Langerhans' cell histiocytosis with multispinal involvement in young adult : case report

Afiq Jasmi; Wong C.C.; Shukur A.; Sharifudin S. Orthopedic Department, Hospital Teluk Intan, Perak, Malaysia

INTRODUCTION:

Langerhans cell histiocytosis (LCH) is a rare disorder that affect mainly children and very rare seen in adult. Multiple spinal LCH, including multifocal spinal lesions (lesions in two or more separated vertebrae) and/or solitary lesions (one lesion involving several consecutive vertebrae), is even rarely reported [1]. The treatment of LCH in adults is still controversial.

REPORT:

A 18 years old patient presented to us with sudden onset low back pain for 1 week without any neurological deficits. Radiological investigation showed osteolytic lesion over L2 vertebral body and subcentimeter lesion over C4 which was moderately enhanced on contrast MR imaging (Fig.1)







Figure 1: Plain Lumbosacral X-ray showing radiolucency of L2 vertebral body and MRI spine showing lesion involve over L2 vertebral body and pedicle with periverterbal soft tissue component and subcentimeter lesion over C4

Fluoroscopy-guided needle biopsy was performed over the L2 vertebral body. The diagnosis was confirmed as LCH by histopathological and immunohistochemistry.

DISCUSSION:

Langerhans' cell histiocytosis is rare in adult and should be include in the differential diagnosis for any patient with osteolytic lesion over vertebra as it may affect our treatment option. There are variety of options of treatments included observation, chemotherapy, radiation therapy or surgical treatment. Hematology team was involve with comanaging and follow up this patient.

CONCLUSION:

This patient is a rare case of LCH with multispinal involvement. Radiological changes or specific histopathologic and immunohistochemical findings are best tool to support the diagnosis of LCH. Any patient diagnosed with LCH without neurological deficit best treated conservatively.

REFERENCES:

1. Vadivelu S, Mangano FT, Miller CR, Leonard JR. Multifocal Langerhans cell histiocytosis of the pediatric spine: a case report and literature review. *Childs Nerv Syst.* 2007;23:127–131. doi: 10.1007/s00381-006-0172-x.