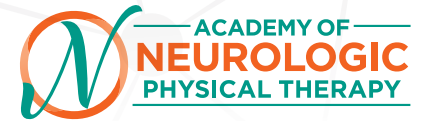


REFERENCE FOR PHYSICIANS

CLINICAL PRACTICE GUIDELINES FOR PERIPHERAL VESTIBULAR HYPOFUNCTION



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

- **Weak to strong recommendation (Level I-III*) 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, migraine, peripheral neuropathy)
 - Delayed initiation of vestibular physical therapy due to risk of decreased quality of life or falls

Supervised Vestibular Rehabilitation Effectiveness

- **Moderate recommendation (Level I-III*) 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

- **Expert opinion recommendation (Level V*) for gaze stabilization exercise for unilateral & bilateral hypofunction consists of:**
 - At least 3 times/day between 12-20 minutes

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

- **Moderate recommendation (Level II*) for use of targeted exercise techniques 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-III*) that quality of life improves and psychological distress reduces with rehabilitation**

Stopping Vestibular Rehabilitation

- **Expert opinion recommendation (Level V*) for the decision to stop 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
- **General recommendation for overall number of treatment sessions:**
 - Unilateral hypofunction – once per week for 2-6 weeks
 - Bilateral hypofunction – once per week for 8-12 weeks

FOR MORE DETAILED INFORMATION, PLEASE REFER TO THE ORIGINAL DOCUMENT:
http://journals.lww.com/jnpt/Fulltext/2016/04000/Vestibular_Rehabilitation_for_Peripheral.8.asp



LEVEL OF EVIDENCE*

I	II	III	IV	V
High quality ($\geq 50\%$ critical appraisal score) diagnostic studies, prospective, or randomized controlled trials	Lesser quality ($\leq 50\%$ 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: An Evidence-Based Clinical Practice Guidelines. JNPT. 2016; 40:124-156.

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