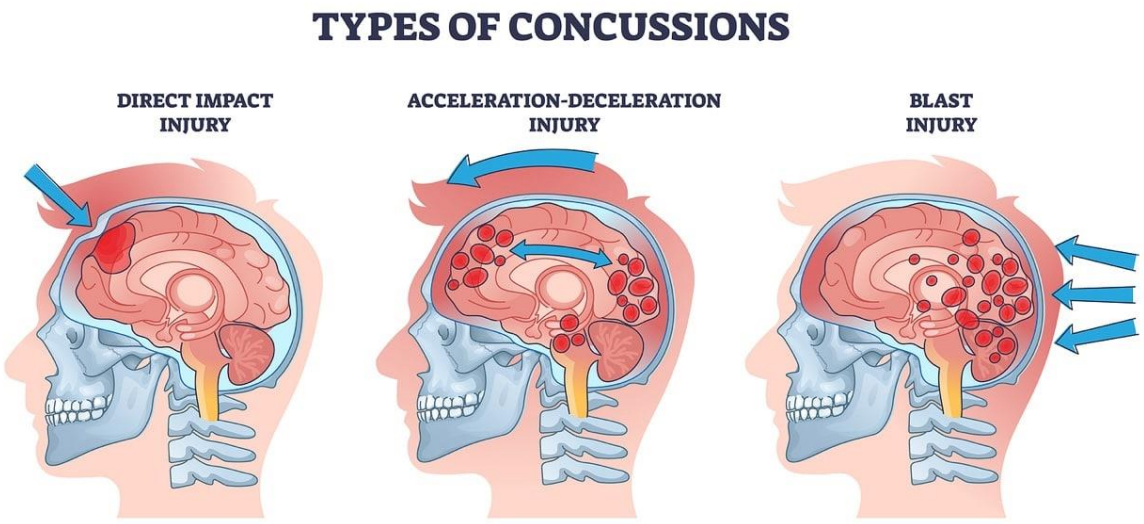
What is a concussion?

A concussion is a mild traumatic brain injury that impacts how the brain functions. This can lead to short-term issues, including headaches, difficulties with concentration and memory, balance problems, mood changes, and sleep disturbances.

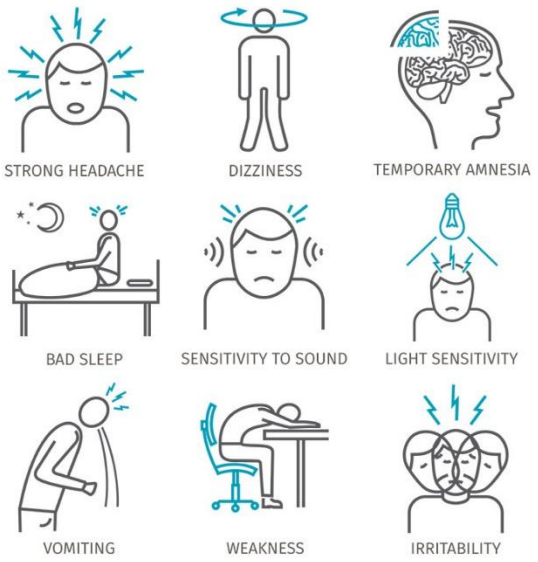
Concussions are typically caused by a hit to the head or body that affects brain function, although not everyone who experiences a blow will sustain a concussion.



While some concussions may cause a brief loss of consciousness, most do not. Falls are the leading cause of concussions, but they are also frequent in contact sports like rugby. In most cases, individuals make a full recovery following a concussion.

Common concussion symptoms

- Headache
- Dizziness
- Light-headedness
- Nausea or vomiting
- Sensitivity to light or noise
- Ringing in the ears (tinnitus)
- Blurred or double vision
- Loss of balance or coordination
- Memory loss
- Changes in thinking



Treatment for concussions

Rest: Ensure you get adequate rest, including plenty of sleep and regular breaks throughout the day.

Avoid Certain Activities: Refrain from physical activities and sports as advised by your healthcare provider.

Pain Relief: If you have a headache, your provider may suggest medication. For pain relief within the first 24 hours, consult your doctor before taking any medication.

Hydration: Aim to drink 60–80 ounces of water or other non-caffeinated beverages daily to stay hydrated.

Avoid Alcohol and Drugs: Steer clear of alcohol and drugs, including cannabis, as these can worsen symptoms and mask signs of a more severe brain injury.

Ice: Use ice packs on any areas that are swollen or sore.

Physical Activity: Light physical activity can support faster healing. Progress to the next level of activity if you've been stable in your current stage for at least 24 hours without symptom worsening. It is recommended to follow a rehabilitation program from an experienced doctor or Physiotherapist.

Therapy: Physical therapy or rehabilitation programs can be beneficial for managing lingering symptoms.

A Physiotherapist may provide visual rehabilitation for ongoing visual issues, such as sensitivity to light, blurred or double vision, eye strain, headaches, or challenges with reading and schoolwork.

Visual rehabilitation can include:

- Techniques to lessen discomfort
- Exercises to enhance reading skills by improving eye movement accuracy and efficiency
- Scanning exercises to increase peripheral awareness
- Eye muscle exercises to expand range of motion, alongside activities to speed up processing and reaction times, contributing to safer mobility and driving.

Vestibular Rehabilitation:

Physiotherapists conduct vestibular rehabilitation for those experiencing persistent dizziness, vertigo, or unsteadiness. Treatment might involve:

- Specialized techniques to address dizziness triggered by head movement
- Exercises to enhance visual focus and balance
- Gait training for improved stability and safety across various environments
- Neck posture exercises to reduce neck pain and improve posture

- Advanced balance training

Some symptoms may be noticed immediately, while others might appear days or months later, particularly when returning to daily activities and facing new demands.

Even though it states above that rehab is only needed if symptoms are experienced for longer periods, it is proven than the earlier the rehabilitation starts, the shorter the return to normal activities.

Recent studies indicate that beginning low-intensity aerobic exercise shortly after a concussion, along with Vestibular Ocular Motor Screening (VOMS) and light resistance training, can help reduce symptoms more quickly.

What is VOMS?

The VOMS assessment is a tool designed to identify the signs and symptoms of a concussion. According to the creators of the VOMS assessment:

- Symptoms which include vision issues, fogginess, and dizziness are often associated with prolonged recovery after concussion
- Assessment of the vestibular ocular system provides the most accurate predictions of long-term outcomes from sports-related concussions

How Does the VOMS Test Work?

The screening tests for five areas of vestibular (balance) and ocular (vision) motor impairment are:

- Smooth pursuits.
- Rapid eye movements.
- Near point of convergence.
- Balance vision reflex.
- Visual motion sensitivity.

The VOMS test takes five to 10 minutes and may help us detect problems that other tests, like the following, don't always find:

- Sideline Assessment of Concussion (SAC).
- Sport Concussion Assessment Tool (SCAT)
- The Balance Error Scoring System (BESS).

Consult a Physiotherapist for a detailed rehabilitation program.