LUMBAR INTERVERTEBRAL DISC SYNDROME L4/5 LEFT WITH COMPRESSION OF L5 NERVE ROOT AND GRADE 2 RADICULAR COMPONENT

Submitted by
Bryce J. Milam, DC
Portland, Oregon
March 18, 2011

Case History

On 9/5/2006, a 30 year old male presented with complaints of pain in the lumbosacral and sacroiliac area with radiating pain into the left leg to his mid calf. He reported the onset of his pain was approximately one week prior while pulling a small quad out of the sand he felt a tearing sensation in his low back. He then caught a 4 year old child who jumped off the back of his truck. At that point the patient collapsed to his knees and had severe onset of lower back pain with significant difficulty standing. His onset was immediate and progressively worsening. His pain level at time of presentation was approximately 8/9 on a 10-point pain scale. Provocative activities were sitting up, standing, bending. Palliative factors were limited to a cortisone injection that he had received at the emergency room at Portland Adventist Hospital. He described the pain as sharp, shooting, aching and tightness in his lower back on the left side, which was constant and radiating into his left leg. He described some prior history of lower back pain, however were not near as significant.

Treatment History

Treatment consisted of his presentation to Portland Adventist Emergency Room. No formal diagnosis was given. He was prescribed over the counter medication and a Cortisone injection with minimal relief.

Past medical History

Past medical history was non-contributory with prior hospitalization for surgery for a cyst on his hand. Fractures were limited to his hand. Current medication at the time of his presentation was Vicodin and Valium.

Physical Examination

Patient presented as a normal, male adult, slightly overweight, with an antalgic posture, restricted gait and cooperative demeanor. Height recorded at 5’8”, weight 200 pounds. Lumbar range of motion was recorded actively observed. Flexion 10/60 degrees. Extension 10/25 degrees. Left lateral flexion is 20/25 degrees. Right lateral flexion 5/25 degrees. Orthopedic

and neurologic examination demonstrated the following positive findings: Kemp's on the left, Lasegue on the left with grade 2 radicular component at 40 degrees, Braggard test on the left, Goldthwaite positive left lumbar, Nachlas positive left, sitting Lasegue positive bilaterally, bilateral leg raise positive, left greater than right, Yeoman's test on the left. He demonstrated tripod sign during the course of his examination with +3 muscle spasming in the lumbosacral and sacroiliac area deep paraspinal left. A left lateral listing of his torso was noted on observation. Bowel and bladder were reported to be normal.

Radiographic Examination

Radiographs ordered that day included AP and lateral views of the lumbar spine, performed in the upright position. The films were negative for recent fracture or dislocation. There was a Schmorls node in the lower thoracic and upper lumbar spine. Mild degenerative changes were noted at L4/5. There was no spondylolisthesis. There was asymmetry of a facet joint plains between L4/5 and L5/S1 with a sagittal component on the left and coronal component on the right. A moderate left lateral listing of spine was noted with the left femoral head approximately 1mm inferior in relation to the right. Sacral base is 2mm inferior to the right measuring at the sacral grooves. Sacral base angle was recorded at 27 degrees and there was some decrease in lumbar lordosis with flattening of the lumbar curve.

Lumbar spinal imaging

MRI examination of lumbar spine was performed 9/19/2007. History of the exam was left radiculopathy and low back pain. Clinical impression: A large extruded fragment at L4/5 left with caudal extension was noted. There were minimal findings at other levels but no significant clinical findings.

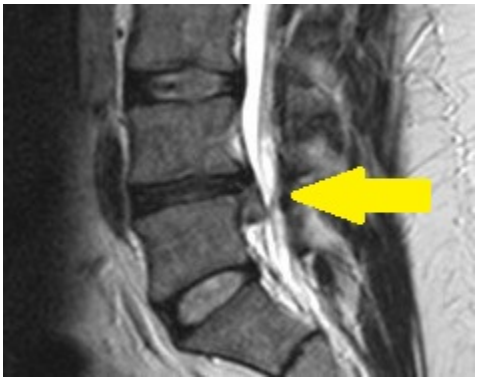

Figure 1 shows a large extruded disc fragment posterior at L4/5 on the left extending inferiorly into the lateral recess of the upper margin of the L5 body with compression of the nerve root.

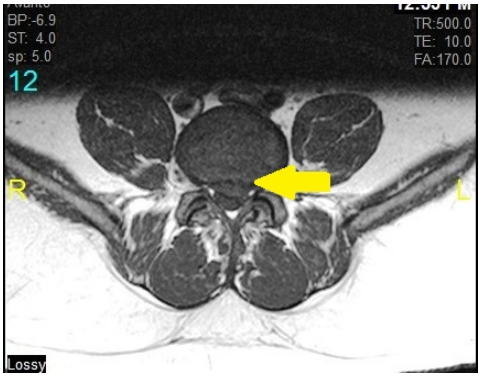

Figure 2 Large posterior disc protrusion is noted.

Diagnosis

Large disc extrusion (HNP) L4/5 left with resultant nerve root compression, consistent with patient's clinical presentation and examination findings.

Treatment plan

Subsequent, the patient was referred for an orthopedic surgical consultation and was seen 10/3/2007. Clinical assessment by the surgeon was a large disc herniation. He was scheduled for lumbar discectomy. He continued to undergo Cox® Protocol 1 chiropractic spinal manipulation for approximately 2 weeks at which time he was approximately 60% better. He was then subsequently seen for neurological evaluation with clinical impression that did not show any evidence of neurological deficit and continued chiropractic management with Cox® Protocol 2 recommended and initiated.

Clinical Outcome

Within 30 days the patient had achieved approximately 90% resolution of his pain and continued to work without restriction at which point he was released to return for treatment on an as needed basis. Patient was instructed in appropriate rehabilitative exercises Cox® 1, 2, 3 lower back exercises with graduation to the remaining seven exercises.

Conclusion

The patient's condition to date is still stable and satisfactory. He has occasional exacerbation of his complaints of lower back pain and occasional radicular component, however these usually subside within 2-3 treatments with Cox® Protocol 2 treatment directed at L4/5. His prognosis remains favorable with adherence to appropriate biomechanics, which he was instructed in during his back school and reviewed with on a visit by visit basis. The patient continues to utilize a lumbosacral support with symptomatic flare-up; however he remains working at full capacity with very limited discomfort. Overall clinical outcome has been excellent with Cox® Technic.