

PAGET'S DISEASE OF THE SPINE

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INTRODUCTION:

Paget's disease (osteitis deformans) is a chronic metabolically active bone disease, characterized by a disturbance in bone remodelling due to an increase in osteoblastic and osteoclastic activity (1). It is common in Caucasians and considered a rare disease among Asian population (2). The vertebra is the second most commonly affected site. (1)

REPORT:

We report a case of an 82 year old man with no comorbidities. He presented with back pain after a fall in sitting position. Tenderness was present at L1 vertebra. X-ray revealed L1 vertebra fracture. CT thoracolumbar reported as multiple osteolytic lesions with pathological fracture of L1 causing spinal canal stenosis and cord compression. Differential diagnosis considered was multiple myeloma and spine metastasis. His biochemical investigations revealed a normal serum calcium, phosphorus and ESR. Tumour markers were normal. Serum electrophoresis and prostate specific antigen were normal (done to rule out myeloma and sclerotic metastasis from prostate). Alkaline phosphatase level was slightly elevated (151 U/L(Normal: 40-150)). Posterior spinal instrumentation, decompression and transpedicular biopsy was done. HPE findings revealed broad trabeculae with disorganized cement lines in a mosaic pattern highly suggestive of Paget's disease. Bone marrow trephine biopsy findings reported as mosaic bone and rich fibrovascular intramedullary tissue (Figure 1) which was consistent with Paget's disease.

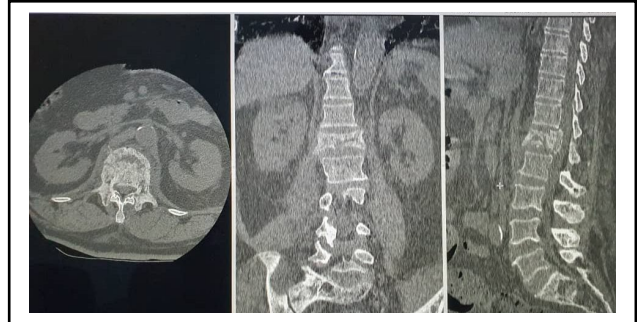


Figure 1: CT Images: Burst fracture Vertebra L1

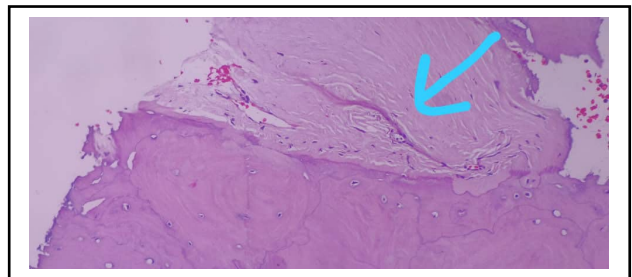


Figure 2: HPE findings reported as mosaic bone and rich fibrovascular intramedullary tissue.

CONCLUSION:

Paget disease of the lumbar vertebrae can mimic various pathological conditions like myeloma, metastasis, or osteoporotic compression especially in elderly men. It is a rare condition in Asian population. Complete clinical, biochemical and radiological work up is needed to rule out various differentials. Definitive diagnosis can only be obtained by histopathological examination and prompt management of the vertebral lesion is crucial to prevent neurological deterioration.

REFERENCES:

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