“Pseudodiskitis:” Degenerative Disk Disease Mimicking Diskitis

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Purpose
Neck or back pain is a common yet nonspecific clinical symptom. MR examination of the spine without contrast is the standard imaging evaluation for the pain. The MR manifestation of degenerative disk disease may mimic diskitis and has been described but not emphasized. Recognition of this atypical radiographic pattern may alter the clinical management.

Materials & Methods
Five patients including one cervical spine, one thoracic spine and three lumbar spine were in the study. Ages range from 52 to 74 year old. MR imaging of the spine was performed in sagittal and axial planes without and with gadolinium administration.

Results
The disk space was decreased and the signal intensity was increased on T2-weighted images. The adjacent vertebral cortical endplates showed irregularity and hypersignal intensity change on T2-weighted images. Contrast enhancement of annulus and cortical endplates was seen in all cases. The findings mimic that of diskitis and osteomyelitis. Conventional imaging of the spine revealed no evidence of bone destruction. Two patients underwent CT guided-needle biopsy. One case showed calcium pyrophosphate dihydrate deposition, the other case showed fibrous tissue.

Conclusion
MR imaging has become the procedure of choice for screening patients for disk disease and often is the only imaging study for workup back pain. Annular tears as well as diskitis can be seen on MR imaging as increased signal intensity within the disk on T2-weighted images and enhanced on T1-weighted with Gd-DTPA images. It is critical to recognize that MR findings of degenerative disk disease can mimic that of diskitis. It is important to review the conventional radiography and laboratory results together with MR imaging before the patient is to have any further invasive procedures or even surgical interventions.

References