Fort Wayne Open MRI

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Date of Report:	1/20/20
Patient Name:	XXXXX
Referring Dr. / Clinic:	XXXXXX
Date of Study:	1/19/20

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Radiology Report

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

CLINICAL HISTORY: 42-year-old male with right-sided leg pain following a weight lifting injury. Patient is a former body builder. No history of lumbar spine surgery.

COMPARISON STUDIES: No comparison studies available.

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

ALIGNMENT: Spondylolytic spondylolisthesis of L5 by 20–25 %. Comparison with weightbearing x-rays (neutral lateral, flexion and extension) would be useful to rule out instability in comparison to the recumbent MRI.

OSSEOUS STRUCTURES: Normal vertebral body height. No marrow infiltration or bone destruction. Posterior arches are intact at L1 through L4. Remote bilateral spondylolysis at L5.

CONUS MEDULLARIS/CAUDA EQUINA: Conus is normal in morphology and signal intensity and terminates at the T12 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. Well-defined fluid filled cystic lesion at the inferior pole the left kidney measuring approximately 1.5 centimeters at greatest visible diameter. Findings most compatible with a benign renal cyst but ultrasonography advised for more complete evaluation.

DISC DEGENERATION/SPONDYLOSIS: Varying degrees of desiccation throughout the lumbar spine and T12/L1. Severe loss of disc height L5/S1. Moderate loss of disc height at L3/L4 and L4/L5. Mild to moderate spurring anterolaterally throughout the lumbar spine and T12/L1.

FINDINGS BY LEVEL

T12/L1: Sagittal images only. Posterior annular bulging by 2-3 mm compressing the thecal sac. Annular bulging resulting in mild foraminal encroachment bilaterally. Mid sagittal diameter canal within the lower end of the normal range.

L1-L2: Diffuse posterior annular bulging by 3 mm compressing the thecal sac. Mild bilateral facet arthrosis. Both foramen are mildly stenotic due to annular bulging. Dimensions of the central canal are still within the normal range.

L2-L3: Diffuse annular bulging by 3 mm, mildly asymmetric towards the right side, compressing the thecal sac with slight posterior displacement of the right L3 nerve root. Mild bilateral hypertrophic facet arthrosis of mild ligamentous thickening. Combined factors have resulted in mild central stenosis. Moderate right-sided and mild left-sided foraminal stenosis due to the annular bulging and facet arthrosis.

L3-4: Diffuse annular bulging asymmetric towards the right side measuring 3 mm AP compressing the thecal sac with slight posterior displacement of the right L4 nerve root. Moderate bilateral hypertrophic facet arthrosis at moderate ligamentous thickening. Combined factors have resulted in mild to moderate central spinal canal stenosis. Right foramen is moderately stenotic with mild to moderate stenosis of the left side.

L4-5: Annular bulging by 3 mm. Broad-based posterior right-sided extrusion type herniation extending from the right central zone to the entrance of the right foramen measuring 6-7 mm AP with caudal right central subligamentous migration of extruded disc material by approximately 7 mm. Extruded disc material measures approximately 5 mm AP and 7 mm in width. At the disc level, the herniation compresses the thecal sac with posterior displacement of the right L5 nerve root and has contributed to moderate to severe right-sided foraminal stenosis abutting the right L4 nerve. Extruded disc material compresses/entraps the right L5 nerve root within the lateral recess. Moderate to advanced bilateral hypertrophic facet arthrosis or ligamentous thickening. Combined factors have resulted in moderate to severe central stenosis. **CONTINUED**

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L5-S1: Spondylolytic spondylolisthesis of L5 is again noted by 20-25%. Combination of severe disc narrowing and spondylolisthesis have resulted in severe bilateral foraminal distortion and stenosis with compression/flattening of both exiting L5 nerves. Central canal maintained.

IMPRESSIONS:

1. Disc Herniation (Extrusion Type) L4/L5: Broad-based posterior right-sided extrusion extending from the right central zone to the entrance of the right foramen with right central caudal migration of disc material by 7 mm. Herniation measures 7 mm AP and has contributed to moderate to severe right-sided foraminal stenosis abutting the right L4 nerve. Herniation also displaces and entrapsthe right L5 nerve root detailed above.

2. Central Spinal Canal Stenosis: Multilevel acquired stenosis which is mild at L2/L3, mild to moderate L3/L4 and moderate to severe at L4/L5.

3. Spondylolytic Spondylolisthesis of L5 by 20-25%. Spondylolysis Is Remote. Comparison with weightbearing x-rays to rule out instability.

4. Foraminal Stenosis L1/L2, L2/L3, L3/L4 and L5/S1: Multilevel bilateral foraminal stenosis L1/L2, L2/L3, with right-sided stenosis L3/L4. Severe bilateral foraminal distortion and stenosis L5/S1 with compression of the exiting L5 nerves.

5. Disc degeneration/spondylosis: Multilevel degenerative change throughout the lumbar spine and T12/L1 level most severe at L5/S1. Varying degrees of annular bulging noted at each level.

6. Facet arthrosis: Multilevel arthrosis L1/L2, L2/L3, L3/L4 and L4/L5 levels.

7. Cystic lesion left kidney: Suspected benign renal cyst at the inferior pole. Ultrasonography advised.

<u>Electronically signed by Edward J. Dailey, D.C., D.A.C.B.R</u> on 1/20/2020 8:03 AM Radiologist Edward J. Dailey, D.C., Diplomate, American Chiropractic Board of Radiology