Barral Institute Case Study

Neural Manipulation – Foot pain/gait abnormalities

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Case Study 9

Abstract: A 53 y. o. female with pain in Rt. foot pain that is significant and not allowing her to walk normally that resolved using neural manipulation.

Key Words: Pain and neural manipulation

Date: 02/28/17

Diagnosis: Pain in Rt. foot with production of gait abnormalities.

History: Patient has seen a podiatrist and is referred to PT after she had long trips in December of 2017 involving lots of walking and she began to limp and have Rt. foot pain. Past medical history includes endometrial cancer with a complete hysterectomy and removal of lymph node surgery 2017 for which she received PT, lymphedema following CA surgery with PT treatment; tear of Lt. post calf muscles 2000 with PT treatment, hypothyroidism.

Patient is unable to accept weight on Rt. foot in gait and even stands with most of weight on left foot. Walking aggravates her pain and she is unable to walk for than 10 minutes, climb steps or hike.

Objective Assessment:

Posture: Patient stands with a pelvic asymmetry with Lt. iliac crest elevated and decreased wt. acceptance on Rt. In supine, asymmetry at pubic symphysis and sacral rotation Rt on Rt. and coccyx deviated Rt.

Gait: (+) Trendelenberg and decreased wt. acceptance in gait with no push off.

ROM: Bilateral hips are limited in flexion to 90 degrees and extension on Rt. is a 5 degree flexion contracture and Lt. is 0 degrees. Knee flexion is WFL and patient has 2 degrees of recurvatum at both knees. Prone knee bend is on Rt. 90 degrees/Lt. 100 degrees

Ankle ROM on Rt. dorsiflexion is 5 degrees short of neutral and Lt. is 0 degrees. Plantarflexion on Rt. is ¼ range and Lt. is WFL

Inversion is 2/3 range Rt. and Lt. is WFL. No calcaneal eversion on Rt. foot or Lt.

Patient is unable to extend DIP jt. Lt. great toe.

Strength: Rt. ant. Tib is 4+/5 and functionally patient cannot lift heels due to weakness/pain in gastroc/soleus. Lt. musculature is 5/5

Neuro:

Proprioception: single leg balance on Rt is poor and she cannot stand for 1 second. Lt. is fair at 5 seconds.

Neural tension: Positive in Rt. on SLR at 20 degrees and in femoral nerve at 90 degrees prone.

Treatment: Patient was evaluated for 60 minutes with 5 follow up visits of 60 minutes each from her initial eval on 01/15/18 until reassessment on 02/28/28. Prior to each treatment, assessment was done with general listening followed by listening at LE and Sacrum. Treatment sequencing was done following local listening and LE listening.

Patient was treated with MET/visceral techniques to equalize pelvis and sacrum/coccyx. Listening techniques guided neural manipulation treatment to Obturator, Femoral and Sciatic nerves and into distal branches into foot.

Reassessment: Patient had not c/o pain in her foot and she was able to accept wt. and walk with wt. acceptance onto her Rt. Foot. Patient is able to move her feet into 10 degrees of dorsiflexion and plantarflexion and inversion = bilat.

Prone knee bend is to 100 degrees on Rt. and SLR is to 45 degrees bilat.

Discussion: Neural tension prevented patient from being able to wt. bear and produced pain in her Rt. foot which limited her ability to walk She is now able to move her foot and ankle but will need to be followed for strengthening ex and to improve mobility at hips and stability at hips and pelvis. The pain reduction in foot allows her to now turn her attention to her strengthening goals.

Conclusion: and Recommendation: Assessment of neural tension caused by abdominal/pelvic surgery was needed to treat distal foot pain. Further study of visceral/neural relationships in pelvic areas needs to be studied. These relationships were guided by listening techniques to be able to treat the appropriate tissues.

Treating Therapist: Linda Keahey- Oberdorfer, PT

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