

IMAGES OF SPINE CARE

Epidural chronic inflammatory mass of the lumbar spine in a human immunodeficiency virus positive patient with a history of repeated epidural injections

This study is a rare case of an epidural chronic inflammatory mass of the lumbar spine in an HIV-positive patient with a history of 12 epidural injections for 3 years because of chronic low back pain (LBP). A 61-year-old man had a 10-year history of LBP and buttock pain. He also has been HIV-positive for 4 years. Patient underwent magnetic resonance imaging (MRI) at the lumbar region. The MRI showed degenerated disc bulging, mild stenosis, and hypertrophied ligament flavum at multiple levels in the lumbar spine (Fig. 1). The LBP was treated with epidural triamcinolone and ropivacaine injection, total of 12 treatments at a pain clinic, but 3 years later, his back pain and bilateral buttock

pain aggravated, hence follow-up lumbar MRI was taken. There was a thecal sac compression caused by a $17 \times 12 \times 9$ mm sized, oval-shaped posterior epidural mass at the L4–L5 ligament flavum on the MRI. The lesion showed heterogeneous hypointense signal on T1-weighted images, heterogeneous hyperintense signal on T2-weighted images, and rim enhancement. There was no bony abnormality (Fig. 2). The patient underwent an L4 laminectomy and a total excision of the mass, which involved the ligament flavum and epidural adipose tissue. After removal of this mass, the patient's symptoms resolved immediately. Postoperative follow-up MRI at the lumbar region showed the total removal of the epidural mass. Histopathologic study examination revealed chronic inflammation with hemorrhage and fibrous necrosis in the entire specimen and no evidence of tumorous lesions, and also no evidence of mycobacterial and fungal infection. Some authors thought this pathology was caused by prior surgery, trauma, or immune disturbances, in addition to infection [1,2]. There is no reported case of epidural chronic inflammatory mass in the lumbar spine caused by repeated epidural injections in an HIV-infected patient.



Fig. 1. Initial contrast enhanced T1-weighted sagittal magnetic resonance imaging showing degenerative disc bulging, mild stenosis, and hypertrophied ligament flavum at multiple levels in the lumbar spine.

References

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Fig. 2. Three-year follow-up (Left) sagittal and (Right) axial contrast enhanced T1-weighted MRIs revealing an oval heterogenous cystic lesion with rim enhancement at L4–L5 that compresses the thecal sac.