

IMAGES OF SPINE CARE

Posterior epidural migration of lumbar disc fragment as an unusual ring-enhancing mass

A 60-year-old man was admitted to the hospital because of 2-month history of low back pain and difficulty in walking. Bladder and bowel functions were normal. The clinical history was unremarkable. On physical examination, both lower limbs showed muscular weakness with increased muscle tone, especially on the right side. Sensation was intact in all dermatomes, and reflexes were normal. Laboratory tests revealed normal findings. Magnetic resonance imaging showed a well-circumscribed smoothly margined solid mass within the posterior epidural space at L2–L3, which compressed the dura. Signal intensity of the mass was similar to that of the intervertebral disc on all sequences (Fig. 1). The lesion revealed an intense rim enhancement on fat-saturated contrast-enhanced magnetic resonance images (Fig. 1). There was no calcification in the epidural mass lesion on computed tomography scan (Fig. 2). Decompressive L2 laminectomy was



Fig. 2. Sagittal reconstructed CT scan shows a solid uncalcified epidural mass (arrow).



Fig. 1. Sagittal T2-weighted (Left) and T1-weighted (Middle) magnetic resonance images show a well-circumscribed smoothly margined posterior epidural solid mass at L2–L3. The signal intensity of the mass is almost similar to the intervertebral disc on both sequences (arrows). The lesion shows an intense rim enhancement (arrow) on fat-saturated sagittal postcontrast magnetic resonance image (Right).

performed. A large, solid, sequestered disc material in the posterior epidural space was found and removed. Microscopic examination showed fragments of disc tissue with the histopathologic features of degenerated fibrocartilage and clusters of chondrocytes, findings suggestive of repair. The postoperative period of the patient was uneventful.

Posterior epidural migration of a lumbar disc herniation is very rare and may present with low back pain, radicular compression, or cauda equina syndrome [1]. Preoperative diagnosis is difficult because of its rim enhancement and may mimic an intraspinal extradural tumor [2,3]. The peripheral enhancement of the disc fragment on contrast-enhanced imaging studies is attributed to an inflammatory response with vascular granulation tissue around the disc mass. The recognition of similar signal intensity of the mass and intervertebral disc on magnetic resonance images together with peripheral rim enhancement are the keys to the correct diagnosis of posterior epidural migration of disc fragment.

References

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FDA device/drug status: Not applicable.

Author disclosures: **ZOT**: Nothing to disclose. **BY**: Nothing to disclose. **DK**: Nothing to disclose. **OY**: Nothing to disclose. **MKD**: Nothing to disclose.

The authors declare that they have no conflicts of interest.