



FLEXION-DISTRACTION DECOMPRESSION TREATMENT OF LUMBAR DISC HERNIATION WITH RADICULOPATHY AND COMPLICATIONS OF MORBID OBESITY AND OPIOID ADDICTION

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OBJECTIVE:

The purpose of this paper is to document the efficacy of Cox Flexion-Distraction Decompression protocol on a patient with radiculopathy (1) who has significant co-morbidities and how they affect the duration of time to achieve acceptable results.

CLINICAL HISTORY:

A 56-year-old white male presented for treatment on 10/18/19 with symptoms of lower spine pain with radiation of pain into both legs extending to the knees. The pain has persisted for approximately one year and was of unknown origin. The condition was reported as gradually worsening, with VAS pain level 8/10 and Oswestry Low Back Disability Index at 58%. Bowel and bladder function were reported as normal. The patient acknowledged past history of Tinnitus, Diabetes, and Thyroid disorder.

Past treatment consisted of Chiropractic manipulations, Spinal injections, Pain medications and Physical therapy. He is currently taking (4) 5.3MG Tablets of Oxycodone per day.

EXAMINATION:

The patient was attentive and cooperative and showed visible signs of pain. He had pain on standing and walking. The patient was 72" in height and weight 350 lbs., BP 165/88 with pulse rate 84.

- Dejerine's sign was positive
- Lumbar Range of Motion: Flexion 20 degrees/ Extension 25 degrees/ Rt Lateral Flexion 35 degrees/ Left Lateral Flexion 25 degrees / Rt Lt rotation 5 degrees... All ranges of motion elicited pain.
- Deep Tendon Reflexes: Achilles Rt. +2, Lt. +2 Patella Rt. +2 Lt. +2
- Lower Extremity Muscle Test:
- Gastrocnemius Rt. 5/5 Lt. 5/5
- Quadriceps Rt. 5/5 Lt.5/5
- Ant. Tibialis Rt.5/5 Lt.5/5
- Extensor Hallicus Longus Rt.5/5 Lt.5/5
- Gluteus Medius Rt.5/5 Lt.5/5

ORTHOPEDIC TESTS:

The following test elicited a positive response of moderate to severe pain: Bechterew's bilateral, Kemp's bilateral w/o radiation to legs, Straight leg raise right at lumbosacral at 30 degrees, Braggard's on right, Bilateral leg raise bilateral lumbosacral pain, Popliteal press test bilateral.

PALPATION AND PERCUSSION:

Moderate to severe spasm of Quadratus lumborum bilaterally with palpatory pain over spinous at L4.

IMAGING:

X-ray showed extreme loss of lumbar lordosis with anterior weight bearing. All disc spaces were well maintained and there was no evidence of fracture or gross osteopathology.

MRI:

Large 6mm central disc extrusion with significant compression of the thecal sac. There was occlusion of the osteoligamentous canal bilaterally with thickening of the ligamentum flavum.

**TREATMENT:**

Cox® Flexion-Distraction decompression protocol utilizing the “Cox 8” instrument.

Low Volt Galvanism applied to L4 disc space

Instrument adjustment to Sacroiliac joints to reduce neuroarticular dysfunction

Home exercises prescribed to improve flexibility and strength to lumbar spine.

Nutritional support consisting of 1500 mg Chondroitin sulfate and 1200 mg of Glucosamine sulfate in “Discat Plus” to be taken daily.

TREATMENT DURATION:

Patient was under continuous treatment with decreasing frequency from Oct. 23, 2019 to Aug. 5 2020.

During his treatment period the patient had several orthopedic consultations where options of more spinal injections and possibly back surgery. He chose not to pursue these options but rather continue with conservative care.



RE-EXAMINATION/OUTCOME:

Changes over initial outcome measures were as follows: Low back pain/leg pain VAS 1/10 with infrequent 5/10. Oswestry Low Back Index - 34%

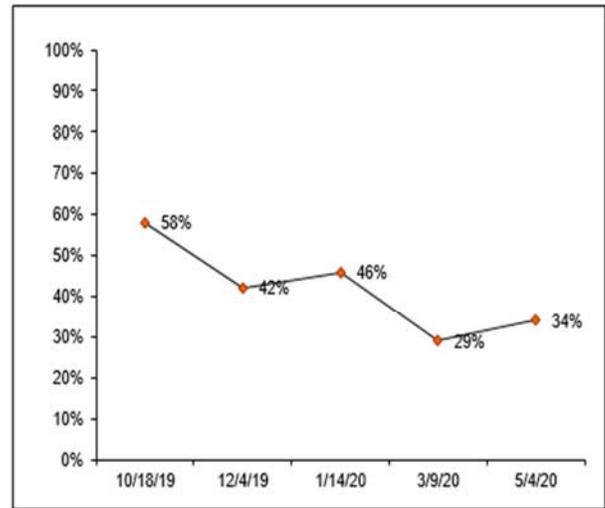
Orthopedic Tests: All negative except Bechterew’s, Well Leg Raise and Bilateral Supine Leg Raise which remained mildly positive.

All Deep tendon reflexes: +2 / All Lower Extremity muscle tests 5/5

Range of Motion: Lumbar Flexion 80 degrees w/o pain/ Extension 30 degrees mild pain/ Right lateral flexion 40 degrees w/o pain/ Left lateral flexion 30 degrees w/o pain.

Current reduction in oxycodone (1) 5.3 mg tablet daily

Assessment Date	Results
10/18/2019	58%
12/4/2019	42%
1/14/2020	46%
3/9/2020	29%
5/4/2020	34%



Initial	10/18/2019	58%	Current Change	-17 %
Last	3/9/2020	29%	Overall Change	41 %
Current	5/4/2020	34%		

CONCLUSION/DISCUSSION:

This case demonstrates that patients with severe disc involvement with radiculopathy can respond acceptably to the proper conservative treatment. Flexion-Distraction Decompression following the Cox protocol is an effective treatment for these patients. This case also shows that a patient who has multiple co-morbidities with an opioid addiction will respond to conservative measures, but not necessarily in what is considered a normal time frame. The decision to continue conservative treatment vs. invasive back surgery should be more of a mutual agreement between the patient and treating physician. All other medical opinions should play a role also in this decision as well as patient satisfaction with care and desire to continue it should be high priority in the decision-making process.