

# Trauma and Inner Ear Problems

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## FACT SHEET



Vestibular Rehabilitation  
Special Interest Group



### *Trauma and inner ear problems*

Trauma, such as hitting your head in a fall or injuring your neck in a car accident, can also injure the inner ear structures. The peripheral vestibular system (located in the inner ear) plays a large role in balance, giving the brain its sense of body motion relative to gravity. In addition, the inner ears communicate information about head motion, which is used to coordinate eye motion. When the peripheral vestibular system is injured people can experience *vertigo*, *dizziness*, *unsteadiness*, and *unclear vision*. Some people experience hearing loss and tinnitus (ringing in the ears) following trauma to the inner ear. Head trauma that affects the inner ear can also cause benign paroxysmal positional vertigo, also known as BPPV. Symptoms will vary from patient to patient and usually depend on the type and extent of injury.

Unfortunately, many people with symptoms of inner ear injury begin to restrict their level of activity and may even stop participating in their usual life duties. Restricting your activities because of inner ear symptoms can actually slow your recovery from an inner ear injury.

### *Physical therapy treatment for inner ear problems*

*Physical therapists* trained in vestibular rehabilitation (inner ear therapy) can help you recover from your symptoms when the inner ear has been injured. Physical therapists evaluate dizziness and vertigo, vision with head motion and balance. A physical therapist will perform a thorough assessment to determine the underlying cause of your inner ear symptoms and then develop a treatment plan that is specific to your problems. Treatment is individualized according to the specific symptoms and losses, but often includes exercises that help to decrease or eliminate dizziness, improve balance, and restore clear vision when the head is moving. The vestibular physical therapist will also correct any BPPV that has developed. A comprehensive rehabilitation program will address any stiffness or pain in the neck to help complete the recovery from inner ear symptoms.



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## *Successful recovery from inner problems*

Recovery takes time, sometimes months, so it is very important that you get back to your prior activities as soon as possible. Research shows that avoiding movements and activities that make you dizzy may complicate your recovery from inner ear problems caused by trauma.<sup>1</sup> Physical therapists can teach you ways to return to your activities as part of your rehabilitation. Successful recovery takes commitment and patience. Following the specific rehabilitation exercises designed especially for you by your physical therapist will help you obtain the best possible outcome in your recovery from dizziness, vertigo, unstable balance, neck pain and unclear vision.

### *References:*

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