

## BENIGN PAROXYSMAL POSITIONAL VERTIGO

This is one of the most common causes of dizziness and vertigo-type symptoms, and is unfortunately quite frequently misdiagnosed. BPPV is defined as an abnormal sensation of motion that is elicited by certain positions of the head and neck, which typically lasts for less than 20 seconds. When experienced, the dizziness is profound. Chiropractors are trained to diagnose and refer a patient immediately if a serious medical problem is suspected.

Causes: The most accepted theory is that otoconia (which can be imagined as microscopic rocks) become trapped in an inconvenient region of the posterior semicircular canal of the inner ear. This model can be compared with pebbles inside a tire. As the tire is rolled, the pebbles are picked up momentarily and then tumble down with gravity. This tumbling down of pebbles triggers the nerves inappropriately, thus leading to severe dizziness.

**Symptoms:** Severe dizziness is reported typically lasting less than 20 seconds, which is often initiated or worsened when moving the head/neck to one side. Rotating the head to the affected side and lying the patient down on their back often triggers the dizziness, and causes obvious fast tiny movements of the eye called nystagmus.

## How our experts can help:

There is a significant amount of evidence highlighting chiropractic treatment as a useful management approach for BPPV. The treatment options may include:

- Patient education and reassurance
- Epley Maneuver
- Home exercise prescription
- Referral and co-management with medical doctor
- \* Most episodes of dizziness/vertigo are non-life threatening, however it is advisable to seek the opinion of your Medical Doctor or Neurologist if you develop sudden or severe symptoms, especially if these are different from previous occurrences and do not sound similar to what was discussed above.





## CERVICOGENIC VERTIGO & DIZZINESS

This refers to dizziness that is directly related to the cervical spine (neck), which has been shown to have a critical role in balance and equilibrium. Abnormal sensory information from the neck to the brain may create a sense of "dizziness" or "vertigo" which can be debilitating. Whiplash is the most common cause. Chiropractors are trained to diagnose and refer a patient immediately if a serious medical problem is suspected.

Causes: Sudden flexion/extension injury to the neck (I.e. Whiplash), dysfunctional neck movement, or spasm of muscles located in the neck. Altered sensory information to the brain, nervous system irritation and/or blood vessel compromise can contribute.

**Symptoms:** Positional unsteadiness or giddiness; a feeling that the ground is moving; postural instability noted especially on turning; and imbalance that is markedly enhanced by sudden head movements, such as neck extension with upward or downward gaze or rising from the lying position. Neck pain is always present in patients suffering from cervicogenic vertigo with muscle tenderness, stiffness, and guarding of the neck commonly noted. Neck pain may precede the sensations of imbalance by a period of days to months and is commonly located in the back of the skull with radiations to the jaw region, the side of the head, and into the arms. Headache complaints are common and localized to the back of the skull, with pain behind the eye(s) or band-like referred pain patterns around the head. Occasionally patients may complain of numbness in the arms.

## How our experts can help:

There is a moderate amount of evidence highlighting chiropractic treatment as a useful management approach for cervicogenic dizziness and vertigo. At present, it is thought that spinal manipulation when applied to neck can restore postural balance and awareness, by giving more information to the brain about where the body is in space and how it is moving. This results in less dizziness, allowing the patient to move their neck properly, then resulting in less neck pain. The treatment options may include:

- Patient education and reassurance
- Manipulation or mobilization of the cervical spine (neck)
- Soft tissue therapy of surrounding musculature
- Rehabilitation and exercise prescription
- Ergonomic and lifestyle changes
- Referral and co-management
- \* Most episodes of dizziness/vertigo are non-life threatening, however it is advisable to seek the opinion of your Medical Doctor or Neurologist if you develop sudden or severe symptoms, especially if these are different from previous occurrences.

