patient showed significant improvement in terms of pain and lower limb power after commencement of antibiotics and was discharged well from ward after completion of 2 months of antibiotic.



Figure 1: MRI showed features of multilevel metastatic deposits.

DISCUSSION:

Pyogenic vertebral osteomyelitis usually presents with combined infection of disc and vertebral bodies. Atypical presentations include sparing of end plate and disc. Some may involve only one vertebral, one vertebral with adjacent disc or normal disc between two involved vertebrae.³ “Pseudotumour” appearance with multilevel vertebral involvement and normal intervening discs is usually seen in spine metastases or atypical presentation of tuberculous infection which rarely seen in pyogenic vertebral osteomyelitis.⁴ Early commencement of antibiotics and surgical stabilisation and decompression achieves a better prognosis, shorter hospitalization period, and subsequent significant improvement in kyphotic deformity and quality of life.⁵

CONCLUSION:

High index of suspicion needed when dealing with spine infection as patient usually comes with vague symptoms and blood investigations and radiological imaging may be misleading. Prompt antibiotic and surgical intervention is vital in patient’s recovery.

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