SunCoast SpineCare & Chiropractic Neurology
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Cervical Radiculopathy and Headache Helped with Chiropractic Cox® Technic System of Spinal Pain Management

Patient: Ms. D

CHIEF COMPLAINT:

On 10/24/23, this 65 year old patient presents with frequent neck pain, rated an 8/10, that radiates into the shoulders and intermittently radiates down the bilateral upper extremities to the hands with burning. She does get intermittent paraesthesia and numbness and possible weakness since she does report that she drops things more often. Turning her neck to the left definitely aggravates and she avoids that movement. The left side appears to be worse than the right. She has a long history of neck and back problems. She underwent fusion of L5-S1 with no issues post-op. She was getting injections and taking medication for the neck pain until 9 years ago when she started seeing two chiropractors which did provide some temporary relief. She is uncomfortable while sleeping and is looking for a good pillow. Sleep apnea also contributes to this. Over the last 6 months the symptoms have become worse.

HISTORY:

1-2 months ago, in addition to the neck pain, she began to experience suboccipital headaches and what she describes as an issue with her vision and pain in her ears. She went to the ER where they could not find a problem and an ophthalmologist, who said her vision got slightly worse and she has a mild cataract but nothing that would be causing her symptoms. She was previously diagnosed with asymptomatic pituitary adenoma and goes for MRIs of the brain every 3 years, and it has not changed. She also went to an ENT which was unremarkable. The latest MRI was a month ago and it showed no change.

IMAGING:

MRI Cervical Spine 11/3/23
At C2-3,
The disc space height is maintained, with decreased disc hydration.
There is no posterior disc bulge, protrusion or extrusion.
There is no spinal canal stenosis.
No neural foraminal stenosis is seen.
Facets have moderate degenerative change.

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At C3-4,
The disc space height is maintained, with decreased disc hydration.
There is no posterior disc bulge, protrusion or extrusion.
There is no spinal canal stenosis.
No neural foraminal stenosis is seen.
Facets have moderate degenerative change.
At C4-5,
The disc space height is decreased, with decreased disc hydration.
There is a mild relatively symmetrical circumferential disc bulge present.
There is mild spinal canal stenosis.
No neural foraminal stenosis is seen.
Facets have moderate degenerative change.
At C5-6,
The disc space height is maintained, with decreased disc hydration.
There is abroad based disc bulge posterior and posterior-laterally.
There is mild spinal canal stenosis.
There is moderate left sided neural foraminal stenosis.
Facets have moderate degenerative change.
At C6-7,
The disc space height is decreased, with decreased disc hydration.
There is a mild relatively symmetrical circumferential disc bulge present.
There is mild spinal canal stenosis.
No neural foraminal stenosis is seen.
Facets have mild degenerative change.
At C7-T1,
The disc space height is maintained, with decreased disc hydration.
There is no posterior disc bulge, protrusion or extrusion.
There is no spinal canal stenosis.
No neural foraminal stenosis is seen.
Facets have mild degenerative change.
PARASPINAL SOFT TISSUES:
No soft tissue abnormality is noted.

EXAMINATION:

PAST HISTORY:	Sleep apnea
MEDICATIONS:	Crestor, Vitamin D, pristique for anxiety.
REVIEW OF SYSTEMS:	Patient denies cardiovascular, respiratory, digestive system disorders as well as bowel or bladder issues.
SURGERY:	Lumbar fusion
SOCIAL HISTORY:	Patient does not consume alcohol or smoke.

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OBJECTIVE:

PART MEDICARE ASYMMETRY/MISALIGNMENT (LOCATION)
Subluxation listings: C3-4, C4-5, C5-6, C6-7

MEDICARE RANGE OF MOTION ABNORMALITY (LOCATION, INCREASED/DECREASED MOVEMENT):
CERVICAL (neck) ROM (range of motion) normal values:
Forward flexion / 45 degrees
Extension / 45 degrees
Left Lateral Flexion / 45 degrees
Right Lateral Flexion / 45 degrees
Left Lateral Rotation / 80 degrees
Right Lateral Rotation / 80 degrees
Limitations noted in active range of motion: left and right rotation 50 and 55 degrees with pain.
Pain upon left and right lateral flexion and extension.

MEDICARE RANGE OF MOTION ABNORMALITY (LOCATION, INCREASED/DECREASED MOVEMENT):
LUMBAR (low back) ROM (range of motion) was compared to the following normal values:
Flexion / 90 degrees
Extension / 30 degrees
Left lateral flexion / 35 degrees
Right lateral flexion / 35 degrees
Left rotation / 30 degrees
Right rotation / 30 degrees
Limitations noted in active range of motion: None

Foramina Compression Test: Positive

Patient reported no increase in symptoms in the lumbar region during Valsalva's maneuver.
==>Kemp's Test was negative bilaterally.
==>Toe Walk Test was performed and was normal.
==>Heel-Walk Test was normal bilaterally.
==>Bechterew's Test was negative.
==>Hibbs test was normal.
==>Laguerre's was negative bilaterally.
==>The Lasegue (Straight Leg Raise) Test was negative bilaterally.
==>Braggard's Sign was absent.
==>Petren Flip was absent.
==>Milgram's Test was negative.

NEUROLOGICAL TESTING:

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==>Muscle strength was normal in the upper and lower extremities at 5/5 bilaterally
The upper and lower deep tendon reflexes were normal at +2 bilaterally in the Biceps, Brachioradialis, Triceps, Patellar and Achilles.
Superficial sensation was normal and equal when tested with a pinwheel in the upper and lower extremities over the C5, C6, C7, C8, T1, L4, L5 and S1 dermatomes.
Babinski sign absent.

PROPRIOCEPTIVE CHALLENGE TEST:
Standing on left LE: <1 seconds with eyes open
Standing on right LE: <1 seconds with eyes open

Comprehension and speech intact.
Cerebellar signs-Romberg absent. No dysmetria.
No Pronator Drift
Double Simultaneous Stimulation intact
Pallesthesia (Vibration) ABSENT IN THE LOWER EXTREMITIES.
JP intact
Topesthesia intact
Tremors absent
Involuntary movements absent
Gait-normal
Coordination- finger to nose normal, heel to shin, fast finger movements and alternate movements normal
Graphesthesia intact
Cortical Functions:
Patient is alert and oriented X3.

Cranial Nerves:
I - deferred
II- visual acuity deferred. Pupils equal, reactive to light and accommodation.
III, IV, VI-extraocular movements normal
V-normal and equal facial sensation, normal muscles of mastication.
VII- normal movement of the forehead of mouth (muscles of expression), orbicularis oculi
VIII-hearing appears normal
IX-uvula movement normal
X-normal gag reflex
XI-normal trapezius and levator scapulae shrugging
XII-Tongue protrusion symmetrical

MEDICARE TISSUE SYSTEM CHANGES (SYSTEM, LEVEL/LOCATION, TISSUE CHANGE):

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Soft tissue palpation of the upper body was essentially normal with the exception of tenderness in the left cervical paraspinal muscles, right cervical paraspinal muscles and interspinous ligaments. Trigger points and hypertonicity of the trapezius muscles noted.

DIAGNOSIS / ASSESSMENT:

M99.01 Subluxations Cervical
M50.121 Cervical Disc Disorder with Radiculopathy C4-5
M50.122 Cervical Disc Disorder with Radiculopathy C5-6
M50.123 Cervical Disc Disorder with Radiculopathy C6-7
M54.2 Cervicalgia
E66.01 Obesity due to Excess Calories

TREATMENT PLAN:

I reviewed my findings with the patient and explained my recommendations for treatment. The treatments will be administered 3x per week for one month. At the end of that time patient will be reexamined to determine the progress and necessity of future care. The goal is a minimum of 50% improvement[3] in her condition within the first 30 days.

SHORT TERM TREATMENT GOALS:
Alleviate the symptoms. Eliminate the regional muscle spasm in the areas associated with the complaints. Increase the lumbar range of motion (ROM) to normal without pain. Decrease the tenderness in the area. Restore the ability to perform normal ADL's (activities of daily living) without pain.

Treatment consists of:
Cox® Technic Flexion Distraction manipulation which was performed on C3-4, C4-5, C5-6, C6-7 Protocol 1 with axial distraction.
CMT consisting of Pierce Stillwagon Sacroiliac
Pulsed therapeutic ultrasound, 3.3 MHz at 1.5 W/cm2 for 8 minutes (97035) was performed over her cervical paraspinal muscles.

PROGRESS:

Ms. D received her first treatment on 11/6/23. She returned on 11/8/23 with a significant improvement in her symptoms. She did not have any radiating pain, paraesthesia, or numbness in her upper extremities. The pain level was down to 3/10. She continued with treatment at a frequency of 3x per week and over the next 3 weeks; her pain was intermittent and varied between 0 and 3/10. More recently, she is symptom free including her headaches and is no longer dropping objects. She was also 60 pounds overweight when she initially came to my office, and she went on my weight management program and has lost 25 pounds to date.

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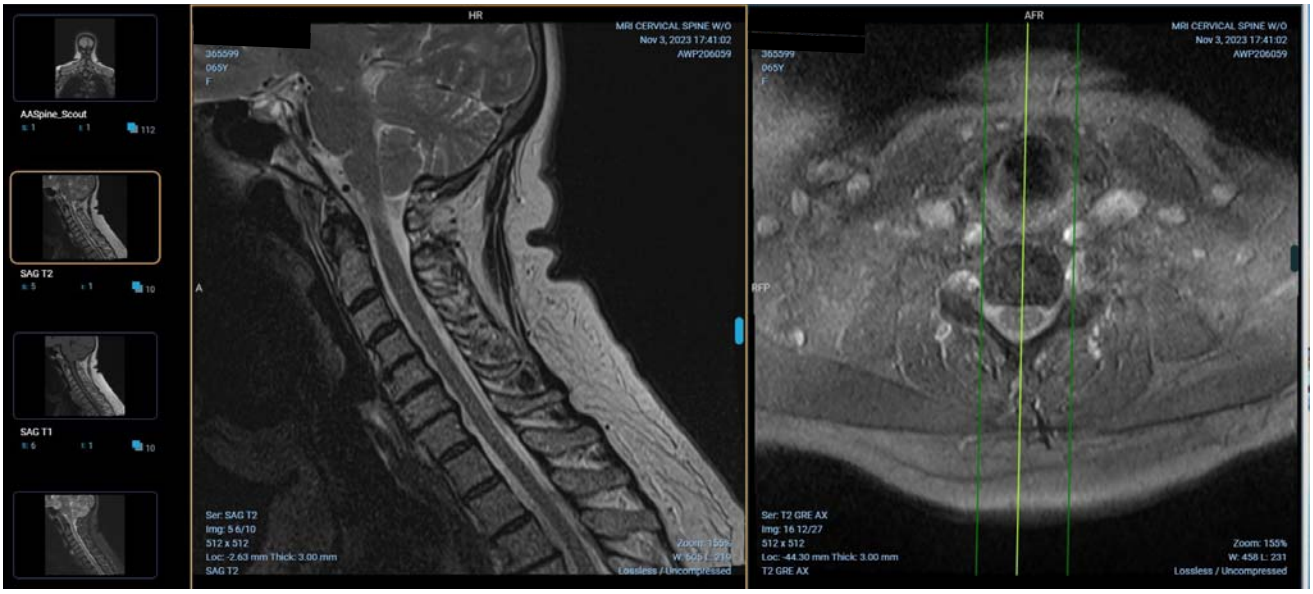
Following is a screenshot of the MRI.



DISCUSSION:

I can safely state that Cox® Technic Flexion Distraction Decompression (CTFDD) has changed this patient's quality of life and without it, she never would have responded as well as she has, and I am confident it will save her from future surgery. The fact is that a patient with cervical radiculitis/radiculopathy caused by discopathy will usually be helped with CTFDD.[1] By utilizing the Cox® procedures to reduce the intradiscal pressures, spinal irritation can be removed resulting in improvement of symptoms.[2] I have been in practice for 40+ years and for many of those years have looked at the upper cervical spine as the cause of most headaches until I did my post-graduate work in neurology. This opened my eyes to the effects of the cervical spine on the trigeminal nerve as a cause of headaches. As discussed in *European Spine Journal*,[3] Persson et al conclude that lower cervical disc radiculopathy can cause headaches. 60% of the participants in their study receiving a nerve block gained relief of their headaches. However, they do not speculate as to the pathophysiology of headaches.

In a National Institutes of Health prospective study, Diener et al[4] found that 80% of patients with cervical disc prolapse causing neck pain, radicular symptoms into the upper extremities and headaches respond well to surgery. They go on to speculate that the cause of the headaches is the association between the lower cervical nerves and the trigeminal nucleus.

As with all treatments we must discuss contraindications. CTFDD has very limited contraindications. They include acute fracture and stroke, intolerance to contact, claustrophobia (as the treatment is performed with the face down on a headpiece - this situation can be accommodated), cancer and advanced osteoporosis (which have caused loss of

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structural integrity), spinal fusion (unhealed, unstable), rheumatoid arthritis with ligament laxity. [5]

REFERENCES:

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4. Diener HC, Kaminski M, Stappert G, Stolke D, Schoch B. Lower cervical disc prolapse may cause cervicogenic headache: prospective study in patients undergoing surgery. Cephalalgia. 2007 Sep;27(9):1050-4. doi: 10.1111/j.1468-2982.2007.01385.x. Epub 2007 Aug 3. PMID: 17680818.
5. “Are there contraindications to receiving Cox® Technic?” https://www.coxchiropracticfwcrc.com/faq.aspx