Brain Injury Facts



Balance & Vestibular Issues

Dizziness and balance problems, also known as vestibular disorders, after a brain injury may be difficult to diagnose and treat, yet can be quite disabling. Vestibular disorders, which may also include vertigo, or a feeling of spinning, are often misdiagnosed or entangled with other related issues and require specialized evaluation and treatment. For those with mild brain injuries, diagnosis may be especially challenging.

Vestibular Issues and Brain Injury

Approximately 40% of individuals with a diagnosis of traumatic brain injury complain of balance disturbance. Brain injury is a common cause of inner ear damage that can develop into vestibular dysfunction. Vestibular issues often do not appear immediately following injury, but frequently occur after a delay of days or even weeks. The type and severity of symptoms in vestibular disorders varies a great deal between individuals.

Once a vestibular disturbance is identified, it is helpful for a Neurotologist or an ear, nose and throat specialist who has a neurological focus to evaluate the individual. It is common for vestibular issues to initially be diagnosed by a physical, occupational or speech therapist who is treating the individual in a post acute environment.

SYMPTOMS

Symptoms of vestibular dysfunction can include: Visual

Trouble focusing Blurred or double vision Reacting to busy environments Sensitivity to light, glare, flickering Discomfort when focusing on objects at a distance Decreased night vision Decreased depth perception Hearing

Hearing distortion or loss Tinnitus (ringing, buzzing, whooshing) Sensitivity to loud noises and environments Imbalance or dizziness caused by loud noises

Cognitive/Psychological

Difficulty concentrating, easily distracted Short-term memory loss Confusion, disorientation, difficulty following directions Anxiety, panic, depression

Other

Nausea, motion sickness Ear pain, headache Sensation of fullness/fluid in the ear Slurred speech Vertigo or spinning Inability to complete activities at work and home

EVALUATION AND TREATMENT

Individuals with mild brain injury and vestibular disorders require specialized evaluation and treatment, with frequent reassessments of the individual's symptoms and level of function.

A comprehensive vestibular evaluation should include:

- Patient History
- Vestibulo-Occular Function
- Testing for Benign Paroxysmal Positional Vertigo (BPPV)
- Motion Sensitivity
- Balance
- Visual system
- Motor/sensory systems
- Vascular
- Headache
- Cognitive
- Mood stability
- Current activity (home and work or school)
- Pain issues

Treatment and rehabilitation should target function first (e.g. decreasing the risk of a fall or increasing the ability to walk in busy environments) and then consider:

- Adaptation
- Substitution
- Habituation

It is critical to identify treatment priorities and realistic outcomes. In doing this, an individual's lifestyle must be considered and plays an important role in designing an optimal treatment plan.

Compensation strategies should be based upon the individual's issues and ultimately make living with vestibular disorders easier. Relaxation techniques, rest periods, environmental changes, schedule adaptations and patience are critical in the process.

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