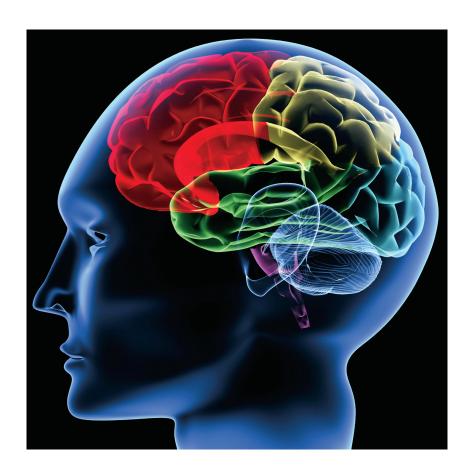
Concussions:

A Guide to Understanding Symptoms & Recovery

For Adults



Provided to you by:

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General Information

- A concussion is a mild injury to the brain. It can occur following a hard blow or jolt to the head.
- Concussions can occur with or without loss of consciousness.
- Feeling dazed or confused or being unable to remember events around the time of the injury (amnesia) is common.
- Most people with mild injuries to the brain have a good recovery.
- Proper management of concussions can help speed recovery.
- All concussions should be taken seriously.

Concussions are also called mild traumatic brain injuries. Common causes of concussions are motor vehicle accidents, falls, sports injuries, or assaults. You might hear people say "I had my bell rung" or "I saw stars" and this suggests they might have had a concussion. Concussions in general are described as "mild injuries" because they are not usually life threatening and in most cases there are no lasting effects.

The rate of recovery varies from person to person but most symptoms fully resolve within 3 months or so. Recovery might be slower for older individuals, people who have had multiple concussions in the past, or for those who have problems with pain, depression, or anxiety. Recovery from more serious injuries involving such things as skull fractures or bruising to the brain often requires more time.

When to Seek Help

Immediately following a concussion, you should be examined by a doctor. This can be done at an emergency department or a doctor's office. You might stay in the hospital overnight for further observation and/or tests. When sent home, the hospital might provide you with instructions to follow and the doctor might ask someone to monitor you for the next 24 hours.

You should seek prompt medical attention if any of the signs or symptoms listed below are observed within the first few days after the injury.

- Headache that persists or gets worse over time
- · Drowsiness or cannot be awakened
- Repeated or forceful vomiting

- Seizures (such as convulsions, body goes stiff, or a fixed stare)
- Weakness or numbness in the arms or legs
- Unsteadiness or clumsiness
- Blurred vision or unequal size or shape of the pupils
- · Blood or clear fluid coming from the nose or ears
- Slurred speech
- Cannot recognize people or places
- Unusual behaviour (for example, increased confusion or significant irritability)

Common Symptoms and Problems

There are a number of symptoms and problems that you might experience after a concussion (see table below). Although troublesome, these symptoms are common and should improve with time. These symptoms are not typically an indication of permanent brain damage or medical complications and it is important to remember that they usually go away without special treatment.

Common Concussion-Related Symptoms and Problems.

Even if you think the injury is minor it is important to be aware of the symptoms of a concussion. People recover better when they understand their injury and learn how to effectively manage their symptoms.

Physical	Cognitive	Emotional
Headache	Reduced concentration	Irritable or grumpy
Dizziness/light-headedness	Memory Problems	Anxious
Nausea	Trouble expressing thoughts	Depressed
Poor Balance	Trouble finding the right words	Feeling more emotional
Feeling tired or sluggish	Feeling mentally foggy	
Changes in sleep pattern		
Changes in vision		
Sensitivity to light or noise		

Getting Better

The symptoms and problems that are common with concussions are typically temporary. Regardless, it is important to listen to your body's needs when you are first injured. In the early stages of your recovery, it is necessary to rest and relax. Returning to activities too quickly or ignoring your symptoms could make them worse and lengthen your recovery.

As you continue to improve you should resume your usual routine gradually, including both mental and physical activities. Engaging in activities gradually can also help improve your stamina and tolerance in preparation for returning to work or school.

Below are some other tips to help you get better.

Rest

In the early stages of your recovery, it is important to take it easy, rest, and get proper sleep. Resting includes not only limiting your physical activities (for example, house-hold chores or exercise) but also your mental activities (for example, reading, watching television, or playing video games).

Feeling tired and having less energy than usual are common problems. Pace your activity level and do not push yourself beyond your limit. Be aware that tiredness can make many of your symptoms worse and it can cause problems with your mood and your thinking.

Sleeping well is also important during your recovery. If you have trouble getting a good night's sleep, you should talk to your doctor.

Alcohol and Drugs

Only take medication that has been approved by your doctor. You should avoid alcohol and other recreational drugs while you are recovering from a concussion. Alcohol and/or drugs might slow your recovery and could place you at further risk of injury.

Driving

Your ability to concentrate and react quickly might be affected by the concussion. Ask your health care professional when you can safely drive a car, or operate heavy equipment, particularly if you are concerned about visual difficulties, slowness of thinking, slowed reaction time, reduced attention, or poor judgment. You should not start driving again until you are confident and safe to do so. When you return to driving, it might be helpful to start with short distances on familiar routes when traffic is light.

Returning to Your Daily Routine

Do not attempt to immediately resume all of your usual activities, including work or school, at the pace you did prior to the concussion. It is strongly recommended that you gradually ease back into your routine and pace yourself by resting between activities. It is often necessary to plan to return to work or school only a few hours each day at the beginning. This is particularly important if you are a full-time worker or student. You might benefit from having a health care professional assist you with your transition back to work or school.

Headaches

Headaches are one of the most common symptoms experienced following a concussion and can be a result of injury or strain to soft tissues, nerves, joints, or bones of the head or neck region. They can also be due to the general stress experienced following an injury. Fortunately, as with other concussion symptoms, headaches typically resolve over time. However, do not take a sit-and-wait approach. It is important to take steps to actively manage your headache pain. Treatment of headaches often requires a combination of approaches, including medication, lifestyle changes, and rehabilitation.

- Medication. This is usually the first line of attack for headaches and can be a very effective
 treatment. It is important to review your medication usage, including any prescription and nonprescription drugs, with your physician throughout your recovery.
- **Lifestyle changes.** Lifestyle adjustments include such things as getting proper sleep, conserving energy, identifying and avoiding headache triggers, and learning how to manage your stress. If needed, various health care clinicians can assist with these changes.
- **Rehabilitation**. Other treatments, such as physiotherapy or massage, might provide some relief as well. Consult your family physician to help guide what treatments you should try for your headaches.

Dizziness

There can be a number of causes of dizziness following a concussion. Possible causes might be trauma to the balance organs in your ears, an injury to your neck, changes in your vision, or possible side effects of certain medications. Typically, dizziness settles down over time but while you have this problem it will be very important to take precautions to avoid falling or hitting your head. Use common sense! Recognize if any particular movements make you feel dizzy and either avoid them or move cautiously. Use hand rails when going up and down stairs and avoid ladders and heights.

• **Inform your doctor of your dizziness.** Your doctor might further evaluate you to determine possible causes of your dizziness and recommend further assessment or treatment.

Dizziness can also impact your safety on the job, so be sure to discuss this problem with your doctor and treating clinicians. Changes to your work duties might be necessary for a period of time.

• **Vestibular rehabilitation**. There are therapists (for example, physiotherapists or occupational therapists) who specialize in dizziness and balance difficulties. An evaluation with a vestibular therapist can determine whether treatment might be useful in your case.

Difficulties with Cognition

Cognition refers to your thinking ability. Following a concussion you might have problems concentrating, remembering things, and thinking quickly. This in turn can slow you down and cause frustration. These problems usually improve over time but while you have these symptoms, it helps to use strategies to lessen their impact. Some tips to help you manage your thinking difficulties are listed below.

- Reduce distractions in your environment. For example, turn off the television when you are talking on the phone.
- Limit multi-tasking by completing one task at a time.
- Whenever possible, work in a quiet area.
- Keep a pen and paper handy to write information down, make lists for yourself, and use a calendar or day-timer to help you remember appointments and important information.
- Pre-plan your activities to help you prepare for the day. Give yourself more time than usual to complete tasks.

Mood Changes & Managing Stress

Feeling anxious, irritable, or sad is common following a concussion. This can be a result of the injury itself or a result of the changes associated with being injured (that is, the changes to your daily routine or functioning). Socializing, engaging in previously enjoyed activities, and exercising lightly might help you manage these symptoms. Recognizing significant changes in your mood is important because emotional difficulties can slow your recovery. If your mood becomes a problem, it is important to consult with your doctor or a counsellor.

Stress is common after any injury because your lifestyle and routine have been disrupted. Worrying about the injury and your symptoms can also contribute to your stress, which can slow recovery. Research has shown that learning about concussions and what to expect regarding recovery can reduce some of that stress. It helps to remind yourself that these symptoms are temporary in the majority of cases and that improvements occur over time.

Some tips to help improve your mood and reduce your daily stress are listed below.

- · Be sure that you are getting enough sleep.
- Eat a balanced and nutritious diet
- Limit your intake of caffeine from beverages, such as coffee, tea, or pop, as well as from other sources.
- Take part in regular, light exercise within the limits of your ability. If you are unsure of what
 you can do, check with your doctor.
- Prioritize your daily tasks and be realistic in what you can accomplish each day.
- Focus on doing one thing at a time with rest breaks in between.
- Include activities you find relaxing and enjoyable into your daily routine.
- · Socialize with friends or family members.
- Avoid major life decisions, such as changing jobs or careers, until your symptoms have largely improved.

Exercise and Sports

It will be important to rest and avoid any strenuous exercise or activity in the first few days to weeks following your concussion. However, exercise is very important as your recovery progresses and is particularly useful for stress management.

Before starting any exercise, be sure to get your doctor's consent. Generally speaking, once your symptoms settle down you can begin with some light aerobic exercise such as walking. Gradually increase the frequency and duration, and then the intensity of your exercise, as long as your symptoms do not worsen. If your symptoms flare-up following exercise this is likely an indication that you need to reduce the duration or intensity of the exercise, or possibly both.

For those involved in more regular, vigorous exercise or sports, a step-wise approach to returning to play is strongly suggested. There are specific guidelines established for returning to play that can help determine when to start exercising, add resistance training, and to start participating in contact sports. These guidelines can be found at www.thinkfirst.ca. Be sure to talk with your doctor before returning to training and sport.

Preventative Measures

While you are recovering please take extra precautions to avoid having another concussion. An additional injury during this time can make your symptoms worse and might prolong your recovery.

Once you have fully recovered and are participating in your usual activities, it will continue to be important to reduce the likelihood of having another concussion. Some helpful tips to reduce your risk for another injury are listed below.

- Always wear a seat belt when in a motor vehicle and use correctly sized child car seats.
- Always wear a certified helmet when riding a motorcycle, dirt bike or all-terrain vehicle (ATV).
- Use appropriate safety procedures and equipment when working from heights.
- Always wear a well-fitted helmet when participating in sports, such as biking, skating, kayaking, horseback riding, skiing, snowboarding, skateboarding and in-line skating.
- Do not dive into shallow or unfamiliar water.

Follow-up

If your symptoms and problems persist or become too debilitating, it is suggested that you consult with your family doctor. Your doctor can advise you if a referral to another specialist or health care professional is needed (for example, a neurologist, physiatrist, audio-vestibular specialist, ophthalmologist, occupational therapist, physiotherapist, or psychologist).

If you have not experienced improvement over time as expected, other factors that could be affecting your recovery should be considered. These include problems with pain, poor sleep, depression, or anxiety. These factors alone, or in combination, can cause symptoms similar to a concussion and can lengthen your recovery time.

The symptoms and problems related to a concussion can certainly impact your day-to-day functioning. However, it is important to remember that these symptoms are usually temporary and that most people who sustain a concussion completely recover. One of the best ways to help yourself during recovery is to learn how to effectively manage your symptoms.

Your doctor can provide you with additional information and education regarding concussions.

For more information:

If you live within the <u>Fraser Health Region</u> and would like more information, please contact the Fraser Health Concussion Clinic, Acquired Brain Injury Services at 604-520-4175 or search for "concussion clinic" on <u>www.fraserhealth.ca</u>

If you live within the <u>Vancouver Coastal Health Region</u> and would like more information, please contact the GF Strong Early Response Concussion Service at 604-714-4186 or search for "early response concussion service" on <u>www.vch.ca</u>

If you live outside of these two regions, please contact your local health authority.

Additional Information

Brainstreams – Concussion 101 http://www.brainstreams.ca/learn/injured-brain/concussion

HEADWays Concussion App - Free concussion management App for iPhone & Android devices http://www.slatervecchio.com/blog/2013/the-headways-concussion-app/

ThinkFirst – Concussion and Sport http://www.thinkfirst.ca/programs/concussion.aspx

ThinkFirst – Return to Play Guidelines

http://www.thinkfirst.ca/programs/documents/TF Concussion RTP E 2012.pdf

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