Physical Therapy Treatment for Patients with Dizziness and Postural Instability

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Fact Sheet

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VESTIBULAR REHABILITATION SPECIAL INTEREST GROUP

A Special Interest Group of

ACADEMY OF NEUROLOGIC PHYSICAL THERAPY

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Individuals with vestibular disorders may experience varying levels of dizziness and postural instability. Following a thorough evaluation, physical therapists trained in vestibular rehabilitation will design individualized exercise programs to address these symptoms. Studies have shown that customized and supervised exercises, such as those provided by a physical therapist, are more beneficial than unsupervised or general fitness exercises for people with vestibular disorders.[1-3]

Goals of Physical Therapy Treatment

Goals for vestibular rehabilitation include (1) improving complaints of visual disturbance with head movement, (2) improving static and dynamic balance, (3) decreasing fall risk, (4) reducing general reports of dizziness, (5) resolving positional vertigo, (6) increasing participation in functional and social activities, and (7) improving overall fitness.[1-6]

Physical Therapy Exercises

Exercises for the treatment of dizziness and postural instability are based on the principles of adaptation, substitution, and habituation. Recovery of postural and gaze stability after vestibular insult is supported by the ability of the remaining vestibular system to adapt its response to relevant stimuli. In some cases, it is necessary to encourage the use of other systems or strategies to substitute for lost or decreased vestibular function.[1,5,6] For individuals who experience position- and movement-induced dizziness, habituation exercises are indicated to decrease their response to provoking stimuli.[1,5] Additional exercises may also be prescribed to address other impairments that may be affecting a person's stability, such as decreased lower extremity strength and flexibility.

Treatment Frequency and Duration

The frequency and duration of physical therapy treatment depends on the individual and associated pathology. Typically, a physical therapist will design a home exercise program for the patient to perform daily. The patient will then return to the physical therapist periodically over several weeks. During these visits, the therapist will assess the patient's response to treatment and advance the home program.[1,5]

Patients with BPPV

Treatment of patients with benign paroxysmal positional vertigo (BPPV) by a trained physical therapist includes performing the appropriate canalith repositioning procedure. For those patients with additional complaints of postural instability, exercises to improve postural control may also be prescribed. Patients with BPPV typically recover in fewer treatments compared to patients with other vestibular disorders.[7]

When to Begin Physical Therapy

Although evidence suggests that early treatment is preferable in certain cases, studies have also shown that patients with chronic vestibular dysfunction can still benefit from vestibular rehabilitation.[1,4] Furthermore, age does not seem to be a factor that affects recovery.[1,8]

Non-vestibular Causes of Dizziness and Postural Instability

Patients with dizziness and imbalance related to non-vestibular disorders such as migraine,[9,10] mal de debarquement,[11,12] and cervicogenic dizziness,[13,14,old 14] may also benefit from physical therapy.

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