



Cervicogenic Dizziness

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Neck pain

Neck pain often accompanies dizziness, but it may be difficult to tell whether the dizziness and the neck pain are related or just coincidental. The influence of head position on equilibrium has been known since the mid-1800s.¹ However, a clinical syndrome relating neck pain and/or injury to dizziness and disequilibrium was not discussed until the 1950s.

Ryan and Cope² described a syndrome of disequilibrium and disorientation in patients with many different diagnoses of neck pathology including cervical spondylosis, cervical trauma, and cervical arthritis. They introduced the syndrome as *cervical vertigo*. As true spinning vertigo is rarely associated with this syndrome, *cervicogenic dizziness* is a more correct name for this syndrome and will be used here.

Cervicogenic dizziness

Cervicogenic dizziness tends to be a controversial diagnosis because there are no diagnostic tests to confirm that it is the cause of the dizziness.

Cervicogenic dizziness is a diagnosis that is provided to people who have

neck injury or pain as well as dizziness and in whom other causes of dizziness have been ruled out.^{3,4}

People with cervicogenic dizziness tend to complain of dizziness (a sensation of movement of the self or the environment) that is worse during head movements or after maintaining one head position for a long time. The dizziness usually occurs after the neck pain and may be accompanied by a headache. Often the dizziness will decrease if the neck pain decreases. The symptoms of dizziness usually last minutes to hours.

People with cervicogenic dizziness may also complain of general imbalance that may increase with head movements and with movement in the environment. Although no formal studies have been completed, true cervicogenic dizziness is thought to be rare.

An evaluation for cervicogenic dizziness involves a thorough medical evaluation because the symptoms are similar to other causes of dizziness. Testing of inner ear function is usually requested to ensure that the peripheral or central

vestibular system is intact. A health care practitioner may perform a maneuver in which the body is turned while the head is held fixed to see if it causes nystagmus (eye movements) or dizziness to confirm the suspected diagnosis. The results of this test need to be correlated with subjective symptoms and the clinical findings because the test can also be positive in healthy individuals.^{5,6}

Cervicogenic dizziness often occurs as a result of whiplash or head injury and is often seen in conjunction with brain injury or injury to the inner ear.^{4,7} It is often difficult to distinguish between cervicogenic dizziness and other medical problems. Cervicogenic dizziness that occurs in conjunction with brain injury or another form of dizziness will be more difficult to diagnose and treat. It is important to be patient while health care professionals sort through the problems and treat them in the most logical order.

The majority of patients with cervicogenic dizziness improve with only treatment of the neck problem. Several studies have reported that approximately 75 percent of patients improve with conservative treatment of the neck such as medication, gentle mobilization, exercise, and instruction in proper posture and use of the neck.⁸⁻¹⁰ For other patients, improvement involves treatment of the neck problem in addition to vestibular therapy. Vestibular

rehabilitation is directed at what problems are found on evaluation and may include eye exercises, balance exercises, walking, and graded exposure to environments that make you dizzy.⁴

Summary

Cervicogenic dizziness is a syndrome of neck pain accompanied by an illusory sense of motion and disequilibrium; it is a diagnosis provided to people once all other causes of dizziness are ruled out.

Cervicogenic dizziness will usually resolve with treatment of the neck problem but may require vestibular rehabilitation for complete resolution of symptoms. In general, the prognosis for patients with cervicogenic dizziness is good, with 75 percent of patients having improvement of symptoms.

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