Primary Ewing’s Sarcoma Of The Lumbar Spine With Cauda Equina Syndrome: A Case Report

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INTRODUCTION:
Ewing’s sarcoma (ES) is a primary bone tumour that was first described by James Ewing in 1921. It usually affect the long bones. The incidence of primary ES arising from the spine is very rare.

CASE REPORT:
A 21-year-old gentleman presented with bilateral lower limb weakness and difficulty in urination following a trivial fall 1 week prior to admission. He has history of lower back pain 2 months prior to the fall and was treated as musculoskeletal pain at general physician clinic. Examination revealed tenderness over the midline lumbar spine, bilateral lower limbs hypotonia with power grade 0-1, sensory absent from L3 downwards and areflexia of knee and ankle jerk. Loss of perianal sensation and anal tone. Bulbocavernous reflex was absent. Plain radiograph showed no obvious abnormality (figure 1, left). MRI revealed comminuted fracture of L2 vertebra with surrounding paravertebral and epidural hematoma causing severe spinal stenosis from L1 to L3 level resulting in cauda equine syndrome (figure 2). He underwent emergency posterior spinal instrumentation T12 to L4 and decompression. Biopsy of L2 pedicle and surrounding soft tissue turned out to be ES.

DISCUSSIONS:
Primary ES of the spinal usually occur at the age of 12 to 24 years old [1], peak at second decade of life [2]. The first symptom usually is local back pain. Neurological deficit will appear later when the tumor extending into the spinal column. Average diagnostic delay is 12.2 weeks [3]. Therefore, when a young patient presented with back pain without significant trauma or causes, a physician should aware of the possibility of spinal malignancy. The common finding on plain radiograph is lytic bone lesion but often appear late. MRI is more sensitive in early detection of ES as compared to CT-scan [4]. Early surgical intervention improve neurological outcome [3]. In our patient the neurology did not improve after decompression because of the delay in seeking treatment. The prognostic factors that determine the survival are age at time of diagnosis, surgical resection and extent of the disease [5].

CONCLUSION:
Primary Ewing’s sarcoma of the spine is rare and usually occur at second decade of life. They commonly presented with prolonged musculoskeletal symptoms and a high index of suspicion is needed in order to diagnose at the early stage for a better prognosis.

REFERENCES:

ABSTRACT TRUNCATED