FACT SHEET

Differential Diagnosis and Treatment of Common Vestibular Disorders

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Diagnosis	Patient History	Key Clinical Exam or Diagnostic Test Findings	Treatment
Benign Paroxysmal Positional Vertigo (BPPV)[1]	Vertigo provoked by head movements and positions (e.g., turning or lying in bed) lasting for a **few seconds, up to a minute**. May also complain of general imbalance with walking and standing.	Dix-Hallpike test: positive for symptoms of dizziness and upbeating (posterior canal) or down beating (anterior canal) torsional nystagmus. Roll test: positive for symptoms of dizziness and horizontal nystagmus (lateral canal). Nystagmus, regardless of canal involvement, has short latency and fatigues with repetition.	Primary treatment of vertigo includes canalith repositioning procedures, such as the Epley or Semont maneuvers. A trained physical therapist can perform these maneuvers. Vestibular and Balance Rehabilitation Therapy (VBRT) may be used for persistent mbalance. Surgery is only considered for refractory cases and is very rare.

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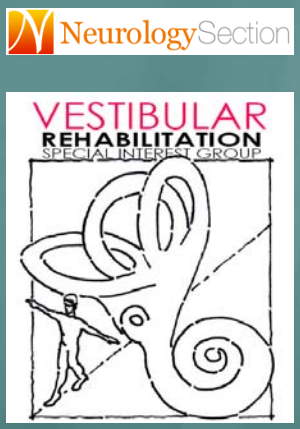
Vestibular Neuritis/ Acute Unilateral Vestibulopathy[2]	Acute onset of persistent (constant) rotational vertigo, postural imbalance, nystagmus, and nausea *without* hearing loss lasting approximately **24-72 hours**. After several days, the patient will start to move again and will complain of varying degrees of dizziness or imbalance with head movement.	Horizontal nystagmus (fast phase away from the affected ear) and significant postural instability are noted in the acute phase. Variable degrees of postural instability and complaints of dizziness with movement are noted in the chronic phase. A unilateral head thrust test may be positive. Reduced caloric response unilaterally. Audiogram is negative for hearing loss.	*Initially* vestibular suppressants and corticosteroids are indicated.[3] Vestibular suppressant use should not be prolonged. VBRT is indicated to improve gaze stability, postural control, and decrease residual feelings of dizziness.[4]
Labyrinthitis	Same as vestibular neuritis, except the patient also complains of **hearing loss** and **tinnitus**. Often associated with otitis media (bacterial or viral).	Same as vestibular neuritis, except audiogram is positive for sensorineural hearing loss.	Treat underlying cause (bacterial or viral). Vestibular suppressants, steroids, and antiviral medications in appropriate cases.



Meniere's Disease	Repeated spontaneous attack (s) of rotational vertigo lasting at least **20 minutes to several hours**. Attacks are accompanied by sensation of fullness in the ear, reduced hearing and tinnitus, postural imbalance, nausea and/or vomiting.[5] Typically, the patient is free of symptoms between attacks. Over time, however, the patient may complain of progressive hearing loss and imbalance if there is a permanent loss of vestibular function.	Horizontal nystagmus (fast phase away from the affected ear), significant postural instability are noted in the acute phase. Hearing will also be acutely decreased on audiogram. Reduced caloric response unilaterally. Over time, audiogram may show progressive hearing loss. A patient may have bilateral involvement.	Vestibular suppressants are indicated for acute attacks. Intratympanic treatment with ototoxic antibiotics or surgery (e.g., vestibular nerve section or labyrinthectomy) may be used when attacks become more frequent and debilitating. VBRT is not appropriate during an acute attack. VBRT is appropriate early on to educate the patient about Meniere's disease and to establish a baseline. VBRT is indicated if patient perceives that their balance is impaired, if there is a permanent loss of vestibular function, or following intratympanic treatment or surgery.[6,7]

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Bilateral Vestibular Disorder	Postural imbalance/severe disequilibrium especially in the dark and/or on uneven surfaces, occasional dizziness, gait ataxia, oscillopsia. May or may not also complain of hearing loss.	Positive head thrust test bilaterally. Reduced or absent caloric response bilaterally. Falls on compliant surfaces with eyes closed (or on conditions 5 & 6 of the Sensory Organization Test).	VBRT is indicated to improve gaze stability and postural control.[8]

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