

A Stroke Mimicker: Patient with Ossification of Posterior Longitudinal Ligament After Minor Trauma

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INTRODUCTION:

Ossification of posterior longitudinal ligament (OPLL) usually presents as a slow progressive cervical myelopathy. We present a case of an OPLL patient with symptoms mimicking stroke.

REPORT:

A 41-year-old obese healthy man presented with sudden onset apparent left sided hemiplegia after a trivial fall. Neurological examination revealed a left sided hemiplegia with power over left upper limb and left lower limb MRC 0-2. Pin prick sensation was reduced more over the right side compared to the left. Myelopathy signs were positive over bilateral upper and lower limb.

Initially, CT brain was done and ruled out a stroke. Lateral cervical radiograph showed the presence of cervical OPLL. Cervical CT scan revealed cervical OPLL extending from C2-C7 level. Axial cut of CT scan showed spinal canal stenosis more over the left lateral canal. MRI cervical confirmed the OPLL caused spinal cord compression with spinal cord oedema from C2-C5. The cord was preferentially compressed over the left side.

Patient was offered decompression and fusion surgery.

There is sparse literature regarding patients with OPLL came presenting with one sided paralysis mimicking a stroke. Only 5% of cervical myelopathy due to OPLL present with acute neurological deficit thus mimicking stroke. OPLL causes unequal compression of the spinal cord leading to hemiparesis. ¹This leads to a neurological examination that might be suggestive of stroke but is more likely to indicate a Brown- Séquard Syndrome. ²

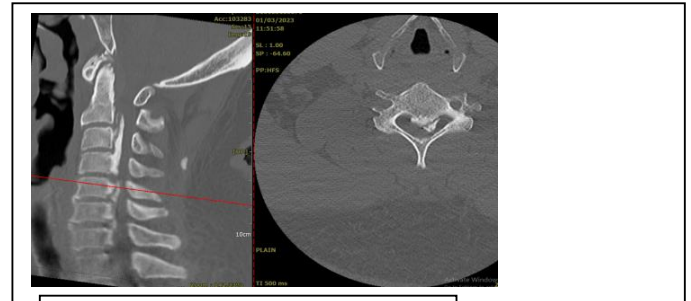


Figure 1

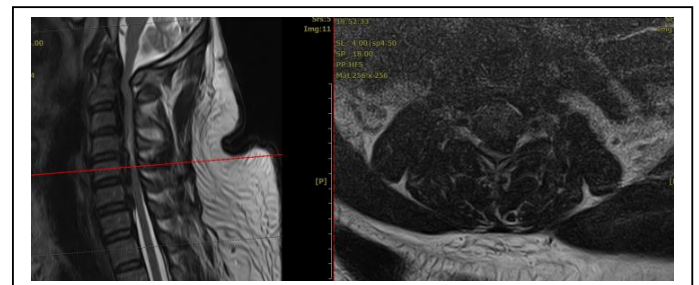


Figure 2

Figure 1: CT cervical

Figure 2: MRI cervical

CONCLUSION:

Extensive OPLL may present with symptoms suggestive of stroke. Diligent clinical examination and radiographic evaluation of the brain and spine will help in confirming the diagnosis.

REFERENCES:

1. Prabhu RM et al. A case of cervical OPLL and DISH mimicking stroke. Surg Neurol Int. 2022 Apr 22
2. Schuermans VNE et al, Ossification of the posterior longitudinal ligament at the craniocervical junction presenting with Brown-Séquard syndrome: A case report. Surg Neurol Int. 2021 Oct 6