

Diagnosis of Concussion

What is a concussion?

A concussion is a type of mild traumatic brain injury that can affect how your brain works. Sometimes concussion is referred to as a mild traumatic brain injury, or mTBI.

Concussion can be caused by either a direct hit or force to the head, face, neck, or other part of the body that makes the brain move inside the skull. The brain can become injured if this happens. Falls, collisions (e.g., car or bicycle), contact in sports, or being hit by an object or person are some examples of things that can cause a concussion.

If you think you or someone you know might have a concussion, it is important to have a full and proper assessment and get a diagnosis as soon as possible.

About diagnosis

Diagnosing a concussion is the first step towards successful management and recovery. It leads to better outcomes and prevents further injury. Although many people may be able to recognize a concussion on their own, a suspected concussion needs to be formally diagnosed by a qualified medical professional.

A physician or nurse practitioner are qualified to diagnose a concussion. They do so by ruling out more severe types of injury to the brain or spine. They will assess your abilities to see, walk, think, and remember. They may also examine your balance, reflexes, and muscle strength. If they believe it is necessary, they can ask for scans of your head and neck.

At the assessment your healthcare provider should make a record of your symptoms to refer back to in case your symptoms last longer than expected.

Using blood or saliva samples (also called biomarkers) to diagnose concussion is not something that can be done at this time in a clinical setting.

Patient tips

Below are some tips from our patients for what they found helpful when they were first diagnosed with concussion.

Bring a support person

Bringing a support person like a family member or close friend with you to your medical appointments is a helpful way to make sure you talk about all your symptoms and understand any instructions you are given. After a concussion, it can be hard to remember large amounts of new information, and a support person can help you do this.

Keep a symptom journal

It is a good idea to keep track of your symptoms in a journal or log for future medical appointments. This way you can make sure you are not forgetting anything when you speak with your healthcare provider.



Following diagnosis

Once a concussion has been confirmed, your healthcare provider should give you and your support person written and verbal information/advice about concussion management and what to do to get better. This information should cover:



Usual symptoms to expect information and about recovery.



Lifestyle advice to help you get better.



Signs of worsening or new symptoms (see below) that would mean you need to follow-up with a healthcare provider right away.

Signs of worsening or new symptoms:

- Headache that gets worse and does not go away
- Nausea and/or vomiting
- Loss of consciousness
- Extreme fatigue or not able to wake up
- Weakness or numbness
- Balance problems
- Slurred speech
- Unusual behaviour, agitation, or confusion

You should follow up with your healthcare provider so they can check your progress and make sure your symptoms are improving as expected. A healthcare provider or your family doctor may also decide to refer you to another healthcare professional such as a physiotherapist, psychologist, or occupational therapist.

About recovery

There are many factors that can influence how a person will get better from a concussion. Each patient and their concussion are unique and should be looked at on a case-by-case basis.

Most people recover from a concussion within a few weeks, after a brief period of relative rest (24-48 hours following the injury) and a gradual return to activities. However, a smaller percentage of patients (15-20%) will have prolonged symptoms which last beyond one month. For more information about managing prolonged symptoms following a concussion, refer to our other patient guideline sections.

Additional Resources

Below is a list of resources you may find helpful to learn more about concussion diagnosis, as well as tools that may help you with your recovery process.

Concussion (video)

<https://www.cedars-sinai.org/health-library/video-library/video-detail/c/concussion.html>

Concussion Information for Patients and Families (booklet)

https://concussionsontario.org/sites/default/files/2024-07/Concussion-Booklet%20CLEAN_May-2024.pdf