



Vestibular Dysfunction Resulting from Brain Injury

Signs and Symptoms

- Vertigo / dizziness
- Decreased ability to balance (dysequilibrium)
- Visual complaints (diplopia, oscillopsia)
- Spatial disorientation
- Nausea / vomiting
- Headaches
- Irritability
- Oversensitivity to light and sound
- Decreased attention and concentration
- Involuntary eye movement (nystagmus)



Initial Screening

- Interview and history
- Vision screening
- Positional tests
 - ✓ Dix Hallpike test
 - ✓ Roll test
- Vestibular-Ocular Reflex (VOR)
 - ✓ Dynamic Visual Acuity
 - ✓ Head thrust
 - ✓ Head shake
- Perception / Sensitivity
 - ✓ Dizziness Handicap Inventory
 - ✓ Motion Sensitivity Quotient
- Neurological
 - ✓ Cerebellar
 - ✓ Reflex testing
- Mobility
 - ✓ Gait assessment
 - ✓ Balance assessment



Possible pathophysiology: temporal bone fracture, perilymphatic fistula, posttraumatic Ménière's disease, labyrinthine concussion, benign paroxysmal positional vertigo, cervical vertigo, central vertigo, posttraumatic vascular loop

Specialists who manage vestibular deficits:

Physiatrist: specializes in physical medicine and rehabilitation

ENT: trained in the medical and surgical treatment of the ears, nose, throat and related structures of the head and neck

Audiologist: works with people who have hearing, balance and related ear problems

Physical Therapist: trained to screen for, and treat, vestibular dysfunction

DIAGNOSTIC TESTING may include: ENG/VNG, rotational-chair and Dynamic Posturography