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A case report of L3/L4 Left Facet Joint Osteochondroma

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ABSTRACT:
Lumbar facet joint osteochondroma undisputedly rare among all the cases of osteochondroma reported in literature. Excision of left L3 inferior articular process exostosis has been employed in the treatment. We present a case of L3/L4 left facet joint osteochondroma in a 23 years old Malaysian lady. Plain radiographs were unremarkable. She was diagnosed from MRI and CT lumbosacral. L3/L4 left facet joint causing spinal canal obliteration and cauda equina compression. CT lumbosacral: left L3 inferior articular process bony exostosis causing significant spinal canal stenosis. L3/L4 facetectomy and decompression was performed on this patient .
On subsequent follow up, our patient showed tremendous improvement with full neurology recovery.

I. INTRODUCTION:

Osteochondromas are benign chondrogenic lesions derived from aberrant cartilage from the perichondral ring that may take the form of solitary osteochondroma, or Multiple Hereditary Exostosis. Patients typically present between the ages of 10 and 30 with a painless mass.Diagnosis is made with radiographs showing sessile or pedunculated lesions found on the surface of bones.Treatment is observation for asymptomatic or minimally symptomatic cases. Surgical resection is indicated in cases of progressive and severe pain.

The most common benign bone tumourtrue incidence is unknown as many are asymptomatic common in adolescents and young adults (tested ages: 9, 10, 12, 20, 24)occur on the surface of the bone and often at sites of tendon insertion .common locations includeknee (proximal tibia, distal femur),proximal femur,proximal humerus, subungual exostosis (occurs most often at hallux). Rarely, these present in the spine. Typically involving the posterior elements of the cervical spine.

REPORT:

A 23 years old, Malaysian lady with no known Medical illness. She initially presented to hospital tawau with the complaint of chronic lower back pain and bilateral lower limb weakness which progressively worsened until she had to ambulate with aid. Otherwise there was no history of trauma, no urinary or bowel incontinence, no constitutional symptoms and there is no history of malignancy. Radiographs findings were unremarkable. MRI lumbosacral: large lobulated exophytic lesion at

Figure 1: AP view of lumbosacral x-ray of our patient

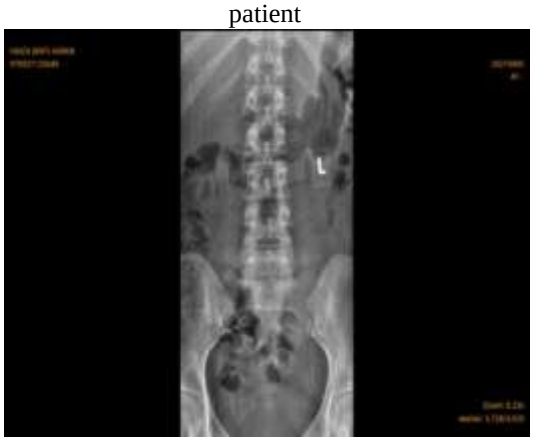

Figure 2: lateral view of lumbosacral x-ray of our patient

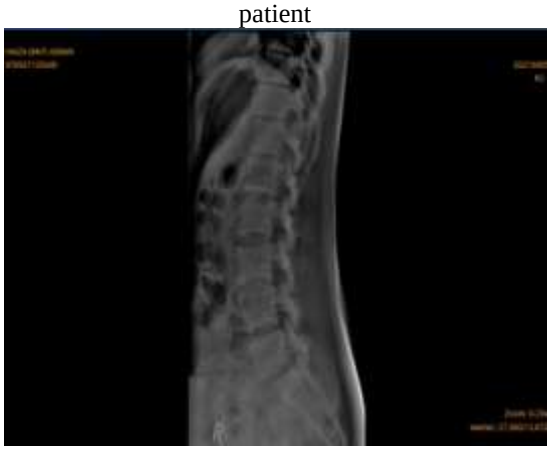

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Figure 3: Axial view of MRI lumbosacral

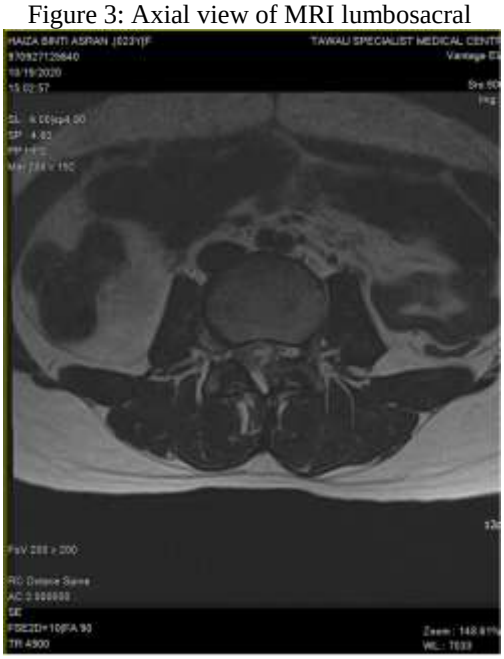
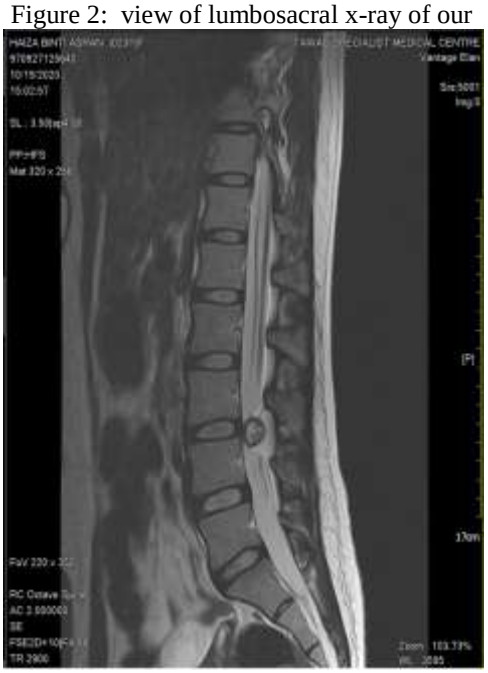


Figure 2: view of lumbosacral x-ray of our



II. DISCUSSION:

Osteochondroma is the most common benign bony tumor, representing up to 40% of all benign osseous lesions.They are reported to occur in up to 3% of the population, although their true incidence is difficult to estimate.Most commonly, they occur in the metaphyses of long bones, particularly the femur, humerus, and tibia.

In the sporadic form, up to 4% of these tumors arise from the spine. More than half of these spinal osteochondromas emanate from the posterior elements of the cervical spine, especially from the atlas.The axis is typically more frequently affected in familial cases. In the thoracic spine, interestingly, they most typically arise from the T4 and T8 vertebrae.Osteochondromas are characteristically attached to the parent bone via a stalk that is contiguous with the parent bone marrow and cortical surface, and they are capped by cartilage.It has been suggested that the cartilaginous cap be used as a surrogate marker for malignant potential, with thickness exceeding 2 cm in adults, or 3 cm in children, concerning for malignancy.

Presentation of these lesions can be highly variable. They are estimated to affect 2% to 3% of the population, however, only rarely come to clinical attention.Furthermore, as only approximately 4% of sporadic lesions are known to affect the spine, the likelihood of an osteochondroma causing neurologic deficit is exceedingly rare. Nonetheless, the literature abounds with case reports of symptomatic spinal osteochondromas. These typically manifest as entrapment neuropathies, local pain and/or swelling, and more rarely, frank myelopathy.

Our review of the English language literature resulted in the tabulation of 44 lumbar osteochondromas that have been reported, including the present case. The first case appears in the literature in 1927 when Meyerding published on 235 patients with 265 lesions treated surgically, of which one arose from a lumbar vertebra.

III. CONCLUSION:

Computed tomography and MRI can effectively diagnose spinal osteochondroma, and surgical treatment can effectively improve clinical outcomes. In almost all symptomatic cases, the best treatment is marginal excision of the tumor. Complete resection of the cartilaginous cap of the tumor is especially important to prevent recurrence.

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