

Case Report

Spinal Tuberculosis – A Case Report

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Abstract: Spinal tuberculosis is a destructive form of tuberculosis which characteristically destroys intervertebral disc and vertebral bodies (Garg, R. K. 2011). It mainly affects thoracic vertebrae. Common clinical symptoms are back pain, spinal tenderness and paraplegia. Magnetic resonance imaging is the most sensitive imaging modality compared to X ray and CT, but gold standard is histopathology. Antitubercular treatment is given usually. Prognosis is good with early diagnosis and treatment. We describe a patient with spinal tuberculosis who presented with back pain and paraplegia with no past history of tuberculosis anywhere in her body. Histopathology showed necrotizing granulomatous lesion. She underwent spine fixation and now is on Antitubercular treatment.

Keywords: Spinal tuberculosis, vertebra, antitubercular treatment.

INTRODUCTION

Spinal tuberculosis is an extrapulmonary form of the tuberculosis which is also known as Pott's spine. Paraplegia developing from Potts disease is called Potts paraplegia. Exact incidence of spinal tuberculosis is not known in many countries but its incidence is high in countries with high burden of pulmonary tuberculosis (Gautam, M.P. *et al.*, 2005). Moreover spine is the most common site of skeletal tuberculosis followed by hip and knee.

CASE REPORT

A 60 year old woman presented with back pain and weakness of both lower limbs for 3 months duration. She also had bowel incontinence, loss of weight and appetite. On examination she is paraplegic with power of both lower limbs 0/5. She gives a history of recent lower respiratory tract infection and calf vein thrombosis 2 months back for which warfarin was started and she is on warfarin now. There is no history of tuberculosis, hypertension, diabetes or seizure disorders. She is moderately built and nourished, afebrile, conscious and oriented, with pulse rate 72/minute and BP 120/80 mm of Hg.

Routine investigations were done which showed elevated ESR (76mm/1st hour), elevated PT INR (36.7/3.67). Liver and renal function tests were within normal limits. Viral markers were negative. Chest X Ray was also within normal limits. Sputum AFB was negative. Mild microcytic hypochromic anaemia was present. S.IgM was normal (0.88gm/L, normal 0.4-2.3gm/L). Serum Albumin was decreased and globulin was normal.

CT showed multiple lytic lesions in thoracic vertebrae (D5, D6, D8, D9, D10 and D12). MRI was done which showed pathological compression fracture D 9 vertebral body and features suggestive of compressive myelopathy. It was suggested to rule out metastasis.

Tumour markers were done like CEA, CA 125, CA 19-9. All were within normal limits. Urine BJP was negative. Serum electrophoresis showed no M band. She underwent Fixation D9 D10, Laminectomy and biopsy. Her post operative period was uneventful. On discharge she was afebrile and paraplegic. Disc material and vertebral body fragments were received for histopathological examination which showed multiple caseating granulomas and degenerated disc material consistent with tuberculosis. AFB stain was negative for tuberculosis.

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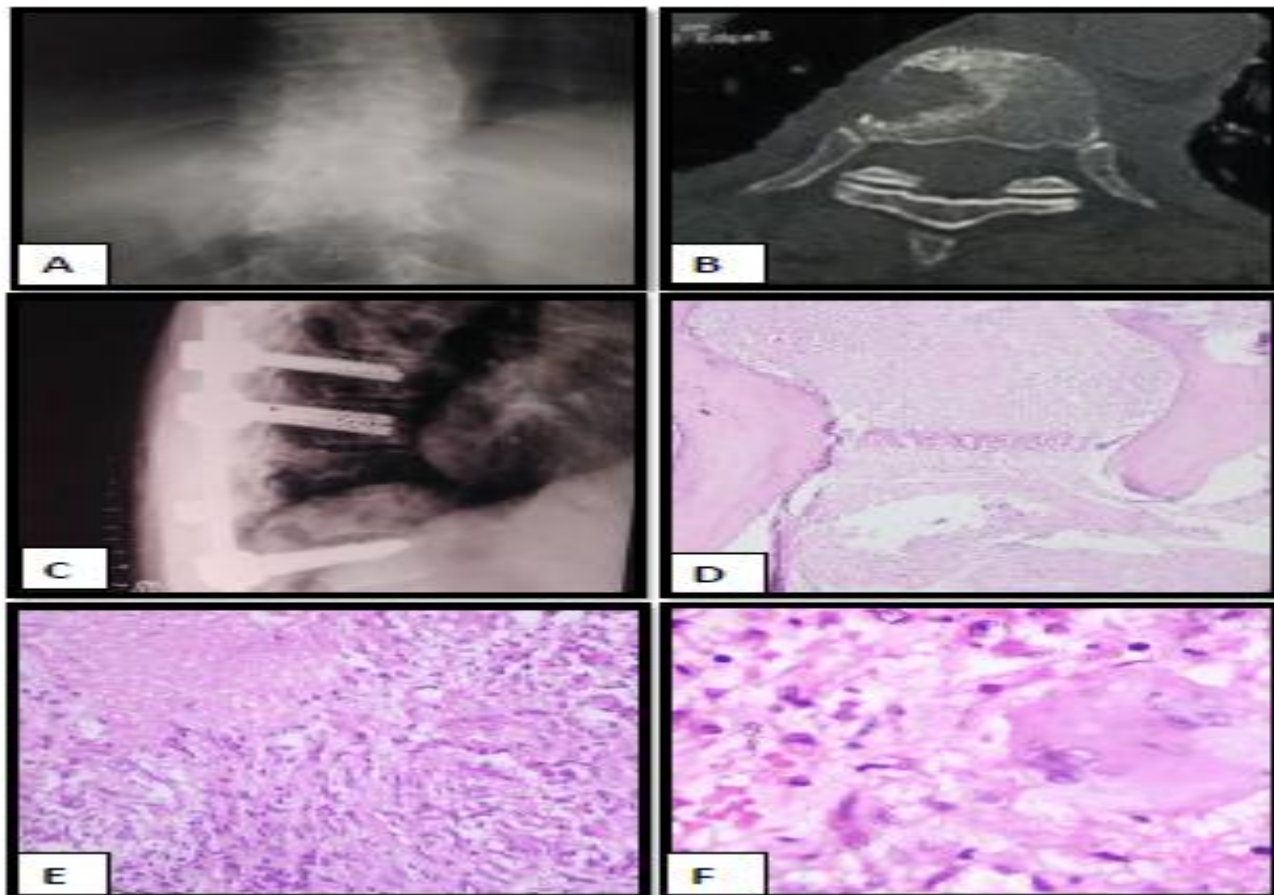
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FOLLOW UP

Now patient is on Anti tubercular treatment for 3 months and undergoing physiotherapy. She is symptomatically better but paraparesis is persisting.



Figures: A- X Ray spine B-MRI spine showing lytic lesion C-MRI spine after fixation D, E, F- caseating granulomas with multinucleate giant cells

DISCUSSION

Spinal tuberculosis is primarily a medical disease which may need surgery for preventing and treating complications (Jain, A. K. 2010). Neurological deficits and weakness are its worst complications. This patient presented with paraplegia, so surgical fixation was done. Spinal tuberculosis is diagnosed mainly based on MRI findings. Needle biopsy should be taken and histology and culture should be done. Antitubercular treatment should be given without waiting for results if there is strong clinical suspicion (National Collaborating Centre for Chronic Conditions. 2006). Prognosis is improved now with early diagnosis and intervention. Control of spread of tuberculosis is the only way to prevent occurrence of spinal tuberculosis.

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