# Large L5-S1 Disc Herniation Avoids Surgery with Cox® Technic

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#### INTRODUCTION

Though commonly seen, this case of a patient struggling to find relief from a disc herniation and related symptoms follows a path from off work, medical doctor visits, rest, physical therapy, other forms of chiropractic, MRI, then to our care with Cox® flexion-distraction. Within a month of care, he found relief measured by a VAS drop of 8 to 10 to a 3 after months of trying other means of relief.

## PRESENTATION & EXAM FINDINGS

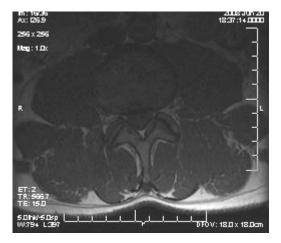
**History/chief complaint:** 51 year old African-American male is seen for the chief complaint of lower back pain, with radiation into the right lower extremity (burning and pain) to the foot. This started 5 months previously of unknown etiology. Patient stated he was lying down at home, got up and just felt lower back pain. He did not treat it for the first 3 weeks. He continued to work, as a construction worker. The pain increased and started radiating into the right leg about 3-4 weeks after the initial onset. He went to his medical doctor, where he had an exam, x-rays, and taken off of work for 2 weeks. He was also referred for physical therapy by his medical doctor. The patient underwent 8-9 sessions of physical therapy, which gave him relief. He returned to work, without restrictions, with complaints of intermittent lower back pain. After a couple of months, the lower back pain worsened again. He went back to his medical doctor, was sent for an MRI, and was taken off of work again. No additional treatment was performed medically. The patient was recommended to have surgery. He chose to see a Doctor of Chiropractic in my town instead. He had 3 treatment sessions. He did not benefit from the diversified side posture adjusting, and stopped seeing that doctor. He then entered my office. He describes the pain as being present all of the time, and increased with sitting, driving, bending, lifting, and with a bowel movement. He states the lower back pain and leg pain as having a VAS score of 8 to 10, constant, and unbearable at times. He has a positive past medical history of a work related injury one year ago, a lower back injury. He lifted a 2"x4" piece of wood, rested, had no medical or chiropractic treatment, and he states it resolved on its own 2 weeks later. Otherwise, the patient has a negative past history, including no past MVCs, no surgeries, and no fractures. He has no health problems.

**Examination:** Examination reveals the following positive orthopedic tests: Minors sign, right bechterews, valsalva, left kemps, right SLR at 45 degrees, and right Braggards. Negative orthopedic tests: WLR. Left antalgia is present, and a slowed and limping gait is present. Toe and heel walk is normal. Bilateral lower extremity patellar and Achilles reflexes are +1 bilaterally. Sensation testing of the bilateral lower extremities reveals right L5 dermatome hypoestesia. Ranges of motion are restricted to all planes, and severely painful. Flexion is 55 degrees, extension is 10 degrees, lateral flexions are 10 degrees bilaterally, and rotations are 10 degrees bilaterally. Bilateral lower extremities muscle testing is normal, +5 bilaterally, to dorsiflexion, hallux extension, plantar flexion, hallux flexion, foot eversion, and quadriceps. Palpation reveals severe tenderness and spasms of the right L5-S1 paraspinal muscles, and right gluteus maximus muscle. Right popliteal fossa moderate tenderness to palpation is also noted. Palpatory PI right ilium subluxation is present.

**Imaging:** AP and lateral lumbar x-rays were performed at an outside facility prior to entering this office, which revealed mild degenerative changes, including small osteophytes at L3-L4, and L4-L5 levels. Otherwise, unremarkable.

MRI of the lumbar spine without contrast was performed one week prior to initially being seen in this office. This reveals a 13mm right paracentral lateral recess disc herniation that extrudes inferiorly impinging on the right transiting nerve root. There is right lateral recess and right foramina stenosis. The left neural foramina is patent.





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Sex: M

Date of Service: 6/20/2008 7:17:00PM

Exam: (AVM) MRI LUMBAR SPINE WITHOUT

CONTRAST

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PALMDALE, CA 93550

Fax #

EXAMINATION: MRI LUMBAR SPINE WITHOUT CONTRAST

REASON FOR STUDY: Low back pain.

COMPARISON STUDY: No prior examination is currently available for comparison.

TECHNIQUE: Using the GE Signa 1.5 Tesla MRI scanner, the following pulse sequences of the lumbar spine were obtained: sagittal T1, sagittal T2, coronal T1, axial T2.

FINDINGS: The alignment of lumbar spine is anatomical. All lumbar vertebral bodies are normal in height and contour. There is disc desiccations at L3-L4, L4-L5 and L5-S1.

The signal intensity and morphology of the conus medullaris is normal ending at L1. The signal of bone marrow is normal.

- T12-L1 shows no significant disc bulge or disc herniation. The central canal and neural foramina are patent.
- L1-L2 shows no significant disc bulge or disc herniation. The central canal and neural foramina are patent.
- L2-L3 shows no significant disc bulge or disc herniation. The central canal and neural foramina are patent.
- L3-L4 shows a 3 mm circumferential bulge more prominent on the right compared to the left. There is effacement of the anterior thecal sac. There is a slight decrease in the AP dimension of central canal to 1 cm. The neural foramina is mildly narrowed on the right.
- L4-L5 shows a 3 to 4 mm central disc herniation that extrudes inferiorly. There is effacement of the anterior thecal sac. There is a slight decrease in the AP dimension of central canal to 1.1 cm. The neural foramina is mild to moderately narrowed bilaterally.
- L5-S1 shows a 1.3 cm right paracentral lateral recess disc herniation that extrudes inferiorly impinging on the right transiting nerve root. There is a right lateral recess and right foramina stenosis. The left neural foramina is patent.

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Exam: (AVM) MRI LUMBAR SPINE WITHOUT

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#### IMPRESSION:

- A LARGE RIGHT PARACENTRAL LATERAL RECESS DISC HERNIATION AT L5-S1 THAT EXTRUDES INFERIORLY AND IMPINGES ON THE RIGHT TRANSITING NERVE ROOT AND CAUSES A RIGHT LATERAL RECESS AND NEURAL FORAMINA STENOSIS.
- 2. A 3 TO 4 MM CENTRAL RIGHT PARACENTRAL DISC HERNIATION AT L4-L5 THAT EXTRUDES INFERIORLY WITH MILD CENTRAL CANAL STENOSIS AT L4-L5.
- 3. A MILD CIRCUMFERENTIAL BULGING DISC AT L3-L4 WITH MILD CENTRAL CANAL STENOSIS AS DESCRIBED.

End of diagnostic report for accession:

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Transcribed By: MM 06/23/2008 4:08PM

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## **DIAGNOSIS**

- 1. A large right paracentral lateral recess disc herniation at L5-S1 that extrudes inferiorly and impinges on the right transiting nerve root and causes a right lateral recess and neural foramina stenosis.
- 2. Right lumbar sciatic radicular neuralgia.
- 3. Ilium segmental dysfunction.

## **TREATMENT**

Cox® flexion-distraction decompression manipulation to the lumbar spine was performed. Protocol #1, contact at L4 level. Adjunctive low volt positive galvanic electrical muscle stimulation to the L5-S1 disc, followed by tetanizing currents to the right lumbar paraspinal and posterior hip, and posterior knee, along with the application of ice packs were also performed. The patient was also advised on home care, including ice to the lower back 3 to 4 times daily for 30 minutes each time, for the first week. He was also given the Cox® lower back exercise sheet, and advised to perform the top 3 exercises only until he is 50% improved in the leg region. Thereafter, he was advised to do the next 4 exercises on the sheet.

The patient was treated daily for the first week, and 3 times per week for the next 3 weeks. He was re-examined on his 12th visit, which was almost 4 weeks after the initial visit. He improved on the VAS scale, initially being an 8-10, at re-examination being a 3. Re-examination revealed the following positive orthopedic tests: right SLR at 65 degrees, Valsalva, right Kemps. Negative tests include: Bechterews, and Minors sign. Ranges of motion were improved with no pain to any planes. Flexion at 75 degrees, extension at 25 degrees, right lateral flexion at 25 degrees, left lateral flexion at 30 degrees, and bilateral rotations at 30 degrees. Palpation revealed slight right L5 paraspinal myotenderness and myotightness, and of the right buttock, and right posterior thigh. Aggravating factors still included sneezing, sitting, bending and lifting, but the patient states he avoided the lifting and bending as much as possible.

The patient treated twice weekly for the subsequent 6 weeks, at which time he was a 1-2 on the VAS scale, and has since decided to do supportive care due to being a construction worker. He treats 1 to 2 times per month. Currently he has no pain, takes no medications, continues to do lower back home exercises and is careful in his work and home activity.

## **DISCUSSION**

This patient is currently being treated to maintain his level of relief at a 1 to 2 on the VAS scale. It is also to prevent him from experiencing any flare-ups of lower back and leg symptoms. Physiologically, the point in treatment from here on is to preserve the osseoligamentous space, maintain low intradiscal pressures, maintain normal physiologic ranges of motion (1), maintain or further promote reduction of the herniated discal material in the canal (2) and to prevent any future nerve impingement.

## **CONCLUSION**

This patient was told by his medical doctor that he would need surgery for this disc herniation. He was also told that no other treatment could help him. He chose to try conservative care via chiropractic first. (3) This resulted in an excellent outcome for this patient. He has been doing supportive care for the past 8 sessions and, to date, is doing extremely well. This patient is a big believer in the Cox® Technic and chiropractic care for the care of lower back problems and has become a great referral source to my practice. This case demonstrates that the proper type of chiropractic care for a lower back disc herniation is imperative. It also proves that the Cox® Technic can have great results, despite what the medical community states, and when surgery appears to be eminent.

## REFERENCES

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