Title: Lumbar pedicle lesion causing radicular pain

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A twenty six year old male presented with history of right lower limb radicular pain, parasthesias in right thigh and back ache for two years. He had antalgic gait and lumbosacral scoliosis with wasting of paraspinal muscles on the right side. Computed tomography (CT) showed a lytic lesion with surrounding sclerosis in the right L3 pedicle. There was soft tissue mass lesion arising inferomedially and causing foraminal stenosis (Figure 1). On magnetic resonance (MR) imaging it was hypointense in both T1 and T2-weighted images measuring 2.3X2 cm. There was moderate contrast enhancing soft tissue extending into right L3-4 neural foramen compressing the exiting root. There was marrow edema seen in short tau inversion recovery (STIR) images (Figure 2). He underwent right L3 hemilaminectomy and excision of the tumor. It had both bony and soft tissue components. L3 inferior facet was excised. Postoperative period was uneventful and radicular pain subsided. Postoperative dynamic X-rays showed no instability. He was advised to follow up and was explained about requirement of instrumentation in future if instability occurs. The lesion was sent for histopathological examination. Histopathology reported

as osteoid formation with intervening fibrovascular stroma. There were foci of osteoclastic giant cells with hemosiderin laden macrophages. Overall features were consistent with osteoblastoma, a benign tumor resulting in remodelling of osteoid tissue and bone[1]. At ten months followup the patient was doing well.

References

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Figure legends:

Figure 1: CT images sagittal (A,B) and axial (C,D) showing the lytic lesion with surrounding sclerosis at the right L3 pedicle extending into neural foramen.

Figure 2: MR T2-weighted sagittal and axial (A,B) images showing hypo intense lesion in the right L3 pedicle. Contrast sagittal, axial and coronal (C-F) images showing moderate enhancement of the lesion.