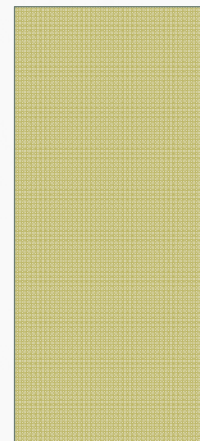


LUMBAR DISC INJURY

**"JUANITA"
CASE PRESENTATION**



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APRIL 2012 – TORONTO COX® SEMINAR PART II

AGENDA

1. Initial visit & presenting complaint

2. Mechanism of injury

3. Previous treatment

4. MRI and results

5. Physical Exam & Clinical Impression

6. Treatment Plan & Progress to date

7. Questions

INITIAL VISIT-PRESENTING COMPLAINT

Patient

- 35 year old female, referred by family physician
- Previously very active (long distance runner)

Symptoms at Presentation

- PAIN: lower back ,right hip, left hip, right posterior thigh
- PAIN: fifth toe bilaterally (feels like `baby toe pointing outward`)
- NUMBNESS: anterior lower leg and feet

Symptom progression from initial injury

- Began in right lower extremity and then progressed to the left

PRESENTING COMPLAINT CONT'D

Bladder dysfunction

- Can't tell at times if she needs to go to washroom. Resorted to going every two hours so she does not have an "accident."

Cannot drive

- Cannot drive due to increased numbness in right foot while sitting

Postural dysfunction

- Leans to her left and slightly forward to relive symptoms after a long day

Pain rating

- 6-9/10 in lower back
- 5/10 in the right thigh

AGGRAVATING/ALLEVIATING FACTORS



- ✓ Sitting
- ✓ Bending at the waist
- ✓ Walking
- ✓ Coughing / Sneezing
- ✓ Bowel movement



- ✓ Lying down on her side
- ✓ Hot shower, hot pack

MECHANISM OF INJURY & PREVIOUS TREATMENT

Repetitively lifting special needs child at work - occurred sometime in Sept. 2011

Referred by family physician to physiotherapy

Symptoms progressively worsened even with the provision of physiotherapy. Eventually stopped working in first week of December 2011

Referred for MRI of the lumbar spine by her physician

MRI & RESULTS

MRI

- Took place December 6, 2011

Indication for MRI

- "Rule out Cauda Equina"

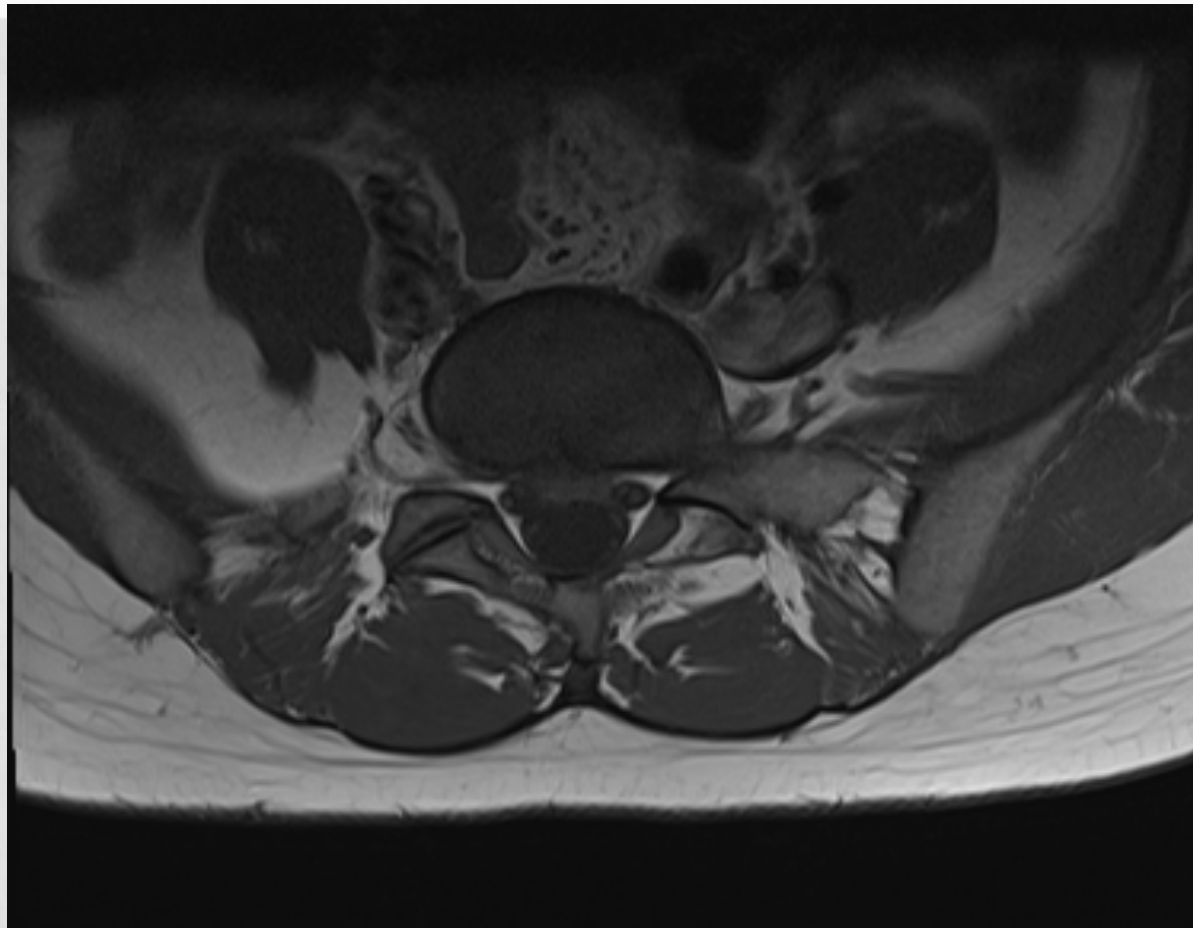
Technique

- Multiplanar multisequence MR images of the lumbar spine were performed without contrast

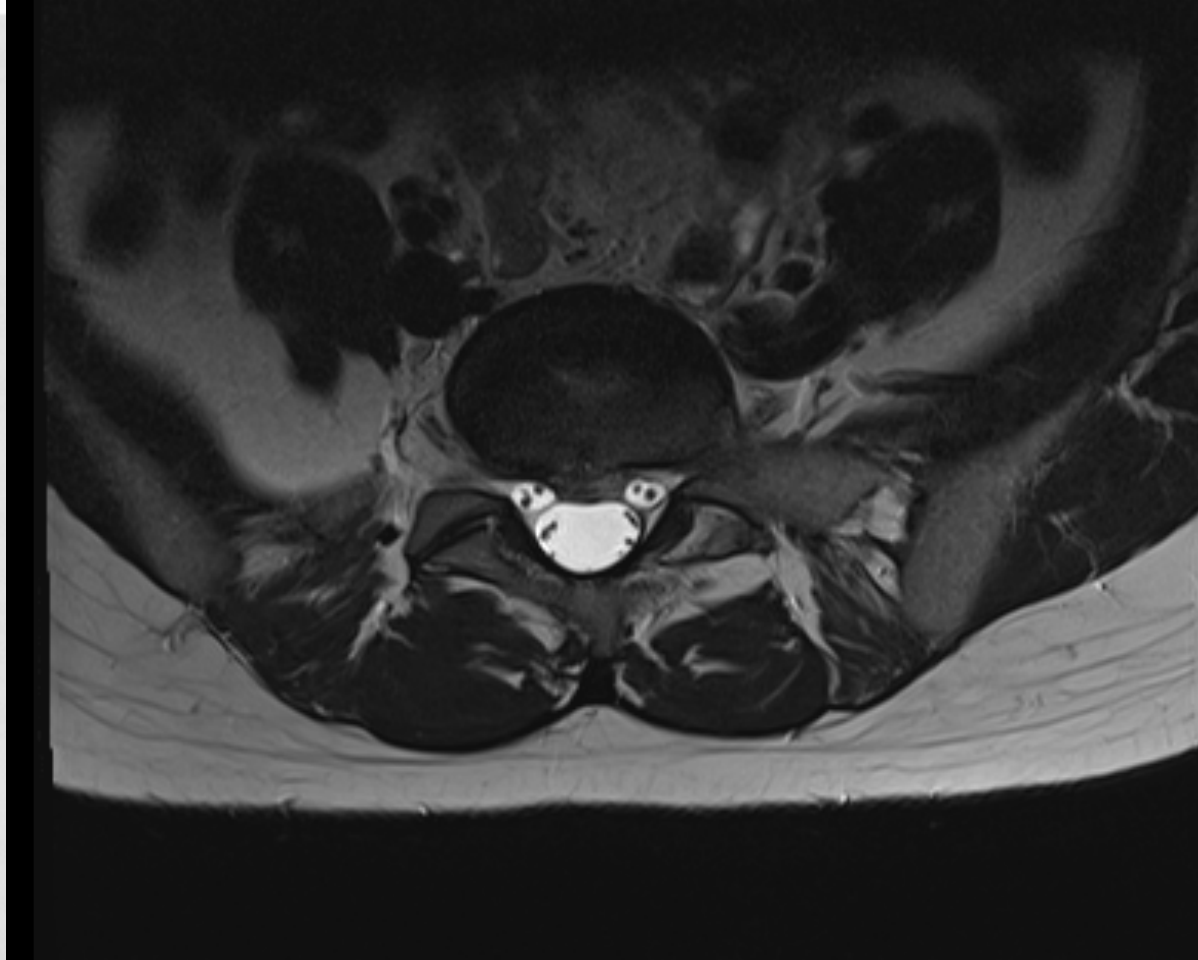
Findings

- L5-S1 moderate size posterior canal focal disc protrusion (1.1 cm x 0.6 cm)
- no evidence of significant spinal canal or neuroforaminal narrowing
- No evidence of cauda equina.

T1 WEIGHTED CORONAL IMAGE



T2 WEIGHTED CORONAL IMAGE



T1 WEIGHTED SAGITTAL IMAGE



T2 WEIGHTED SAGITTAL IMAGE



PHYSICAL EXAM

1. AROM of the lumbar spine severely restricted in all directions except extension (about $\frac{3}{4}$ normal with pain)
2. Tenderness in lower back paraspinals from approximately L4-S1 and right gluteal musculature
3. Seated SLR positive for lower back pain with either leg elevated, and “slumping” worsened symptoms
4. Positive Minor’s sign
5. Peripheral neurological exam revealed;
 - decreased sensation in sole of right foot
 - weakness in right calf musculature with single leg stance (not an issue with heel and toe walk)
 - reflexes 2+ bilaterally
 - no clonus noted

CLINICAL IMPRESSION



S1 radiculopathy secondary to L5-S1 central disc bulge

Physician's diagnosis: lumbar spine with radiculopathy

Orthopedic surgeon's/neurologist's diagnosis: LBP

TREATMENT PLAN

- Requested MRI report before treatment is to begin
 - Wanted to see MRI and report myself given her symptoms.
- Used Cox® Distraction Manipulation Protocol One
 - 3 times per week and reduce based on 50% rule
- Patient advised to seek emergency care if any worsening of bladder dysfunction occurs

TREATMENT RESPONSE - MONTH 1

Week 1

Week 2

Week 3 - 4

Treatment begins 3 X week

Patient develops soreness in lower back after treatment, returns to normal symptoms on follow day.

- Patient notices decreased symptoms in lower extremities.
- No bladder dysfunction for 2 consecutive days
- Able to walk up stairs pain free

Patient is able to drive short distances.

Patient returns to work on modified duty (by Week 5).

TREATMENT RESPONSE - MONTHS 2-3

Month 2

Month 3

**Treatment continues
3 X week**

**Treatment reduced
to 2 X week**

Symptom-free for most of
the day.
Some discomfort in right
thigh and numbness in
toes bilaterally.

**Treatment reduced
to 1 X week**

Began exercising (elliptical
machine) to improve her
conditioning

Able to complete all of COX®
lower back exercises without
issue

TODAY, SHE IS ABLE TO DO THE FOLLOWING:

- Sits for approximately 40 minutes without pain or numbness
- Uses elliptical for 25 minutes without symptoms
- Engages in proprioceptive ball (Cox®) exercises without issue
- Engages in light running for short distances

