

Vertigo and Vestibular dysfunctions

Complaints of vertigo and dizziness can severely impact independence, quality of life and increase the risk of injury due to falls. According to Hansson (2007), lifetime incidence of dizziness is about 8% and it is the most common symptom in the elderly.

Troubling to physicians is screening these clients to rule out serious causes of dizziness or vertigo and finding other treatment options when drugs like antiemetics are not used.

For the diagnosis of Benign Paroxysmal Positional Vertigo (BPPV) physical repositioning maneuvers are more effective than vestibular rehabilitation alone.

A recent Cochrane review summarized the findings on the effectiveness of vestibular rehabilitation. The physical repositioning maneuvers focus on guiding the otoconia out of the semi-circular canals and back to the utricle. When combined with vestibular rehabilitation exercises that focus on retraining the vestibular, ocular reflexes and proprioception the result is superior then with the vestibular rehabilitation alone.

The client presents complaining of a spinning sensation that accommodates if they stop moving.

The **Dix-Hallpike test** is useful in identifying BPPV. It is

performed long sitting, with the client's head rotated 45°. The therapist helps the client lay down quickly with the head in slight extension while monitoring symptoms and

nystagmus. Horizontal or rotational nystagmus may be evoked towards the down (affected ear) after a latent period of 5-10 seconds and should accommodate in less than 45 seconds. If the first side is negative the other side should be tested.



Vestibular rehabilitation has been shown to be effective for treatment of other causes of dizziness and vertigo.

Hansson (2007) reviewed the literature to establish the effectiveness for vestibular rehabilitation in non-BPPV disorders of dizziness. The findings were as follows:

- Strong evidence for treatment of vestibular hypofunction, multisensory dizziness and Meniere's disease.
- Moderately strong evidence after vestibular surgery
- Insufficient evidence but with promising trends for the treatment of Neurologic dizziness, Phobic postural vertigo, WAD associated dizziness and migraine associated dizziness.

NOTE: although vestibular rehabilitation has been shown effective for many presenting causes of dizziness, proper diagnosis remains key to avoid missing a potential life-threatening problem.

Manual Therapy is effective for cervicogenic dizziness.

Cervicogenic dizziness can be caused by dysfunction within the upper cervical segments. Manual therapy such as manipulation, mobilization, massage and other manual treatments has shown effectiveness in treatment of this condition.

Cervicogenic dizziness is often described as being unbalanced without spinning sensations. It may be provoked by head movements. The Dix-Hallpike should be negative. A sitting differentiation test where the therapist fixes the patient's head while they rotate their body underneath should produce the symptoms if rotation produced them while testing range of motion.

References:

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