



5th Lumbar Disc Herniation with Spondylolisthesis Treated with Cox® Technic Flexion-Distraction

by

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INTRODUCTION

This case was special in that the patient was told by a neurosurgeon that his only treatment option was surgical intervention to stabilize his 40% spondylolisthesis. The surgeon informed this patient that other healthcare providers may claim to be able to address his condition, but they in fact could not. The patient was unwilling to accept this prognosis and began his own internet search to explore his treatment options. Our personalized Cox® Technic Complete website was the key to this patient finding our office and scheduling a consultation for a second opinion.

HISTORY AND CHIEF COMPLAINT

On 8/7/13, a 54 year old male patient presented to Cross Chiropractic Center with unbearable low back, left hip and left hamstring pain. The patient arrived on crutches and had to be driven to his appointment. He reported that a few weeks earlier he had run a 5K. Within the next couple days, he was in excruciating pain and could basically only lie in the supine position with weight bearing nearly impossible for almost the last month. One interesting comment by the patient was not only his inability to put any weight on his left leg but also that it was very painful to take *all* the weight off his leg. The patient reported that he had been relatively healthy with no major back or leg problems until this episode. He did report right ankle surgery in 1979 that caused him little if any problem. The patient also reported weight lifting and running as his primary form of exercise and was a healthy weight and body fat percentage. The patient actually reported losing several pounds during his recuperation.

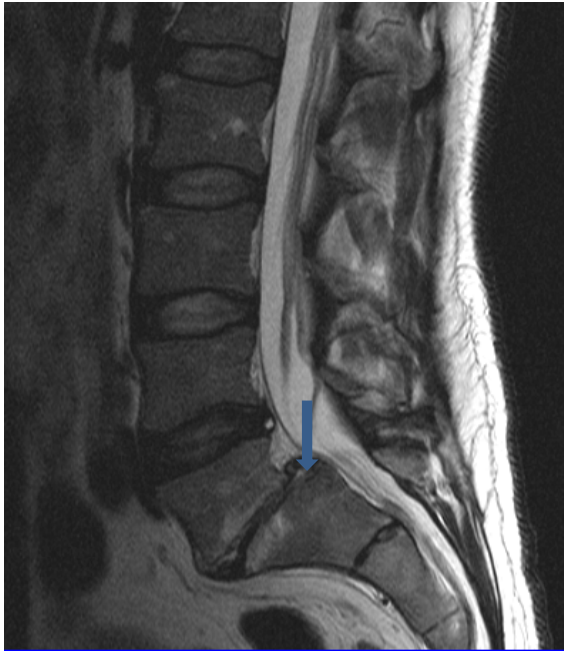
Besides a neurosurgeon, the patient had received chiropractic adjustments from another DC with little improvement. He stated that he was looking for a “new solution” and was adamant that back surgery was going to be an absolute last option.

EXAMINATION

Initial examination was very difficult due to the severity of the pain in the patient’s low back and left hip as well as the inability of the patient to tolerate range of motion, muscle testing, etc., in his left leg. The patient reported a VAS of 7 in his three main areas of complaint. He did have an MRI to review and was sent to therapy for interferential muscle stimulation. The MRI revealed L5 spondylolisthesis as well as severe L5 degeneration with an annular tear.

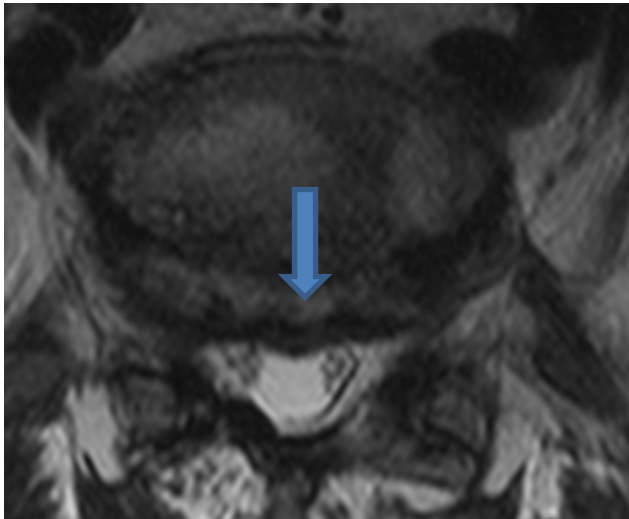
Straight Leg Raise was negative, positive bilateral Nachlas was present causing pain in the lumbosacral junction with greatly reduced bilateral internal and external hip rotation. Point tenderness was noted on the left SI joint as well as the L4 and L5 vertebra. Severe trigger points were identified in the left quadratus lumborum, lateral hamstring and peroneus longus muscles.

IMAGING

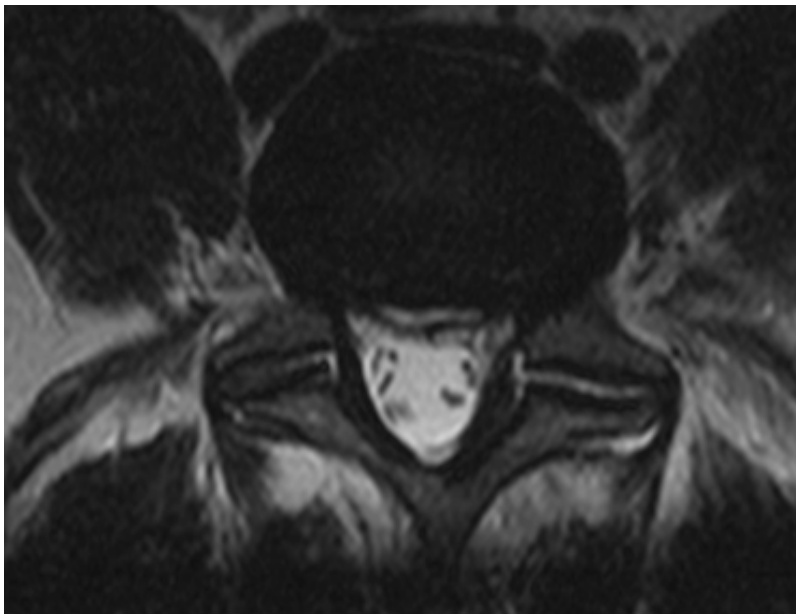


Legend for sagittal MRI of lumbar spine (added by Dr. Cox):

1. The L5-S1 disc space is severely degenerated with a forty percent spondylolisthesis slippage of L5 on sacrum. L5 appears buttress fused to sacrum. To further test the stability of L5 on sacrum flexion and extension views, or more preferably Friberg's vertical suspension study, could be ordered.
2. Posterior to the L5 vertebral body the superior sacrum shows pseudodisc formation with hyperintensity within the disc material. (see arrow)
3. Note that the L4-L5 disc is desiccated with a small disc bulge noted containing a high intensity zone. The cauda equina at the L3-4 and L4-5 levels does not show ligamentum thickening nor endplate or facet hypertrophy to introduce spinal stenosis.
4. Note the sclerosis of the endplates of the inferior L5 and superior sacrum



L5S1 axial image showing the pseudodisc (see arrow) of spondylolisthesis with a small central disc protrusion that contacts the thecal sac. Facet arthrosis is also noted bilaterally.



L4-L5 axial image showing central disc protrusion containing a high intensity zone indicating annulus fibrosus inflammatory change.

DR. COX'S OPINION ON THIS CASE:

Buttressed spondylolisthesis of L5 on sacrum is seen with complete disc degeneration of the L5 disc. Axial image reveals a pseudodisc with a central disc herniation as noted in the report. The L4-L5 disc is hypointense indicating internal disc derangement with a high intensity zone suggesting inflammatory chemical degeneration of the annulus fibrosus. There is a central disc herniation as well.

The symptom is left low back and thigh pain with no true sciatica or neurological deficit. The spondylolisthesis is old and not of significance at this time, but rather the L4-5 disc, having

assumed the range of motion and compression forces that once were at the L5-S1 level, now undergoes instability, degeneration, chemical inflammation and results in scleratogenous pain and perhaps some neural compression due to bilateral foraminal narrowing.

Fusing of L5 spondylolisthesis would not have been the answer for this person as the symptoms appear to be probably due to the changes at the L4-5 level which were addressed with long y axis distraction.

- James M. Cox, DC, DACBR

DIAGNOSIS AND TREATMENT

The initial diagnosis was 5th lumbar disc herniation with severe degeneration, and I also reported to the patient that I felt his spondylolisthesis was stable, and the neurosurgeon's recommendation for stabilization surgery was unnecessary. The patient's MRI report was brought to the office a few days after his initial visit that supported my diagnosis of an annular tear at L5. The patient also later informed me that his pain management doctor also supported my diagnosis and felt the spondylolisthesis was stable and would not require a surgical intervention. An initial care plan of 30 visits over a three month time plan was discussed and agreed upon with the patient.

Initial treatments consisted of 30 minutes of Solaris Interferential Muscle Stimulation with the patient supine on an ice pack followed by his adjustment. Visits were daily until the patient reported 50% subjective VAS improvement. The Cox 7 Table® was utilized to administer Cox® Protocol 1 to the lumbar spine to decompress the lumbar disc, relieve pain, increase function and initiate disc healing. The Impulse iQ adjusting instrument was also employed to treat the surrounding musculature of the hips and lower extremities to create additional balance and reduce additional stress to the lumbar spine. The patient was given home care instructions that consisted of the application of ice every four hours to the lower lumbar spine, limited sitting, limited lifting and bending and the utilization of a lumbar brace to support the L5-S1 joint complex. The patient also received a lumbar cortisone injection 2 weeks after the start of care at our office.

RESULTS AND OUTCOME

The patient reported immediate improvement on the second visit. After two weeks of care the patient's pain had begun to centralize and Cox® lumbar Protocol 2 was initiated as well as 5 minutes of automated long y axis distraction at 1 inch. Not only did the patient's pain greatly reduce, but his left leg function improved greatly to the point he no longer needed the use of crutches and was driving on his own. The patient has stayed very consistent receiving 2-3 adjustments every week since starting his care plan. He has been able to tolerate the Cox® lumbar Protocol 2 and has increased his automated y axis distraction to 2" for 10 minutes. We are being very cautious with this patient, and limited exercise has been incorporated at this time.



He is back to work fulltime and has successfully taken an out of town business meeting that required a 4 hour drive each way. The recommended Cox® Exercises will be added to his active care recovery plan as his health continues to improve. The patient has also been made very aware that his condition is degenerative and that the treatment he has received is designed to *control not cure* his back issues. He also has started a regimen of Discat and has been instructed to take this dietary supplement for the next 6 months to further aid in the recovery of his L5 disc. The patient has expressed his intention to continue care after the initial 30 visit care plan to maintain the correction we have attained. He also cancelled his second cortisone injection much to the displeasure of his pain management doctor.

Respectfully submitted,
Travis Cross BS, DC