

Vestibular and Balance Rehabilitation Therapy

Who Can Benefit?

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Fact Sheet

Vestibular rehabilitation can be an effective treatment for patients with dizziness and balance disorders. The purpose of vestibular rehabilitation is to facilitate compensation after peripheral and central vestibular dysfunction has occurred, with the goals of decreasing symptoms of dizziness and vertigo, improving balance, and facilitating a return to previous activities. Evidence exists to support its effectiveness in a variety of conditions. There is also evidence that suggests vestibular rehabilitation can be more effective than medication alone for long-term improvements in symptoms and function.¹ Below is a list of conditions that benefit from vestibular physical therapy.

Diagnosis	Expected Outcomes
Unilateral vestibular loss (vestibular neuritis, labyrinthitis, acoustic neuroma)	Good: Return to baseline level of function ²
Benign paroxysmal positional vertigo	Good: Resolution of symptoms when treated with appropriate canalith repositioning maneuver ³
Bilateral vestibular loss	Moderate: A significant level of impairment is likely following therapy, but the patient can expect improved balance and dynamic visual acuity with treatment ⁴
Central vestibular dysfunction (stroke, brain injury, migraine)	Moderate: Recovery will take longer compared to peripheral vestibular dysfunction, but the patient can expect improvements in balance and decreased symptoms of dizziness ^{5,6,7}
Presbystasis (disequilibrium of aging)	Moderate: Patient can experience decreased dizziness, improved balance, decreased fall risk ⁸
Persistent postural perceptual dizziness/motion provoked dizziness	Moderate: Decreased symptoms of self and visually induced dizziness ^{9,10,11}

The following conditions would *not* benefit from vestibular therapy:^{5,6,12}

1. Fluctuating vestibular loss (Meniere's disease, semicircular canal dehiscence, perilymphatic fistula, vestibular migraines), *unless* the patient exhibits imbalance or dizziness between the episodes.
2. Spontaneous or unprovoked dizziness.

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References:

1. Horak FB, Jones-Rycewicz C, Black O, Shumway-Cook A. Effects of vestibular rehabilitation on dizziness and imbalance. *Otolaryngol Head Neck Surg.* 1992;106:175-80.
2. Giray M, Kirazli Y, Karapolat H, Celebisoy N, Bilgen C, Kirazli T. Short-term effects of vestibular rehabilitation in patients with chronic unilateral vestibular dysfunction: a randomized controlled study. *Arch Phys Med Rehabil.* 2009;90:1325-31.
3. Battacharyya N, et al. Clinical practice guideline: benign positional vertigo. *Otolaryngol Head Neck Surg.* 2008;139:S47-S81.
4. Brown KE, Whitney SL, Wrisley DM, Furman JM. Physical therapy outcomes for persons with bilateral vestibular loss. *Laryngoscope.* 2001;111:1812-17.
5. Shepard NT, Telian SA. Programmatic vestibular rehabilitation. *Otolaryngol Head Neck Surg.* 1995;112:173-82.
6. Telian SA, Shepard NT, Smith-Wheelock MS, Kemink JL. Habituation therapy for chronic vestibular dysfunction: preliminary results. *Otolaryngol Head Neck Surg.* 1990;103:89-95.
7. Brown KE, Whitney SL, Marchetti GF, Wrisley DM, Furman JM. Physical therapy for central vestibular dysfunction. *Arch Phys Med Rehabil.* 2006;87:76-81.
8. Jung JY, Kim JS, Chung PS, Woo SH, Rhee CK. Effect of vestibular rehabilitation on dizziness in the elderly. *Am J Otolaryngol.* 2009; 30: 295-299.
9. Rine RM, Schubert MC, Balkany TJ. Visual-vestibular habituation and balance training for motion sickness. *Phys Ther.* 1999;79:949-957.
10. Pavlou M, Lingeswaran A, Davies RA, Gresty MA, Bronstein AM. Simulator based rehabilitation in refractory dizziness. *J Neurol.* 2004;251:983-995.
11. Popkirov S, Staab JP, Stone J. Persistent postural-perceptual dizziness (PPPD): a common, characteristic and treatable cause of chronic dizziness. *Pract Neurol* 2018;18:5-13.
12. Clendaniel RA, Tucci DL. Vestibular rehabilitation strategies in meniere's disease. *Otolaryngol Clin N Am.* 1997;30:1145-58.

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