



Immediate Management of Concussion in Sport

What is a concussion?

A concussion is an injury to the brain caused by a direct or indirect blow to the head or caused by the head striking something else such as the ground or a bony hip. A concussion can occur whether or not a person is "knocked out." A concussion typically causes the rapid onset of short-lived impairment of brain function that resolves spontaneously with time. However, occasionally there can be a more significant or longer lasting problem, and it is important that the symptoms from every concussion be monitored by medical professionals who understand the concussion management protocol.

What happens when I suffer from a concussion?

- Physical symptoms like headaches, nausea, dizziness, tiredness, intolerance of bright light
- Concentration difficulties, memory loss, difficulty reading or using a computer
- Emotional changes such as mood swings, irritability and aggression
- Sleeping pattern changes – sleeping more or difficulty falling asleep

What should I watch out for?

After evaluation by a sideline medic, it may be determined that you are safe to go home. If you are sent home, you should not be left alone. A responsible adult must accompany you. Symptoms from your concussion may persist when you are sent home but should not worsen, nor should new symptoms develop. If this happens you should see a medical professional quickly or visit your local emergency room.

Important symptoms to monitor, that are called **Red Flags**, over the next 48 hours include:

- Headaches that worsen
- Severe neck pain
- Loss of feeling or use of an arm or leg
- Confusion
- Slurred speech

- Deteriorating consciousness
- Seizures (fits)
- Repeated vomiting

The presence of any of these red flags requires urgent medical attention and usually a brain scan. Report to a hospital casualty, preferably one with a neurosurgeon and brain scanning facilities.

Is it okay to go to sleep?

Concussion often makes a player feel drowsy or tired. Once you have been medically assessed, as long as you are not getting worse, as mentioned above, it is alright for you to sleep. You should however have a responsible adult with you in case any problems arise.

Can I take something for pain?

You should not take any medication unless a doctor has told you to do so. Sometimes paracetamol is allowed but avoid anti-inflammatories eg. ibuprofen and diclofenac and anything containing codeine.

What should I avoid doing?

Avoid actions that may worsen your symptoms, slow down recovery or place you at risk include:

- Do not consume caffeine (including coffee) or any other stimulants
- Stop taking any supplements that you may be using
- Do not consume alcohol for at least 48 hours after a concussion and until cleared by a medical doctor
- Do not drive a motor vehicle or motorcycle or ride a bicycle until cleared by a medical doctor
- Do not exercise at all, until medically cleared to do so
- Do not spend long periods behind a computer, smart phone, playing video games, watching TV or reading.

May I eat after the practice or game?

It is fine for you to eat if you are hungry. Remember, some athletes do have a sense of nausea and fatigue, and often find that their appetite is decreased immediately after a concussion. Do not force yourself to eat.

How long will I be observed?

You must follow-up with a medical doctor after your suspected or confirmed concussion. You must be monitored regularly and your symptoms observed until they have completely cleared. You must refrain from any physical exertion including strength conditioning until released to do so by the medical staff. Return-to-practice and return-to-play decisions are made at the appropriate time by the team physicians and these may differ from player to player.

Additional testing may be considered (eg. computerised brain function testing) and this should be explained to you during your follow-up visits. Determining if school activities (eg. class, exams) need to be modified can also be evaluated by your doctor. Often a period of complete 'brain rest' is advised which requires time away from any stimulus including work and/or school or studies.

If symptoms persist, what other support is available to me?

Your concussion may make it difficult to concentrate, study, and/or attend class. In such a situation, it's important for you to discuss with your medical team and teachers, different options for receiving academic support during this time including:

- 1 Short-term adjustments such as a shorter school day, working in an isolated and quiet environment and limited reading and computer work
- 2 Extended accommodations to be made regarding your academic assessments including deferring or allowing for additional time.

The information contained in this article is intended as general guidance and information only and should not be relied upon as a basis for planning individual medical care or as a substitute for specialist medical advice in each individual case. ©Co-Kinetic 2019