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Manual Physical Therapy and Cervical Joint Position Training for Cervicogenic Dizziness Following Whiplash-Associated Disorder: A Case Report

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Abstract Submission- CSM 2018

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Title Manual physical therapy and cervical joint position training for cervicogenic dizziness following whiplash-associated disorder: A case report

Background and Purpose Whiplash is defined as an acceleration-deceleration injury to the neck, which may lead to a variety of immediate and/or prolonged symptoms collectively known as whiplash-associated disorder (WAD). Cervicogenic dizziness is one possible sequelae that may arise from dysfunction within the structures of the cervical spine, disrupting the flow of sensory and proprioceptive feedback. The purpose of this case report is to demonstrate the efficacy of combining manual physical therapy and cervical joint position training on a patient with cervicogenic dizziness status-post motor vehicle accident (MVA).

Case Description A 28-year-old female with a history of MVA and chief complaint of a one-month history of progressive increase in left-sided headache and dizziness was referred to physical therapy from her primary care physician with a diagnosis of Benign Paroxysmal Positional Vertigo (BPPV). Physical therapy evaluation revealed impairments including joint mobility deficits, cervical joint position sense error, muscle imbalances and decreased neuromotor control. Functional limitations included difficulty with looking up and down, working on the computer, and carrying her child. At the time of initial evaluation, the frequency of symptoms was reported as a minimum of four days a week, for 75% of the day. The patient was seen two times per week for three weeks for a total of six sessions. Interventions included manual therapy, cervical joint

proprioception training, cervico-scapular stabilization, and therapeutic exercise including a home exercise program.

Outcomes Numerical Pain Rating Scale (NPRS) values improved from 5/10 to 0/10, Dizziness Handicap Inventory (DHI) scores significantly improved from 32/100 to 2/100, and Cervical Joint Position Error decreased to below the meaningful error value at the time of discharge. The patient reported no headaches or dizziness for ten days prior to discharge and denied limitations in function.

Discussion This case report supports the use of physical therapy intervention, including cervical joint position training and manual physical therapy, in the treatment of a patient status-post MVA with cervicogenic dizziness.

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