MRI of intradural lumbar disc herniation. A case report.
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Patient: 48 years, female

Clinical History:
Intradural intervertebral disc herniation is a rare complication of spinal degenerative processes. If it is not preoperatively diagnosed, severe neurologic sequelae may be provoked. We present the magnetic resonance imaging (MRI) appearance of a patient with an intradural lumbar disc herniation.

Imaging Findings:
A 48 year-old woman came to the MRI examination after 3 month history of low back pain, left sciatalgia and progressive left lower extremity weakness. MRI was performed with SE and FSE sagittal and axial T1 and T2-weighted sequences before and with gadolinium EV administration. The MRI examination showed intradural left disc herniation with ring enhancement (20 x 10 mm) at the L4-L5 level (fig. 1). A laminectomy was performed; a longitudinal incision was made in the dura mater and the free disc fragment was removed in one piece. The patient experienced an immediate improvement in sensory function and was discharged 7 days after.

Discussion:
Intradural herniation of a disc herniation is a rare complication of disc disease and comprise only 0.27% of all herniated discs; 3% are found in the cervical, 5% in the thoracic and 92% in the lumbar spinal canal; those with lumbar localization demonstrate radicular or cauda equina syndromes [1]. The majority of intradural disc herniations occur at the L4-L5 level; the patients usually have neurologic deficits more severe than those found in the common extradural disc herniation; 30% of patients have previously undergone surgery for lumbar disc herniation [2,3]. The intradural disc herniation must be considered in the differential diagnosis of lesions causing nerve root or cauda equina syndromes (disc space infection or tumor): contrast-enhanced MRI are useful [4]. The mechanism of the tearing of the dura mater by a herniated disc is not known with certainty. The common factor is considered adhesion between the dura and posterior longitudinal ligament, probably caused by chronic mechanical irritation, leading to perforation of the herniated disc by an accidental force [2]. The surgical treatment of intradural disc herniation is an absolute requirement because of the severity of symptoms and neurological deficits [5].

Differential Diagnosis List: Intradural disc herniation.

Final Diagnosis: Intradural disc herniation.

References:
Epstein NE, Syrquin MS, Epstein JA et al. (1990). Intradural disc herniations in the cervical, thoracic, and lumbar...
Description: A) MRI. Sagittal FSE T2-weighted. Origin:
Description: B) MRI. Axial SE T1-weighted with Gadolinium. Origin: