

Case Study

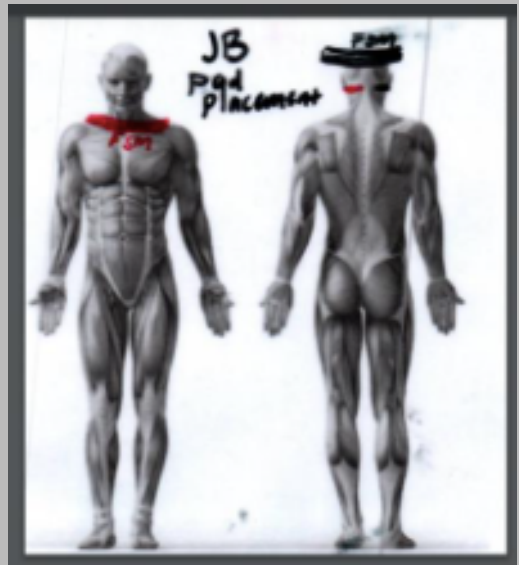
Vestibular Dysfunction,
Balance Impairments

PERFORMED AT:

*Performance PT and
Wellness*

DIAGNOSIS:

Patient is a 73 year old female with increased dizziness and balance impairments. Patient PMH that includes lightheadedness and feelings of nausea when walking.



TREATMENT AND OUTCOME:

Patient was seen 2x/week for treatment with neurobiological electrical stimulation. We utilized Neubie pads on her mastoid processes (initially negative on R mastoid, positive on L and switched polarity halfway through) then added pads on plantar aspects of B feet (negative on L, positive on R). Treatment included VOR activities in standing on floor and foam, tilt-board tasks, walking with and without head turns, etc. We also did Neubie cervical loosening and master reset in conjunction with upper cervical mobility/manual skills and IDN as well as B foot bath as pt still has peripheral neuropathy (more on R vs. L). With treatment, patient noticed significantly less trunk sway during static standing and less dizziness with gait, especially in busy environments. She has better sensation into feet and notices she runs into doorways less and she feels more steady when walking in community.

CLINICAL FINDINGS:

Negative Dix Hallpike and log roll testing

Negative for nystagmus both horizontally and vertically

Dynamic walking with head turns: poor balance and LOB

Disdiadokynesis: slowed on BUE and LE especially with alternating movement

Fakuda step test: negative but did turn ~3 steps to left mild impairments with B finger to nose test with significant undershooting on R with moving finger

VBIt test: negative

Cervical ROM WNL B but difficulty rotating past mid clavicle on B sides Poor balance with SLS on R side with eyes open <5 secs, unable to maintain longer than 1-2 secs with eyes closed and with head turns B

Inability to ambulate in straight line with moderate to severe deviation to R, slight lateral lean to L to compensate

Patient very slow with transfers, increased sxs when leaning forward to get out of chair and upon standing and righting herself, pt states that sxs reduce upon standing after less than 5-10 seconds.

Severe pes cavus B with pt noting inability to wear standard tennis shoes

DISCUSSION:

Patient progressed much faster with the use of neurobiological electrical stimulation as we were able to treat multiple body systems at once including her neuropathy, upper cervical mobility limitations, and her vestibular impairments, all of which were contributing to her symptoms.

PATIENT PERSPECTIVE:

Patient states that she felt that she progressed very quickly with PT and noticed changes much faster this time than she did when she was doing more "conservative PT" at a different clinic. While patient occasionally has some mild dizziness with repetitive looking up/down and with balance on very uneven terrain but denies any falls or headaches.