

Head Trauma

This leaflet contains information about dizziness and balance problems following Head Trauma. If you have any further questions or concerns, please do not hesitate to contact your GP or health care professional.

What type of head trauma can lead to inner ear problems?

Trauma to the head can affect the inner ear 'directly' or 'indirectly'. Direct head trauma involves a physical injury to the head and most commonly occurs after falls, motor vehicle accidents or assaults. Indirect head trauma commonly occurs through impact to the body where rapid acceleration-deceleration forces cause the brain to 'wobble' in the skull increasing the risk of injury to the structures of the inner ear (e.g. motor vehicle collisions without direct head injury or tackle injuries in sport).

Head trauma can be classified by its severity as either mild (often referred to as 'concussion'), moderate or severe. The injury severity due to head trauma should be made by a medical professional with specialist experience and only after a thorough assessment. Inner ear problems can occur after all types of head trauma and will vary from person to person.

The structures of the inner ear are located in the skull just behind both ears. The inner ears communicate through complex pathways that go to all areas in the brain. Head trauma can involve any part of this balance pathway and an assessment by a physiotherapist who specialises in vestibular disorders (dizziness/balance problems) can help.

Did you know?

The most common cause of head trauma are falls that are less than 2 metres in height in people older than 65 years of age.

How common is dizziness after head trauma?

Symptoms of dizziness are commonly reported after head trauma. Dizziness is present in 23% to 81% of cases in the first few days after injury. The reasons for the wide range of reported dizziness symptoms includes the following:

- Depending on injury severity, dizziness may not be a problem in the first days after injury if you are not moving around as much.
- Dizziness is a complex symptom and often difficult to describe.
- Some health professionals may not be aware of inner ear problems after head trauma and therefore may not ask specific questions about dizziness or balance issues.
- Dizziness may be attributed to non-vestibular (non-inner ear) problems e.g. BPPV
- Some people with severe head trauma become less aware of balance and dizziness problems and so don't report them (balance agnosia).

Dizziness after head trauma can feel different for different people. Some common descriptions of dizziness include vertigo (spinning), light-headedness, swimmy, floaty, unsteadiness, imbalance, unclear vision.

Symptoms of dizziness can occur in different situations: changing position (e.g. turning over in bed), busy environments (e.g. local grocery store), moving your head (e.g. walking and looking around). **Do not worry if your description of dizziness is not here – everyone has their own way of describing how they feel. This is normal.**

What other symptoms can you have with head trauma?

It is common to experience other symptoms with dizziness after head trauma and this can include:

- Hearing problems, headaches, sensitivity to light/sound, neck pain
- Anxiety, low mood, irritability
- Reduced attention, concentration and memory, 'fogginess'
- Difficulty getting to sleep, difficulty staying asleep

All these symptoms are common after head trauma and can respond to treatments that work together to improve your quality of life. It is important to have a conversation with your GP or Physiotherapist if you are worried about any symptoms.

Can Physiotherapy help recovery from a Head Trauma?

It is very common for individuals with inner ear problems following head trauma to restrict their level of activity and stop participating in their normal daily routine e.g. cleaning the house, shopping, exercising, walking or working. However, restricting these normal activities because of inner ear problems can slow down recovery.

Physiotherapists specialising in vestibular disorders can help with dizziness after Head Trauma. Vestibular physiotherapists can perform a thorough assessment to determine the underlying cause of your inner ear problems and develop a specific treatment plan to address any agreed goals of therapy. Treatment may include education and specific exercises or treatment techniques to help reduce dizziness, improve balance, general strength and fitness levels.

Recovery takes time, sometimes months and years, so it is very important that you get back to your prior activities as soon as possible. Successful recovery takes commitment and patience. Research shows that avoiding movements and activities that make you dizzy may slow your recovery. Following the

specific paced and graded rehabilitation programme from your vestibular physiotherapist gives you a chance to obtain the best possible outcome.

Useful website:

<https://vestibular.org>