

## UPPER LUMBAR DISC HERNIATION WITH CENTRAL AND FAR LATERAL STENOTIC CHANGES RESULTING IN ANTERIOR THIGH PAIN

### History, Examination & Imaging Review:

A 53-year-old white married female is referred to me from a local chiropractor for the chief complaints of right low back pain which radiates into the right anterior thigh, stopping at the knee. History shows that she slipped on ice on 2/27/08 at which time the low back pain started which then progressed into the right anterior thigh. The pain intensity in the low back is rated at a VAS of 8 and in the right anterior thigh at a 9. It is a constant pain and aggravated by lifting and bending. She is taking Aleve and Vicodin for the pain.

She is on a very lengthy list of medications for GERD, respiratory problems, hyperlipidemia, and methotrexate for undiagnosed connective tissue disease. She also takes various vitamins and minerals.

Examination reveals that she is in a de-conditioned state. So far as her general health, blood pressure is 120/89, pulse rate 60 beats per minute of sinus rhythm. She is alert times 3, quite easy to work with and quite cooperative. Her heart and lung sounds are normal.

Examination revealed normal deep tendon reflexes at the patella and ankle, a positive sitting straight leg raise producing low back pain. She can toe and heel walk normally while the quadriceps' strength on the right is 4 plus and on the left is 5. The straight leg raise is negative except for tight hamstring muscles. No sign of hip disease is noted.

Review of the MRI (*See images at the end of this report.*) reveals generalized disc degeneration through out the lumbar spine with an L3-L4 right paracentral disc protrusion and possible fragment which does contact the cauda equina and exiting L3 nerve root. Facet arthropathy is present at L3-4 and overall mild central stenosis and right foraminal narrowing is seen at L3-4. There is also an L2-L3 far lateral left disc protrusion that does create spinal stenosis in the canal and most likely disc material located within the right anterior aspect of the spinal canal at the level of the right pedicle of L3.. Also noted is an L4-L5 left far lateral disc herniation that creates spinal stenosis and mild left foraminal narrowing. A shallow left paramedian protrusion is seen the L5-S1 level with mild left foraminal narrowing present.

### Diagnosis:

The probable cause of this patient's right anterior thigh symptoms is the L3-L4 right paracentral disc prolapse causing stenosis of the foramen and compression of the L3 nerve root. There is an L2-L3 right far lateral inferior migrated disc extrusion within the right anterior aspect of the spinal canal at the level of the right pedicle of L3. These stenotic changes would account for the femoral nerve root and dorsal root ganglion origin of the anterior right thigh pain.

## Treatment Plan:

Long Y-axis decompression with Cox® flexion-distraction of the L3-L4 and L2-L3 disc prolapses was performed daily for the first week, four times the second week, three times a week the third week, and then twice weekly for two weeks for a total of 18 adjustments. Contact for administering long y-axis decompression was the L2 spinous process. Electrical stimulation to reduce inflammatory fluids and sedate the inflamed nerve root was given. This patient was administered treatment for constipation as well. On her second visit, 3/10/08, her low back and thigh pain reduced from VAS 9 to 6. The result of this treatment plan was reduction of the anterior thigh pain to VAS of 6 and back pain to 7 on the sixth visit. The patient noted relief of both back and thigh pain and was quite satisfied with the relief. On the tenth visit, the leg pain was at VAS 3 and the back pain at VAS 5, substantial relief. At the end of eight weeks of care and 23 visits, the pain was VAS 1 in the anterior right thigh and VAS 3 in the low back.

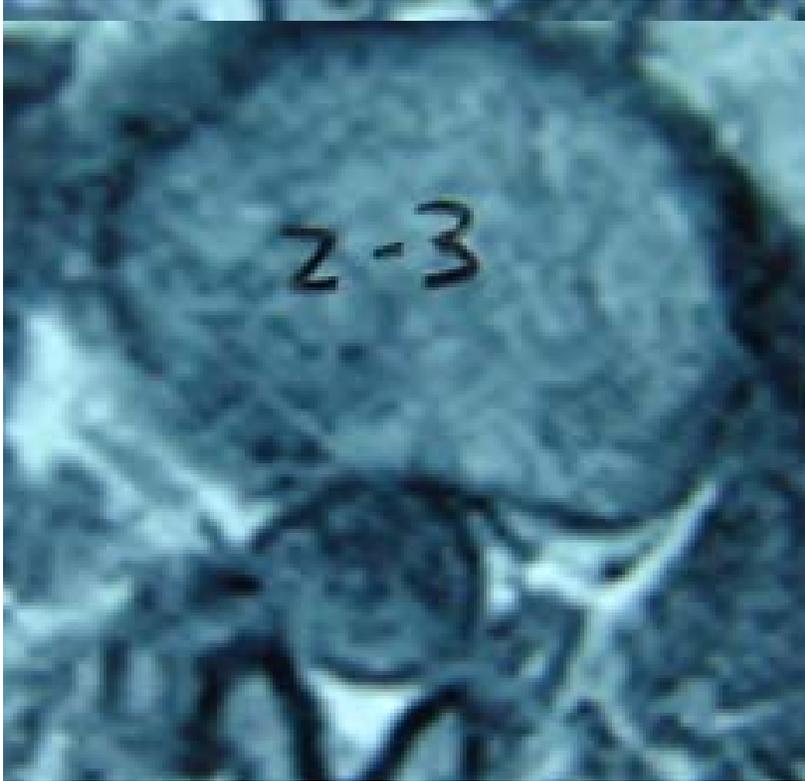
Throughout the spinal adjusting with Cox® Technic flexion-distraction and decompression, the patient increased home rehabilitation exercises as relief allowed. This patient is a school bus driver and was back to driving her bus at one month of care. This patient was very satisfied with her relief and very willing to allow publication of her case.

This patient was referred to me by another chiropractor who did not have the Cox® work to treat this patient, and yet the doctor wanted the patient treated with my work. He recognized the serious problem of upper lumbar far lateral disc herniations and the great challenge they can be to relieve. I applaud this young chiropractor for the referral. It makes the profession, the doctor, and the patient look and feel good.

Please review the MRI of the disc herniations and stenosis involved with this case and recognize the challenge of such high lumbar disc prolapse stenosis changes. I think any chiropractor treating cases of femoral nerve pain and upper lumbar disc herniation and stenosis will be stimulated to incorporate this type of chiropractic adjusting for such cases.

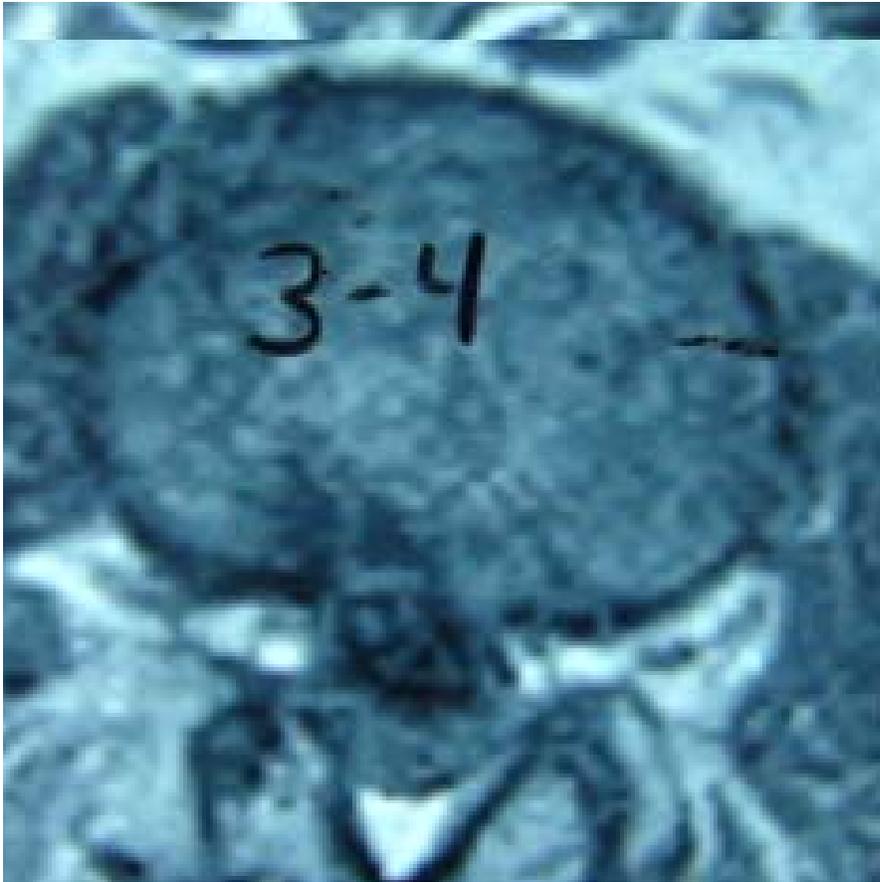
Sincerely Yours,  
James M. Cox, DC, DACBR  
[www.coxtechnic.com/casereports.asp](http://www.coxtechnic.com/casereports.asp)  
May 13, 2009





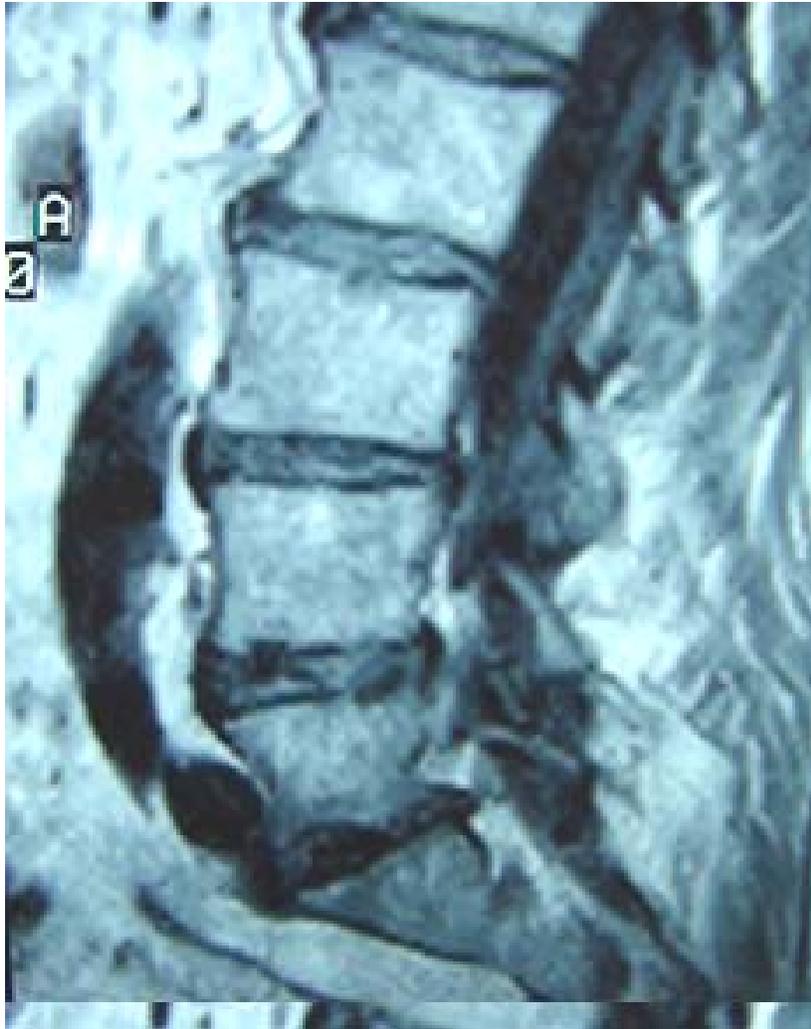
*(special note: Your reading right is the right side of the MRI image.)*

Note the far lateral L2-L3 disc extrusion of probable disc material located within the right anterior aspect of the spinal canal at the level of the right pedicle of L3 to create stenosis of the osseoligamentous canal and both nerve root and dorsal root ganglion potential compression and chemical irritation. This image reveals the most stenosis of any lumbar level of this spine.



*(special note: Your reading right is the right side of the MRI image.)*

Note the disc bulging and early facet arthropathy and small focal right paramedian disc protrusion that creates spinal stenosis and contacts the thecal sac. Also mild right foraminal stenosis is noted.



Sagittal image shows the generalized disc degeneration throughout the lumbar spine with L5-S1 disc bulging. The stenosis is not appreciated on this sagittal image as appreciated on the axial images shown at the L2-3 and L3-4 levels shown above.