

This Clinical Practice Guideline was developed to describe the current best evidence for vestibular rehabilitation for patients with peripheral vestibular hypofunction. The purpose of this guideline is to provide clinical recommendations in order to reduce unwarranted variations in care and to develop collaborative relationships to assist with efficient referrals and high-quality, consistent treatment.

MD CLINICAL SUMMARY:

- Patients with uncompensated vestibular hypofunction of all ages and at any time since onset should be referred for supervised vestibular physical therapy (see below regarding BPPV**).
- Vestibular rehabilitation exercises should be initiated as soon as possible.
- Based on evaluation, these exercises may need to be performed multiple times/day.
- Co-morbidities and vestibular suppressants may limit the success of therapy.

Vestibular Rehabilitation Effectiveness in Unilateral and Bilateral Peripheral Vestibular Hypofunction

- **Strong recommendation (Level I*) that vestibular rehabilitation should be offered to patients with symptoms due to:**
 - Acute, subacute, & chronic unilateral hypofunction
 - Bilateral hypofunction, including pediatrics
 - Evidence indicates that vestibular rehabilitation provides clear and substantial benefit

Factors that Modify Vestibular Rehab Outcomes

- **Moderate to strong recommendation (Level I-II*) for factors affecting vestibular rehabilitation:**
 - Age and gender do not affect outcomes
 - Improved outcomes with earlier intervention, though chronic symptoms can be improved as well
 - Factors that may have negative impact on recovery:
 - Long term use of vestibular suppressants
 - Co-morbidities (anxiety, depression, migraine, peripheral neuropathy, abnormal binocular vision, impaired cognitive function)
 - Delayed initiation of vestibular physical therapy

Supervised Vestibular Rehabilitation Effectiveness

- **Strong recommendation (Level I*) that patients with peripheral vestibular hypofunction use customized, supervised exercises.**
- **Benefits:**
 - Promotes adherence with rehabilitation
 - Better outcomes compared to generic home programs

Optimal Exercise Dose

- **Weak recommendation (Level II-III*) for gaze stabilization exercise for unilateral & bilateral hypofunction consists of:**
 - At least 3 times/day between 12-20 minutes
- **Weak to expert opinion recommendation (Level II-V*) balance exercise for unilateral & bilateral hypofunction consists of:**
 - At least 20 minutes per day

Saccadic or Smooth Pursuit Exercises Effectiveness

Strong recommendation (Level I*): Voluntary saccadic or smooth pursuit eye exercises should not be offered instead of gaze stabilization (VOR) exercises, which include head movement

Effectiveness of Different Exercise Types for Unilateral Peripheral Vestibular Hypofunction

- **Strong to moderate recommendation (Level I-II*) for use of targeted exercisetechniques for acute and chronic hypofunction:**
 - Important to use the most appropriate exercise approach for identified impairments and activity limitations
 - Unknown consequences when patients perform an exercise that does not address their primary problem.

Vestibular Rehabilitation Harm/Benefit Ratio

- **Strong recommendation (Level I *) that quality of life improves and psychological distress reduces with rehabilitation**

Stopping Vestibular Rehabilitation

- **Moderate recommendation (Level II*) for the decision tostop rehabilitation based on:**
 - Goals met
 - Symptoms resolve or patient plateaus
 - Patient choice or patient non-adherence
 - Status deteriorates
 - Prolonged symptom increase
 - Co-morbidities affect participation
- ◦ Clinical judgement based on patient’s goals and values
- **General recommendation for overall length of treatment:**
 - Unilateral hypofunction – 5-7 weeks
 - Bilateral hypofunction – 6-9 weeks

FOR MORE DETAILED INFORMATION, PLEASE REFER TO THE ORIGINAL DOCUMENT:

https://journals.lww.com/jnpt/Abstract/9000/Vestibular_Rehabilitation_for_Peripheral.99697.aspx

LEVEL OF EVIDENCE*

I	II	III	IV	V
High quality (≥50% critical appraisal score) diagnostic studies, prospective, or randomized controlled trials	Lesser quality (≤50% critical appraisal score) diagnostic studies, prospective, or randomized controlled trials	Case-controlled or retrospective studies	Case study or case series	Expert opinion

*Based on Centre for Evidence Based Medicine website: <http://www.cebm.net/oxford-centre-evidence-based-medicine-levels-evidence-march-2009/>
+Hall CD, et al. Vestibular Rehabilitation for Peripheral Vestibular Hypofunction, Journal of Neurologic Physical Therapy: December 03, 2021. doi: 10.1097/NPT.0000000000000382

**This clinical practice guideline does not include physical therapy management recommendations for Benign Paroxysmal Positional Vertigo.