Professional Imaging Consultants, Inc.

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Date of Report: August 07, 2013
Patient Name: **SAMPLE MRI LUMBAR 2**
Referring Dr. / Clinic: John Jones, DC
Date of Study: August 7, 2013

Radiology Report

MRI OF THE LUMBAR SPINE WITHOUT CONTRAST:
Multiplanar multisequence images were obtained without contrast.

CLINICAL HISTORY: 36 year-old with moderate to severe mid to lower back pain without radiculopathy. Symptoms for approximately 2-3 weeks.

COMPARISON STUDIES: No comparison studies available.

VERTEBRAL NUMBERING: Five lumbar segments are identified using the lumbosacral junction as the reference.

ALIGNMENT: Marked reduction of the normal lordotic curvature. On the coronal scout images, there is a mild left lateral convexity of the lumbar spine with apex at L3. Findings may reflect muscle spasm and/or joint dysfunction and needs be correlated clinically. Retrolisthesis of L4 by 2-3 mm. Comparison with weight bearing x-rays advised rule out translational hypermobility or instability.

OSSEOUS STRUCTURES: Normal vertebral body height. No marrow infiltration or bone destruction. Posterior arches are intact.

CONUS MEDULLARIS/CAUDA EQUINA: Conus is normal in morphology and signal intensity and terminates at the L1 level. Cauda equina has a normal appearance and distribution within the thecal sac.

PARASPINAL SOFT TISSUES:Paraspinal muscle mass is preserved and the muscles have a symmetric appearance. Visualized abdominal and pelvic soft tissues are unremarkable.

T12-L1 level: Sagittal images only. Normal disc morphology and signal.

L1-L2: Disc height is maintained and the disc is well-hydrated. No annular bulging, posterior spurring or disc herniation. No appreciable facet arthrosis or ligamentous thickening. Dimensions of the central spinal canal and the lateral recesses are within the normal range. Foramen are patent.

L2-L3: Disc height is maintained and the disc is well-hydrated. No annular bulging, posterior spurring or disc herniation. No appreciable facet arthrosis or ligamentous thickening. Dimensions of the central spinal canal and the lateral recesses are within the normal range. Foramen are patent.

L3-4: Disc height is maintained and the disc is well-hydrated. No annular bulging, posterior spurring or disc herniation. No appreciable facet arthrosis or ligamentous thickening. Dimensions of the central spinal canal and the lateral recesses are within the normal range. Foramen are patent.

L4-5: Moderate loss of disc height with desiccation and early anterior spurring. There is moderate to marked amount of increased T2 signal involving the L4 and L5 bodies compatible with Modic type I reactive marrow change. Diffuse annular bulging by 2-3 mm compressing the thecal sac and contacting the L5 nerve roots. Complex annular tear affecting the outer most fibers centrally and includes both radial and concentric components. Findings demonstrated on T2 sagittal images 6/14 and 7/14. No appreciable facet arthrosis. Dimensions of the central spinal canal are within the normal range. Mild foraminal stenosis bilaterally due to the annular bulging which contacts the exiting L4 nerves. Clinical correlation regarding any history of L4 radiculopathy is advised particularly with weight bearing and/or extension.

L5-S1: Minimal anterior spurring. Disc height is maintained with desiccation and diffuse annular bulging by 2 mm. No focal disc herniation. Foramen are patent. Dimensions of the central spinal canal are within the normal range. No appreciable facet arthrosis.

CONTINUED

IMPRESSIONS:
1. Discogenic Spondylosis L4-5: Moderate spondylosis with moderate to marked Modic type I reactive marrow changes involving both the L4 and L5 bodies. In the literature, Modic type I reactive marrow changes have demonstrated a strong correlation with disc degeneration, disc herniations and discogenic pain. Modic type I changes presumably due to abnormal biomechanical stress with or without instability (micro- or macro-instability).

2. Annular Tear L4-5 Level: Complex annular tear affecting the outer most fibers at L4-5 disc centrally (innervated zone). Annular tears have been documented potential pain generators (discogenic pain) with or without referral/radiculopathy.

3. Foraminal stenosis L4 5 level: Mild bilateral foraminal stenosis due to annular bulging which contacts the exiting L4 nerves. Clinical correlation regarding L4 radiculopathy is advised.

4. Discogenic spondylosis L5-S1: Mild spondylosis.

5. Annular Bulging: Diffuse posterior annular bulging L4 5 and L5-S1. At L4-5 the annular bulging contacts both L5 nerve roots.

6. Abnormal Alignment: Retrolisthesis of L4 by 2-3 mm which should be compared with weight bearing x-rays rule out translational hypermobility or instability. Left lateral lumbar curve with generalized reduction of lordosis which could be associated with muscle spasm and/or joint dysfunction and needs to be correlated clinically.

Electronically signed by Edward J. Dailey, D.C., D.A.C.B.R on August 07, 2013 at 12:21:51.4531250
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