

CONCUSSION

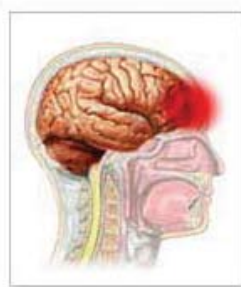
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Concussion is one of the most common mild traumatic brain injuries (MTBI) found in all types of contact sports. It is defined as a pathophysiological process that affects the brain as a result of a direct or indirect blow to the head and symptoms include dizziness, short term memory loss, nausea with/without vomiting, loss of consciousness, headache and drowsiness. It is definitely the most common injury found during hostel rugby matches here at TUKS and could be fatal if not understood or managed correctly.

If only a MILD traumatic brain injury then why all the fuss?

If the condition is not correctly diagnosed and appropriately managed symptoms are likely to persist for longer and hamper the recovery. As many of the symptoms listed represent changes to brain function, the developing brain of a young athlete may be significantly compromised not only in a sporting, but importantly also in a learning and social environment. A **Post Concussion Syndrome** comprising persistent headaches, sensitive eyes, poor concentration, fatigue and drowsiness, and disturbed sleep patterns may wreak havoc with the learner's performance in the classroom. Other symptoms such as mood changes and depression impact on the athlete's interaction with family and peers. Poor coordination, delayed reaction times, exercise-induced headaches and dizziness, and compromised vision will affect performance on the sports field, thereby greatly increasing the risk of recurrent head or other injury.

Although far less common, the risk of **Second Impact Syndrome**, a very serious and even fatal brain injury that may occur even with a relatively mild impact, appears to be particularly significant in young athletes. Second Impact Syndrome occurs when an athlete suffers a concussion and then, within a short time later (usually within one to two weeks after the initial MTBI), receives a second blow to the head before the brain has recovered from the first concussion. It is possible for rapid brain deterioration and even death to occur. This happens because the brain is still affected from the first injury and the second injury results in rapid swelling and pressure within the skull. This increased intracranial pressure, if uncontrolled, can lead to death. There have been several episodes of suspected second impact syndrome in South Africa which could have been prevented if understood and treated correctly.



Concussion can be graded by some health care professionals (from grade I to III) depending of the severity of the concussion and whether there were any loss of consciousness. Depending on the grade of concussion patients/athletes are told to stay off the contact field for anything from 2 weeks to 6 months. We at the hpc have now started with our own concussion clinic and hopefully we can reduce the number of fatal incidents in all types of contact sports.

CogSport (CogState LTD. Australia) is a computerised programme that helps with the management of concussion and we have it available now to all our patients at the hpc. It

is a proven scientific measure of concussion where a baseline (before/pre-injury) report is compared with a post-injury report and one can see whether a player is ready for full participation again. For more information please contact the SSMU (Sport Science and Medical Unit) at the hpc on (012) 362 9850 or visit www.hpc.co.za. One can also learn a lot more about concussion on the following website: www.sportsconcussion.co.za.

