

CONCUSSION UPDATE FOR TAEKWONDO PARTICIPANTS, PARENTS and COACHES by Dr. Terry DeFreitas, MD CCFP, Sport Med Diploma (CASM)

Most people have heard of a concussion. We all need to remind ourselves what it is, how to recognize it and what to do about it.

WHAT IS CONCUSSION?

A concussion can occur after a kick or punch to the head or neck or a fall where a significant amount of force is transferred from the body to the head and neck.

When this force produces any symptoms such as headache, dizziness, having your bell rung, amnesia, feeling foggy or unconsciousness, there is a concussion.

In Alberta at Provincial Championship Tournaments for the last 6 years I have instructed all medical staff to use the SCAT, **STANDARD CONCUSSION ASSESSMENT TOOL** to check our Taekwondo athletes for concussion after a head shot or falling on the mat hitting the head.

We have updated to the SCAT2 which was introduced at the 3rd International Symposium on Concussion in the fall of 2008.

The SCAT2 is a screening tool which now includes balance testing, more word memory tests and a select number of neurological tests as well as a questionnaire which asks the athlete to score what symptoms they have. These additional screening tests will help better identify athletes with **concussion**.

WHY IS IT IMPORTANT TO RECOGNIZE CONCUSSION?

People with concussion should not participate in activity until all the concussion symptoms have resolved and they have gradually returned to play under medical supervision.

If a concussed athlete gets another hit to the head or neck, it can result in increased symptoms, a prolonged recovery where symptoms do not resolve for months, or rarely death.

WHEN CAN I RETURN TO SPARRING?

The 3rd International Symposium on Concussion published **RETURNED TO PLAY** guidelines.

The cornerstone of management is REST. If the athlete has any symptoms such as headache, foggy feeling, irritability, memory problems, nausea, dizziness and balance problems, then that athlete needs more REST.

IF the athlete has no symptoms and has been cleared by a medical doctor to start return to play then this is how it should progress: (under medical supervision)

1. 24 hour minimum rest after a concussion
2. IF ALL symptoms are gone then you can start very light exercise on Day 1
3. On day 2 if no symptoms occur, light exercise
4. On day 3 increased exertion, no contact sports (sparring, hosinsool)
5. On day 4 if the athlete is still asymptomatic then sports specific activity can be done but NO contact activities
6. Day 5 if the athlete still has no symptoms then a Sparring trial in practice only can be done

SOME MYTHS

1. I did not get knocked out, therefore I did not have a concussion.

FALSE!!!

If you have any symptoms after a force to the head or neck you may have a concussion you must seek medical attention.

2. I have had my bell rung lots...that is not concussion.

FALSE!!!

If you have had your bell rung lots you have probably had several concussions. The bad news is if you have one concussion and get hit again while still symptomatic from the first concussion, you can get symptoms with a lesser hit. That means each time you get a concussion it takes less force than the first one.

If you have had your bell run lots you may have developed memory problems. Some athletes who have had several concussions have noticed significant memory problems resulting in worsening performance in school.

The life expectancy of an NFL linebacker is 20yrs less than other men their age. Researchers have done autopsies on the brains of some of these athletes known to have suffered several concussions in their career. The brains of these athletes showed early signs of dementia, and several of these athletes died in their 50's either from suicide or other causes!

At this point leading experts in this field have found some relationship between repeat concussions as a teenager/young adult and dementia, and depression later in life. Until we know for sure it is better to avoid repeat concussion all together.

In all contact sports we must ensure that our athletes who do happen to get a concussion are COMPLETELY recovered before they are put at risk again.

The Taekwondo community is a close family - if all our coaches, senior black belts, parents and athletes understand the importance of concussion we can prevent further injuries

3. My coach told me I have a concussion, I should just rest.

TRUE and FALSE!!!

An athlete who has concussion symptoms must be evaluated by a medical doctor. If you are at a tournament with just first aid and you get a concussion, **you should be evaluated by a medical doctor that day**. This is to ensure that you have been adequately assessed for complications of concussion.

The athlete will need to be reassessed before he or she returns to play.

REFERENCES:

HEADS UP ON SPORT CONCUSSION by Solomon, Johnston and Lovell

HEADS UP: Concussion in Youth Sport; cdc.gov/concussioninyouthsports

Consensus statement on Concussion in Sport, 3rd International Conference on Concussion in sport held in Zurich, November 2008; Clinical Journal of Sports Medicine 2009; 19; 185-200