

Fungal Infection Of The Spine : A Diagnosis And Treatment Challenge

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INTRODUCTION:

Infection of the vertebrae can lead to significant morbidity and mortality. Different imaging characteristics help to identify infection of vertebrae and at the same time assist in differentiating other possible differential to ensure appropriate treatment administer to the patients.

MATERIALS & METHODS:

We reported an unusual case of fungal infection of the spine, presented with sudden onset of neurological deficit. The differential may include pyogenic infection and mycobacterial tuberculosis of spine. In this case, patient was initially treated for tuberculosis based on MRI finding, however, histopathological biopsy obtained revealed fungal infection of the spine instead. Treatment and rehabilitation are described. Patient's progresses were later then assessed during follow up.

RESULTS:

No significant improvement was observed immediately post decompression. Assessment at 3 months after decompression in combination with antifungal treatment, his neurological status improve – average myotomes at level L2 – S1 (3 – 4 /5). Currently he undergoes rehabilitation period and still require further follow up to monitor his progress.

Figure 1: MRI shows extradural lesion at T9,T0 causing cord compression and oedema

Figure 2: Histological cross section suggestive for fungal infection.

DISCUSSIONS:

Osteomyelitis of the spine is a rare entity itself, which account less than 2 – 4% are due to infection. Fungal infections are much rarer. It usually chronic infection which may lead to great disability and mortality if left untreated. Neurological symptoms are rare and usually associated with regional mass effect. Extradural

lesions are relatively more common and usually occur in immune compromised patients. The management depends primarily on antifungal drugs, and in some cases, where it is indicated, surgical decompression is needed.

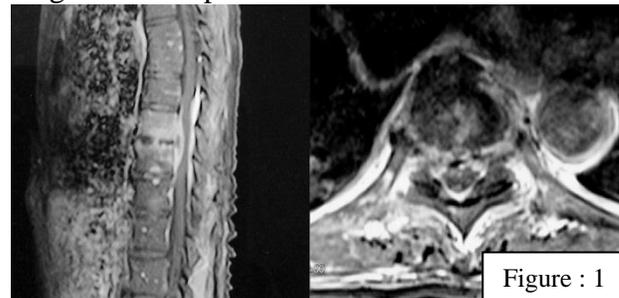


Figure : 1



Figure : 2

CONCLUSION:

Advanced imaging is a helpful diagnostic tool; in adjunction with other diagnostic tools are utmost necessary to exclude other differential such as pyogenic infection, mycobacterial tuberculosis and malignancy. Early diagnosis and treatment are associated with optimal functional outcome.

REFERENCES:

1. Line Storm et al. Vertebral infection with *Candida albicans* failing caspo fungin and fluconazole combination therapy but successfully treated with high dose liposomal amphotericin B and flucytosine. Elsevier, Medical Mycology Case Reports 6(2014)6–9
2. Rewati et al. Fungal infections of the nervous system: Current perspective and controversies in management. IJS 8 (2010) pg591-601
3. Jay Acharya et al. Imaging spinal infection. Radiology of Infectious Diseases 3 (2016) pg84-91