Barral Institute Case Study

Neural Manipulation - SI/Low back pain

Linda Oberdorfer PT, CNMP

Abstract: A case study of a 61 y.o. female suffering from SI/Low back dysfunction after a fall that developed sudden arm pain and distal weakness in her hands that resolved with treatment of neural manipulation.

KEY WORDS: Arm pain and weakness, neural manipulation

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Diagnosis: Neck and dorsalgia with UE pain and weakness as well as SI/back pain..

History: Patient had a hard fall on concrete on her coccyx on 03/04/17 resulting in an injury to SI/coccyx and back. She was treated with chiropractic and some PT for the low back and pelvis/SI difficulties. She developed sharp pain in the UE’s with high level 9/10 pain on 10/23/17. On 10/25/17 she presented in PT for treatment of an emerging neck and arm pain down her Rt. arm to the wrist and fingers to include radial, median and ulnar distributions. Aggravating factors were postural deficits, computer use and weakness of cervical and scapular stabilizers. Surgical history includes brain tumor surgery in 1993, 1999 breast surgery and 2014 hysterectomy.

Objective Assessment:

Posture: Patient stands with an extreme forward head posture with C6/C7 anterior to T1 with an extreme and fixed dorsal kyphosis lower in the thoracic spine than is the normal curve with bilateral scapulae abducted.

Cervical ROM:

Forward bending: 20 degrees Backward Bending: 1/3 range

Rotation Rt.: 35 degrees and Lt. is 40 degrees Side bend Rt. and Lt. are to 20 degrees each

Thoracic spine rotation Rt. was to 15 degrees and Lt. was to 20 degrees.

Special tests: (+) Adson Wrist on Rt.

DTR’s at Rt. Biceps was 1+ and brachioradialis was 2+ Lt. was 2+ on both Upper Limb Tension test was (+) on Rt. for median, radial and Ulnar tension.

Strength: gross grasp with dynamometer on 3 Trials:

Rt.: 5#, 7#, 3# Lt. : 42#, 53#, 62#

Age and sex norms for a 61 y.o. female with this dynamometer on Rt.; 55.1 # Lt.45.7# indicating Lt. was within norms and Rt. was significantly weakened.

Sensation: Patient was experiencing pain into the ulnar, median distributions with slight decreased sensation to light touch experienced as a hypersensitivity to touch.

Treatment : From 10/23/17-12/29/17 the patient received four 60 minute treatments with each treatment starting with a general listening and ending with a reassessment general listening to ensure a change had been made. Patient was then assessed on each visit with a listening at the vertex and RCPM to guide treatment. After neural manipulation technique, reassessment was done to determine next site of treatment by a listening at vertex or RCPM/sacrum or LE/UE. Patient was treated with neural manipulation to the brachial plexus and down the Rt. Arm to the distal distributions of Radial, Median and ulnar nerves. She received neural manipulation on occipital nerves, cervical plexuses, Phrenic and Vagus nerves as needed. Tentorium cerebelli was also released as was Falx Cerebri. Treatment was directed by Listening as vertex and RCPM as well as General Listening. She was also instructed in a HEP of neural gliding ex as well as upper quarter mobility ex. Treatment sessions were 60 minutes each and she received 4 treatments dedicated to this issue.

Reassessment: On 12/21 patient was re-assessed and had 3/10 pain in neck and infrequent symptoms into UE’s. Gross grasp on Rt. was 62# and on Lt. was 58#. Re- evaluation ROM of neck was as follows: Forward bending: 30 degrees from chest BB:

½ range Rot Rt. and Lt.: to 60 degrees each Rt. side bend 30 and Lt. 25 degrees. Thoracic spine rotation was to 30 degrees Rt. and Lt. was 35 degrees.

Conclusion and Discussion: Patient had an episode of acute weakness in Rt. UE which was greatly decreased with use of neural manipulation. Treatment was guided by listening techniques which helped localize the aspects of the neural tensions present.

Treating Therapist.: Linda Keahey-Oberdorfer, PT

References:

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