

## Diffuse Large B-Cell Lymphoma Mimicking As Malignant Nerve Sheath Tumour: A Rare Case Report

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### INTRODUCTION:

Diffuse Large B-cell Lymphoma (DLBCL) is the most common type of non-Hodgkin lymphomas (NHL). Few case studies reported the primary manifestation of DLBCL as infiltrating nerve roots and ganglia. Here, we present a patient with extranodal DLBCL involving the lumbar nerve roots.

### METHODS:

A 63-years old gentleman presented with 1 year history of bilateral lower limbs weakness and numbness which progressively worsened. He noticed left neck swelling 2 months prior to presentation. He denied back pain, bowel or urinary incontinence, history of trauma, fall or constitutional symptoms. Neurological examination revealed power of grade 2 over bilateral L2 to S1 myotomes. Lumbosacral x-ray is unremarkable, tumor markers taken were normal. However, MRI of lumbosacral spine done showed thickened and enlarged left L3 exiting nerve root with extradural mass and associated with neural foramina and paraspinal extension. Provisional diagnosis of malignant nerve sheath tumour (MNST) was made. CT guided biopsy of the extradural mass was performed but however was inconclusive. Subsequently a cervical lymph node biopsy was done which was reported to be DLBCL.



Figure 1: Axial T2-weighted image of L3 spine shows aggressive tumor on left L3 level evading pedicle and surrounding structures.

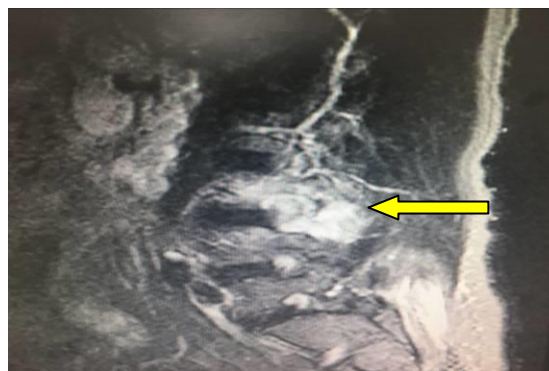


Figure 2: Sagittal T2-weighted image of thickened nerve root and ill-defined border mass

### DISCUSSIONS:

DLBCL accounts for 25–30% cases of NHL in the United States. The most common sites include the gastrointestinal tract and bone marrow.

Although nerve root infiltration has been reported in both T-cell and B-cell NHL, however nervous system involvement does not occur without widespread disease. In our patient, the diagnosis of DLBCL was surprising given the clinical findings and appearance of left L3 exiting nerve root lesions on MRI being similar to that of MNST.

### CONCLUSIONS:

Although the initial differential diagnosis included neurofibroma, schwannoma, and meningioma, the correct pathological diagnosis was lymphoma, and clearly these lesions should be considered when assessing multifocal intradural nerve root tumors.

### REFERENCES:

1. Jason Milton, Julie Renner, Victor Awuor. B-cell Lymphoma presenting as multiple nerve sheath tumours. 11-Jul-2017; 8:142