



CONCUSSION – *what every parent should know*

In the past *concussion* was a scary and misunderstood condition. Lack of knowledge led to either under-management or fear driven protocols. The good news today is that we understand it much better and with proper management the prognosis in most cases are very good. The most important way to keep your child safe is to RECOGNISE the signs and symptoms and then to TREAT it correctly.

In short, *concussion* is a functional injury to the brain due to an impact directly on the head or indirectly on the body. An energy shortage follows in the brain that affects its functionality. The brain fires without external stimulation which causes an energy crisis. This leads to the various signs and symptoms we see as the brain is struggling to process incoming stimulation well.

RECOGNISING CONCUSSION

Signs Observed by Parents or Guardians	Symptoms Reported by Athlete
<ul style="list-style-type: none"> • Appears dazed or stunned • Is confused about assignment or position • Forgets an instruction • Is unsure of game, score, or opponent • Moves clumsily • Answers questions slowly • Loses consciousness (even briefly) • Shows mood, behavior, or personality changes • Can't recall events <i>prior</i> to hit or fall • Can't recall events <i>after</i> hit or fall 	<ul style="list-style-type: none"> • Headache or "pressure" in head • Nausea or vomiting • Balance problems or dizziness • Double or blurry vision • Sensitivity to light or noise • Feeling sluggish, hazy, foggy, or groggy • Concentration or memory problems • Confusion • Just not "feeling right" or "feeling down"

If a child is showing any signs and symptoms of a concussion during or after physical activity the best thing to do is to let them be assessed by a qualified medical professional.

If in doubt – sit them out.

Individuals that are concussed should stop playing immediately. Another blow can cause *second impact syndrome*. A second impact, even a small hit before the original concussion has healed can be fatal. The biggest reason being that after the first impact the brain swells and then becomes hyper sensitized against more impact.

Some misconceptions to be aware of:

In the past an individual had to be unconscious, vomiting and have a headache to be diagnosed with a concussion. Today we agree that any **impairment of brain function** is an indication of a possible concussion. Most concussions do not cause loss of consciousness.

An individual can have a concussion even if there was no direct impact on their head. A bump or a fall that causes the **whiplash effect** will also move the brain inside of the skull.

TREATING CONCUSSION

The good news is that 90% of concussions resolve spontaneously after 3 weeks. Rehabilitation is not always needed – but will speed up recovery.

The dangers come in with repeated and untreated serious concussions as this can cause permanent damage to the brain as it becomes more sensitive after every injury. In those cases functional impairment of the brain is permanent and individuals lose their higher brain functions and well as their ability to reason.

As physiotherapist we work in conjunction with a medical doctor to rehabilitate those with concussion. We have various protocols for every phase to help the brain recover as quickly as possible.

We also advocate doing a baseline assessment every year with your active child. We evaluate brain function before an injury by testing short term memory, recognition, reaction speed and concentration. In the event of an injury, the test is then used to help make a diagnosis and plan safe return to sport/activity.

Please feel free to contact us for more information about concussion, the rehabilitation thereof and to schedule a baseline assessment.