ETA STAFF - concussion

These guidelines are designed to be used by Referees, Coaching staff and Managers

This guideline has been adapted from the Rugby Football Union (RFU) guidance, World rugby guidance and the Zurich Consensus conference.

1. What is Concussion?

Concussion is a brain injury caused by either a direct or indirect force to the head resulting in a disturbance in brain function. There are many symptoms, common ones include: headache, dizziness, memory disturbance or balance problems.

Loss of consciousness, 'being knocked out', occurs in less than 10% of concussions and is not necessary to diagnose a concussion.

Common Features

- Can be caused by a direct blow to the head, face, neck or anywhere else that can transmit forces to the head.
- Causes rapid onset of short lived impairment of brain function
- Symptoms are reflective of a functional disturbance (e.g. memory disturbance, balance problems or symptoms) rather than damage to structures (such as blood vessels, brain tissue or fractured skull)
- Typically standard imaging, such as MRI and CT scans are normal
- Loss of consciousness occurs in less than 15% of cases and is not necessary for diagnosing concussion

CONCUSSION MUST BE TAKEN EXTREMELY SERIOUSLY

Concussion is only one diagnosis that may result from a head injury:

1. Superficial injuries – scalp or face lacerations or abrasions
2. Sub-concussive event – head impact event that does not cause concussion
3. Concussion – an injury resulting in disturbance of brain function
4. Structural brain injury – injury resulting in damage to a brain structure (fractured skull, bleed into or around the brain)

   Structural brain injuries may mimic concussion. In this instance signs and symptoms of structural injury will persist or deteriorate over time, e.g. worsening of headache, increased drowsiness, persistent vomiting, increasing confusion, seizures

All head injuries should be considered associated with cervical spine injury until proven otherwise.

NB: Symptoms of concussion can present at any time, but typically become evident in the first 24-48hrs

Different Ages

Children and adolescent athletes (18 years and under) with concussion should be managed more conservatively. Evidence shows that children:

1. are more susceptible to concussion
2. take longer to recover
3. have more significant memory and mental processing issues
4. are more susceptible to rare and dangerous neurological complications, including death caused by a single or second impact

Athletes with a history of 2 or more concussions within a past year are at greater risk of further brain injury and are slower to recover. Medical attention must be sought prior to play!

2. Recognising Concussion

Visible clues: - what you see

- dazed or vacant
- lying motionless on the ground/slow to get up
- unsteady on their feet/balance problems/incoordination
- loss of consciousness or responsiveness
- confused/not aware of plays or events
- grabbing or clutching head
- more emotional/irritable
- convulsion

Subjective clues: - what you are told

- headache
- dizziness
- mental clouding/confusion/feeling slowed down
- visual problems
- nausea/vomiting
- fatigue
- sensitivity to light or noise
- drowsiness
- pressure in head

Side line evaluation

- If able – player MUST BE REMOVED FROM PLAY to be assessed.

  Questions to ask:

  1. What venue are we at today?
  2. Which half is it now?
  3. Who scored last in this game?
  4. Did you win the last match?
  5. Who won the last tournament you played in?

Failure to answer any of these questions correctly may suggest concussion

If in doubt remove the player from the field – this should be done safely and in accordance with emergency management procedures. If a neck injury is suspected, the player should only be removed by emergency healthcare professionals with appropriate spinal care training.

Team mates, coaches, match official, managers, parents who observe an injured player displaying any of the signs or symptoms after an injury event with potential to cause a concussion MUST do their best to ensure the player is removed from the field of play safely.

3. Recognise and remove

If any signs and symptoms are noted and the player fails to answer all 5 questions correctly the player must be removed from play and a comprehensive medical evaluation undertaken

- The player must not be left alone for 24 hours
- Should not consume alcohol in the first 24 hours and should not be consumed until symptom free
- The player should not drive and not return to driving until symptom free

Hospital referral

Indications:

- Complaining of severe neck pain
- Deterioration in conscious state following injury
- Confusion/impairment of consciousness > 30 minutes
- Loss of consciousness > 5 minutes
- Persistent vomiting or increased headache post injury
- Unusual behaviour change
- Double vision
- Seizure (fit)

- Weakness or tingling/burning in arms or legs
- ***When in doubt – refer***

Conservative management

- Player must not be left alone and must be serially monitored. This must be by player coach/manger if available or by a responsible adult – friend/relative.
- Player must be monitored and player should be referred to hospital in the presence of:
    - Changes in behaviour
    - Vomiting
    - Dizziness
    - Worsening headache
    - Double vision
    - Excessive drowsiness
- Evidence suggests that the majority of concussive injuries recover over 3-5 days, although recognised recovery is classed as 7-10 days.

4. Rest

Rest is the cornerstone of treatment – physical and mental rest

There should be complete mental and physical rest for 24-48 hours (this includes; television, computer, reading, homework, video games etc)

Before starting physical activity the player must be symptom free for 24 hours at rest. Medical clearance is needed before activity is restarted.

Children and adolescents should be managed more conservatively. Recommendations suggest rest for a minimum of 2 weeks prior to undertaking contact training following cessation of symptoms and students must have returned to school or full studies before commencing.

After a minimum rest period and symptom free, a graduated return to play programme should be followed.

5. Return to play (RTP)

- Players require a graded programme of exertion prior to medical clearance.
- ***Player must be sign and symptom free at rest and on exertion before the RTP test is completed.***

Graded Return to Play (GRTP) protocol (adapted from the World rugby organisation)

- Each steps take 24 hours minimum
- The player should not proceed to the next level until ***asymptomatic*** at the current level.

Stage	Rehabilitation Stage	Exercise allowed	Objective
1	Minimum rest period	• Complete body and brain rest without symptoms	Recovery
2	Light aerobic exercise	• Light jogging for 10-15 mins, swimming or stationary cycling at low intensity. • No resistance training • Symptom free during full 24 hour period	Increase heart rate
3	Sport-specific exercise	• Running drills • Ball handling skills • No head impact activities	Add movement
4	Training drills	• Progression of more complex training (passing) • Resistance training	Exercise coordination and cognitive load
5	Full training drills – game practice	• Normal training	Restore confidence and assess functional skills by coaching staff
6	Return to play	• Rehab completed	Recover

Players 15 years and under

- Minimum rest period 2 weeks and symptom free
- GRTP to follow rest, with each stage lasting 48hrs
- Earliest return to play – Day 23 post injury

Players 16-18

- Minimum rest period 1 week and symptom free
- GRTP to follow rest, with each stage lasting 24hrs
- Earlies return to play – Day 12 post injury

Adult – 19 years and over

- Minimum rest period 24 hours and free of symptoms
- GRTP to follow rest period, with each stage lasting 24hrs
- Earliest return to play – Day 6 post injury

A GRTP should only commence if the player:

- has completed the minimum rest period for their age
- is symptom free and off medication that modified symptoms of concussion
- Medical or approved healthcare professional clearance is required prior to commencing GRTP
- If medical or approved healthcare practitioner is not available to manage and review the GRTP, the player **MUST NOT** play until a completion of a minimum 2 week rest period and the relevant GRTP for that age.

6. Summary

1. Concussion must be taken seriously to safe guard the long and short term health of players
2. Know how to RECOGNISE concussion
3. Players suspected of having concussion must be REMOVED from play and must not resume play that same day
4. All players suspected of having concussion must be assessed by a healthcare practitioner
5. Players suspected of having concussion must have time to RECOVER
6. Players must go through a RETURN to play protocol (GRTP) and receive medical clearance before returning to play

<u>Remember the 4 R's</u>

Recognise
Remove
Recover
Return

RFU acronym for symptoms

Headache
Emotional
Appearance
Drowsiness
Confusion
Agitated
Seizure
Eyes & Ears