

CONCUSSION IN TAEKWONDO COACHING RESPONSIBILITIES

DEFINITION: *a concussion is any alteration in mental status following a blow to the head or neck or a fall which causes the head to rapidly accelerate and decelerate.*

TAEKWONDO: kick to the face, back of the head, or neck, fall hitting the head on the floor, rolling out of a fall incorrectly, punch to the face

WHY IS IT IMPORTANT?

The risk of concussion is high in taekwondo sparring. In a tournament with 100 minutes of sparring competition, we can expect 3 concussions. In average local tournament with 50 matches and 3 2 minute round, there would be an expected 9 concussions in one day.

1. RARELY SECOND IMPACT SYNDROME:

A rare condition where post traumatic cerebral swelling occurs causing death. Only 5 reported cases have been documented as sport related catastrophic brain injury.

2. POST CONCUSSION SYNDROME:

Headache, nausea, memory complaints, blurred vision, noise, light sensitivity, difficulty concentrating, fatigue, depression, sleep disturbance, loss of appetite, anxiety,, incoordination, hallucinations

3. CHRONIC TRAUMATIC BRAIN INJURY:

Primarily a disorder of professional boxers, but has been documented in professional soccer. This represents the cumulative long term neurological consequences of repetitive concussive and sub concussive blows. The signs and symptoms tend to occur later in life, and can involve motor, cognitive and behavioural impairments.

SIGNS AND SYMPTOMS:

These are variable and can include:

YOU MAY OBSERVE THIS IN YOUR STUDENT:

*Inappropriate play behaviour
Decreased playing ability, staggering, clumsiness
Easily distracted
Unusual emotions
Irritability
Vacant stare*

THE STUDENT MAY COMPLAIN OF:

*blurred vision or tunnel vision
Fatigue (beyond the expected)
Ringing in the ears
Dizziness
Headache
Sensitive to light/noise
Nausea, vomiting
Feeling “out of control”
Difficulty remembering
Irritability
Slurred speech
Seeing stars or flashing lights
Feeling dazed
drowsiness*

BETWEEN ROUNDS YOU MAY DETECT:

*Poor comprehension
No memory of what has just occurred
No awareness of who, where, what, when*

IF THE STUDENT DISPLAYS ANY ONE OF THE ABOVE SIGNS OR SYMPTOMS: *Consider throwing in the towel*

ANY LOSS OF CONCIIOUSNESS *should result in termination of the match*

STAGGERING *is an indication for throwing in the towel*

ONCE THE MATCH HAS ENDED HAVE YOUR STUDENT EXAMINED BY A MEDICAL DOCTOR

The best way to determine if there is a brain injury is to do serial exams, therefore, a student should be examined initially and checked every 15 minutes to determine if the symptoms are resolving or worsening.

MOST ON SITE MEDICAL PERSONNEL WILL USE AN ASSESSMENT SCORE TO DETERMINE IF FURTHER ACTION IS REQUIRED

The exam score includes orientation, memory testing , concentration, a neurological exam +/- exertional tests

If there is no Doctor on site it is safest to have the student seen by a doctor that day.

In the event of a minor inform the parent that a medical exam should be completed

In the event of an adult with a possible brain injury, someone must be designated to take responsibility

ON THE ROAD: *the coach is ultimately responsible for the student, unless there are team medical personnel designated for this task.*

If the student becomes symptomatic after the tournament he or she must be examined by a medical doctor.

Frequently head injuries with cerebral swelling do not produce symptoms until several hours or days following injury. The first 24 hours are critical, therefore ensure your student is checked on in the evening and is with someone responsible.


No alcohol

Any changes in the students' behaviour should alert you to the possibility of head injury and warrant a trip to the emergency

BACK TO PLAY GUIDELINES

Once the doctor has cleared the student to return to play, follow the step by step guidelines

Risky Sports	Concussion	Impact	Protection	Recognition	Severity	Back To Play	Authors
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Back To Play

When can I go back to play?

Any concussed athlete should be removed from competition, examined and observed. Repeated assessment is very important, the athlete should not be left alone. Any player with post concussion symptoms needs a medical evaluation. Return to play must follow a gradual process, monitored by a medical doctor.

**A PLAYER SHOULD NEVER RETURN TO PLAY WHILE SYMPTOMATIC!
"WHEN IN DOUBT, SIT THEM OUT!"**

STEP 1
No activity, complete rest. Once ASYMPTOMATIC , proceed to step 2. CONTINUE TO PROCEED to the next step IF ASYMPTOMATIC . If symptoms occur, drop back to a step where there are no symptoms, and try to progress again.
STEP 2
Light exercise off of the game field (stationary bike, walk...)
STEP 3
Sport specific activity without body contact (light running, skating...)
STEP 4
On field practice without body contact.
STEP 5
On field practice with body contact, once cleared to do so by a medical doctor. The time required to progress from full noncontact exercise to contact will vary with the severity of the concussion.
STEP 6
Return to competition.

REMEMBER: if you play or practice too soon, you may have to sit out even longer.

EVALUATION OF A CONCUSSED ATHLETE WITH RESIDUAL SYMPTOMS:

*There is on going research on when is the safe time for an athlete to return to play following concussion
Some varsity programs use standard neuropsychological testing to determine when an athlete may return to play.*

PREVENTION

TRAIN ATHLETES TO BLOCK HEADS SHOTS

IMPROVE NECK MUSCLE STRENGTH

IMPROVE ENDURANCE WHICH IS IMPORTANT IN THE 3RD ROUND

ENSURE THE ATHLETES HEAD GEAR FITS PRPERLY AND IS IN GOOD REPAIR

SUPERVISE PRACTICE SESSIONS OF THE POST CONCUSSION ATHLETE

BE PREPARED TO STOP THE ATHLETES TRAINING SESSION IF THEY ARE SYMPTOMATIC