Recognise and Remove Protocol

UAERF Concussion Guidelines September 2019

CONTENTS

INTRODUCTION

UAERF recognize & remove protocol document is intended to be used by everyone involved in the game, the information contained in this document has been reviewed and prepared by the UAERF Concussion Management Working Group.

UAERF supports a recognize and remove policy for management of suspected concussion. In the event of a suspected concussive injury being identified by any of:

- Team official
- Match Official
- Relative of player

The player should be removed from play and not returned the same day, and a concussion assessment should be completed by a doctor experienced in concussion.

Each Affiliate School\Club should manage their members' concussion events through traceable reporting. A concussion report register should be maintained in a timely manner and be made available to the UAERF.

The HIA (Head Injury Assessment) and temporary replacement Law is applicable only to world rugby elite level competition and so does NOT apply to any UAERF Competitions or tournaments at any level or age.

CONCUSSION FACTS

- Concussion is a brain injury causing disturbance of normal function
- A player does not have to be knocked unconscious to have a concussion - loss of consciousness is seen in only 10% of cases of concussion.
- BUT if a player is 'knocked out' or loses consciousness, even if only for a short period of time, there is concussion (other brain injury should also be excluded by clinical examination).
- Concussion does not cause a structural brain injury that would be seen on scan and so cannot be excluded or diagnosed on any type of brain scan including MRI or CT
- All concussions are serious, and head injuries can be fatal
- Most concussions recover with time and a gradual return to normal life and sport
- Concussion has many symptoms, commonly dizziness, headache, memory or concentration disturbance and balance problems
- Concussion is an evolving injury, symptoms usually start within the first 24-48 hours after an injury, but might not be present straight away and can change over the course of the injury
- Patients should avoid taking medications such as painkillers when concussed
- People with previous concussion are more likely to have further concussions and may also take longer to recover
- The usual timeframe for recovery is up to 2 weeks (adults) or up to 4 weeks for children, variable from person to person.
- Children (under 19) are more susceptible to concussion, take longer to recover, can have more significant symptoms and are more likely to have rare and dangerous complications including death by single or second impact

CONCUSSION RULES

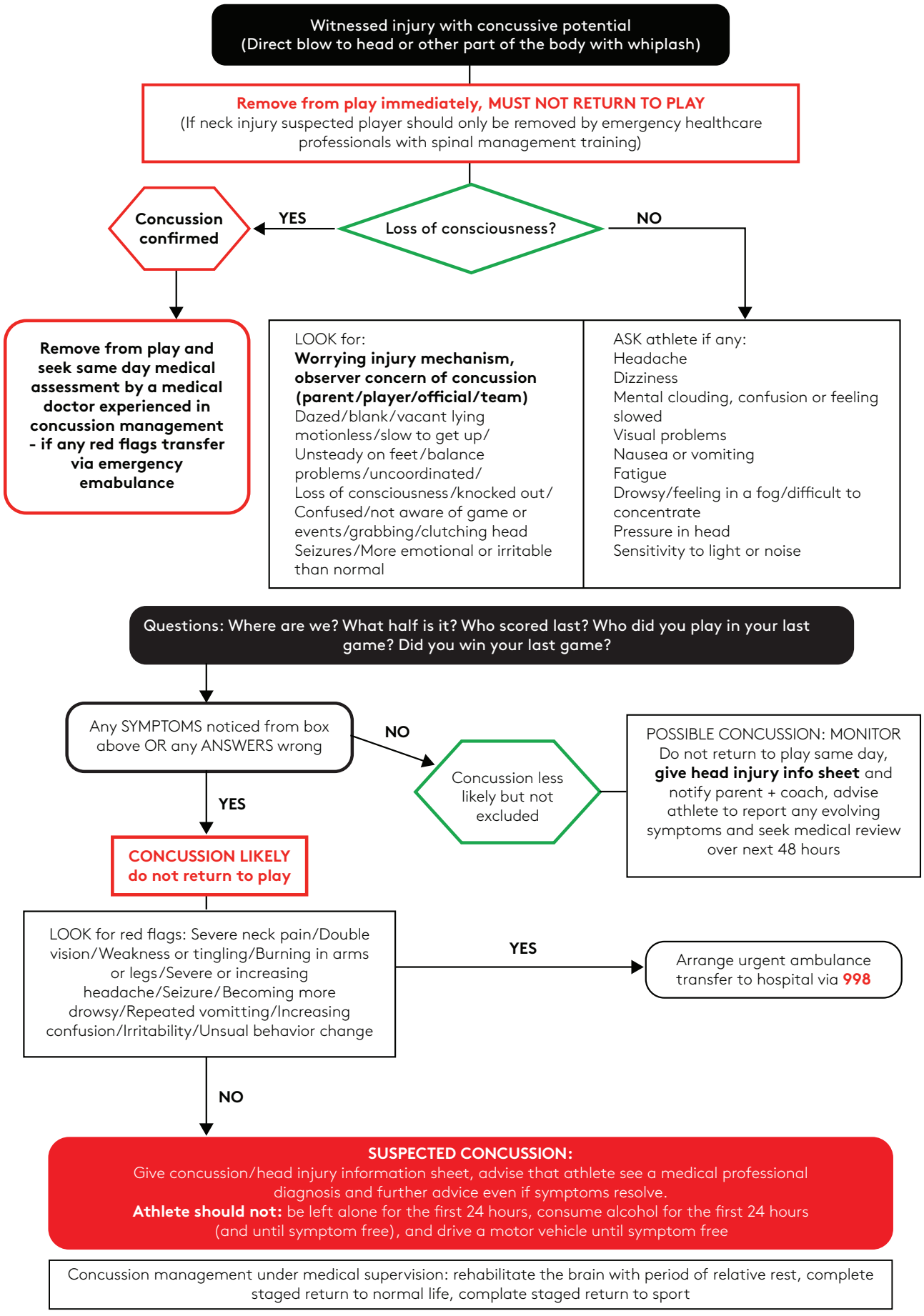
- If an athlete is suspected of having concussion they should be immediately removed from sport and should not be returned to sport on the same day
- All head injuries should be initially assessed by a doctor experienced in concussion management, within 48 hours of the injury
- Those suspected of being 'knocked out' or having worrying symptoms such as worsening headache, vomiting or unusual behavior should be assessed urgently in an emergency department
- No athletes should drive, drink alcohol or operate heavy machinery if concussion is suspected
- Athletes with suspected concussion should not undergo physical activity until symptoms have cleared
- Any player with two concussions in 12 months, or more than 3 concussions, unusual symptoms or prolonged recovery should be managed by a doctor with specific concussion experience.
- **IF IN DOUBT SIT THEM OUT – this can prevent further injury or death**

Red Flags and Danger Signs

Be alert for symptoms that worsen over time. Any of the symptoms listed below require urgent assessment in the closest hospital emergency department:

- One pupil larger than the other
- Increasing drowsiness or cannot be woken
- Worsening headache
- Weakness, numbness or worsened coordination
- Repeated vomiting
- Slurred speech Convulsions or seizures
- Difficulty recognizing people or places Increasing confusion, restlessness or agitation
- Unusual Behaviour
- Loss of consciousness

SUSPECTED CONCUSSION FLOWCHART



CONCUSSION BASELINE TESTING

Concussion Baseline Testing refers to Neuro-Psychological testing, either computerized or using the SCAT 5. This establishes an athlete's normal level of brain function. The Baseline Test is compared to a test after injury and in conjunction with a full clinical history and physical examination it can help in accurate concussion diagnosis and safe return to sport.

A concussion potentially affects all brain processing, therefore, clinical neurological examination, balance, memory, symptom scoring, and cognitive testing are used together to help diagnose a concussion.

The UAERF recommends Baseline Testing for those engaged in collision sports.

For a list of clinics that conduct baseline testing, please contact the UAERF.

CONCUSSION MANAGEMENT PROCESS

A slow, stepwise return to normal life is the key to successful concussion management and minimizes the chance of continued symptoms. This process should be overseen by a doctor experienced in concussion management.

NOTE: If an athlete has been seen at an Emergency Department at a Hospital, they must still be seen by a doctor experienced in Concussion Management, as the emergency department should clear serious injury, but not usually oversee recovery and a safe return to sport.

If a potential concussive injury was deemed serious enough to attend the hospital, then in most cases, a concussion protocol and safe return to sport plan should be followed.

UAE and World Rugby recommend the following with concussion or suspected concussion:

- Complete rest (body and brain) for first 24hours
- In adults relative physical rest should be for a minimum of one week
- In children under the age of 19, relative physical rest should be for a minimum of 2 weeks followed by graded return to school and then sport
- Successful return to school should occur before return to physical activity
- For adults and children, the aim is to facilitate symptom free return to a normal life, school, work, followed by a staged return to sport. The staged return should be guided more by symptoms and progression than absolute timescales

GRADUATED RETURN TO PLAY (GRTP) PROGRAM

It is highly recommended that the gradual return to play process is overseen by a doctor and medical team who are experienced in concussion management, and that Medical Clearance for play at the end of the gradual return is completed by the treating doctor. The Graduated Return To Play (GRTP) Program incorporates a progressive exercise program that introduces a player back to sport in a step wise fashion.

This should only be started once the player has completed their relative physical rest period, is successfully attending a normal school/work day, is symptom free and off treatments and/or medication that may modify or mask concussion symptoms, for example drugs for headaches or sleeping tablets. The UAERF recommends following the World Rugby's GRTP Protocol.

GRTP Program contains six distinct stages:

- The first stage is a relative rest period
- The next four stages involve increasing activity in a step-wise manner with progression guided by symptoms
- Players should be cleared by a doctor experienced in concussion management prior to contact at stage 5
- Stage 6 is full return to match play
- World Rugby requires that after a minimum of 1 weeks relative rest (adults) or 2 weeks (under 19s), each stage of the GRTP be a minimum of 24 hours, this time may be longer for those under 19
- If any concussive symptoms worsen or reappear during any stage, the athlete should go back to the previous stage until symptoms resolve

GRTP Programme Table
EACH STAGE IS A MINIMUM OF 24 HOURS

Stage	Rehabilitation stage	Exercise allowed	Objective
1	Initial rest (physical and cognitive)	No driving or exercise. Minimize scree time. Consider time off or adaptation of work or study	Recovery
2a Symptoms persists at 24 hours	Symptom-limited activities	Initially activities of daily living that do not provoke symptoms. Consider time off or adaptation of work or study	Return to normal activities (as symptoms permit)
2b Symptom free at 24 hours	Light aerobic exercise	Light jogging for 10-15 minutes, swimming or stationary cycling at low to moderate intensity. No resistance training. Symptom free during full 24-hour period	Increase heart rate
3	Sport-specific exercise	Running drills. No head impact activities	Add movement
4	Non-contact training drills	Progression to more complex training drillls, e.g., passing drills. May start progressive resistance training	Exercise, coordination and cognitive load
5	Full contact practice	Following medical clearance, participate in normal training activities	A return to learning must achieved before returning to sport
6	Return to sport	Normal game play	Restore confidence and assess functional skills by coaching staff

REPORTING & RECORDING

The reporting process is where information is stored by the club/school and transferred to the concussion specialist who is responsible for managing the treatment & GRTP process.

UAERF recommends that all clubs and schools keep a register of all concussion injuries to track progress, ensure safe return to sport and monitor number of concussions.

Details gathered should include:

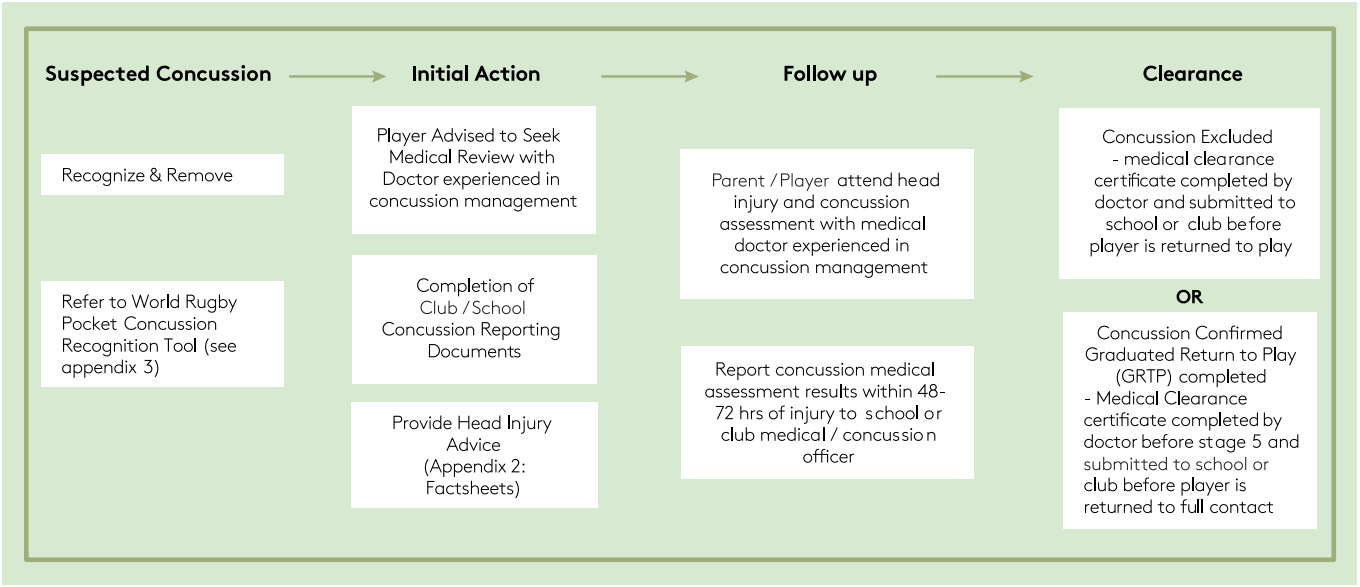
- Name and age of injured player
- Date of incident
- First aider details
- All contact details for the player
- Action taken following the incident

Although UAERF recommend clubs and schools report and track concussions, ultimate responsibility for safe management of concussion is with the player and/or their parent/guardian

Please find the recommended UAERF head injury incident report sheet in Appendix 3 if your club/school does not support an online reporting system.

UAERF Reporting Pathway for Head Injury

Note: the school or club medical / concussion officer should be notified at every step of the pathway



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https://bjsm.bmj.com/content/52/10/635:
Patricios JS, Ardern CL, Hislop MD, et al
Implementation of the 2017 Berlin Concussion in Sport
Group Consensus Statement in contact and collision sports: a joint position statement from 11 national and international sports organisations
British Journal of Sports Medicine 2018;52:635-641.

APPENDIX 1 - USEFUL RESOURCES

World Rugby Concussion Education Module:
https://playerwelfare.worldrugby.org/concussion

APPENDIX 2 – CONCUSSION FACTSHEET

WHAT IS A CONCUSSION?

Concussion is a type of brain injury which changes the way the brain works. It is caused by a bump, blow or jolt to the head, and can also be caused from a blow to the body that causes the head and brain to move rapidly and stop suddenly.

A patient does not have to be knocked unconscious to have a concussion – loss of consciousness is seen in only 10% of concussions.

Recognizing a suspected concussion at the time of injury is very important for safe management and should be a priority for those involved in contact sports: IF IN DOUBT SIT THEM OUT.

Concussion cannot be confirmed or excluded by any form of brain scan including CT or MRI and should be diagnosed by a doctor experienced in concussion using clinical examination and appropriate assessment tools.

Concussion can have life threatening complications such as second impact syndrome (where another blow occurs before the brain has recovered from the first), or longer term consequences such as prolonged concussive syndrome, where symptoms are continue for longer than normally expected.

Concussion requires a period of relative rest to allow recovery of the brain and return to normal function, and this should be overseen by a Doctor experienced in concussion management. Some people may require more specific rehabilitation addressing dizziness and balance depending on medical assessment.

After the intial relative rest period and guided by the overseeing doctor, a patient should undergo a gradual return to normal work/school and then sport once symptoms have resolved. Timescales for this return should be advised by the treating doctor as recovery is variable from person to person and injury to injury.

Concussions can have a more serious effect on young developing brains as well as in people with other medical problems and those who have had previous concussions, as a result these patients may need longer to recover.

With correct treatment, most concussions resolve over time with approximately 90% of adults recovering in 2 weeks and children (under 19) within 4 weeks.

WHAT ARE THE SIGNS AND SYMPTOMS OF CONCUSSION?

You cannot see a concussion, and it cannot be diagnosed from a CT or MRI scan. Signs and symptoms can occur straight after an injury or may not appear or be noticed until hours or days after the injury.

It is important after potentially concussive injury to watch for changes in how the patient might be feeling or acting, being alert for worsening symptoms or a person 'just not feeling right'. Most concussions occur without loss of consciousness.

If you notice any of the symptoms below after an injury, it is important to seek medical review in order to assess properly for concussion:

SIGNS AND SYMPTOMS OF A CONCUSSION

Signs that might be observed in an injured person:

Thinking / remembering:

- Appears dazed or stunned
- Confused about events
- Answers questions slowly
- Repeats questions
- Can't recall events either prior or after the bump/fall
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Forgets facts that would normally recall

Symptoms reported by patients:

Physical:

- Difficulty thinking clearly
- Difficulty concentrating / remembering
- Feeling slowed down
- Feeling sluggish / hazy / foggy / groggy
- Headache / pressure in the head
- Nausea / vomiting
- Balance problems / dizziness
- Feeling tired / fatigue
- Blurry / double vision
- Sensitivity to light or noise
- Numbness or tingling
- Just don't feel right

Emotional:

- Irritable
- Sad
- More emotional
- Nervous

Sleep:

- Drowsy
- Sleeping less or more than usual
- Trouble falling asleep

HEAD INJURY INFORMATION SHEET: SUSPECTED CONCUSSION

You / your child have been assessed and thought to have a suspected concussion, which is a type of brain injury.

Concussion commonly causes symptoms such as

- Headache or pressure in the head
- Poor concentration
- Feeling foggy or dizzy
- More emotional than usual
- Sensitivity to light or noise

Concussion usually resolves within 2 weeks (adults) or 4 weeks (under 19s) with correct management however can have prolonged symptoms or other more serious complications such as second impact syndrome if return to school / work / sport is attempted too soon.

We advise further assessment by a medical Doctor trained in concussion within the next 48 hours to confirm the diagnosis and advise on further treatment plan. Over the first 48 hours after injury the brain requires rest as a priority, and we would also advise you to follow the below guidance until further medical review is completed:

- **No work or school for the first 48 hours**
- **No physical or sporting activity until given further medical guidance**
- **Avoid phones / computer screens for the first 48 hours**
- **Avoid medications such as sleeping tablets, antiinflammatories, aspirin or strong painkillers**
- **No driving**
- **No alcohol**

Patients with suspected concussion should not be left alone for the first 24 hours and should go to hospital immediately if any of the following symptoms occur (these are signs of other types of head injury aside from concussion):

- A headache or neck pain that gets worse
- Very drowsy (not appropriate for the time of day - it is okay to go to sleep if it is night time)
- Unable to recognise people or places
- Have repeated vomiting
- Behave unusually or seem confused or very irritable
- Have seizures
- Have weak or numb arms and legs

We advise if you have any concerns prior to scheduled medical review that you seek medical review at your closest emergency department.

APPENDIX 3 –ASSESSMENT TOOLS / REPORTING

FORMS
SCAT Test (Standardized Concussion Assessment Tool):

Adult:
https://bjsm.bmj.com/content/bjsports/early/2017/04/26/bjsports-2017-097506SCAT5.full.pdf

Child (5-12 yrs.):
https://bjsm.bmj.com/content/bjsports/early/2017/04/28/bjsports-2017-097492childscat5.full.pdf

World Rugby Pocket Concussion recognition tool:
https://rugbyready.worldrugby.org/pdfs/pocket_crt_en.pdf

UAERF concussion reporting template LINK

Pocket CONCUSSION RECOGNITION TOOL™

To help identify concussion in children, youth and adults

RECOGNIZE & REMOVE

Concussion should be suspected **if one or more** of the following visible clues, signs, symptoms or errors in memory questions are present.

1. Visible clues of suspected concussion

Any one or more of the following visual clues can indicate a possible concussion:

Loss of consciousness or responsiveness
Lying motionless on ground / Slow to get up
Unsteady on feet / Balance problems or falling over / Incoordination
Grabbing / Clutching of head
Dazed, blank or vacant look
Confused / Not aware of plays or events

2. Signs and symptoms of suspected concussion

Presence of any one or more of the following signs & symptoms may suggest a concussion:

- Loss of consciousness
- Seizure or convulsion
- Balance problems
- Nausea or vomiting
- Drowsiness
- More emotional
- Irritability
- Sadness
- Fatigue or low energy
- Nervous or anxious
- "Don't feel right"
- Difficulty remembering
- Headache
- Dizziness
- Confusion
- Feeling slowed down
- "Pressure in head"
- Blurred vision
- Sensitivity to light
- Amnesia
- Feeling like "in a fog"
- Neck pain
- Sensitivity to noise
- Difficulty concentrating

3. Memory function

Failure to answer any of these questions correctly may suggest a concussion.

"What venue are we at today?"
"Which half is it now?"
"Who scored last in this game?"
"What team did you play last week / game?"
"Did your team win the last game?"

Any athlete with a suspected concussion should be IMMEDIATELY REMOVED FROM PLAY, and should not be returned to activity until they are assessed medically. Athletes with a suspected concussion should not be left alone and should not drive a motor vehicle.

It is recommended that, in all cases of suspected concussion, the player is referred to a medical professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

RED FLAGS

If ANY of the following are reported then the player should be safely and immediately removed from the field. If no qualified medical professional is available, consider transporting by ambulance for urgent medical assessment:

- Athlete complains of neck pain
- Increasing confusion or irritability
- Repeated vomiting
- Seizure or convulsion
- Weakness or tingling / burning in arms or legs
- Deteriorating conscious state
- Severe or increasing headache
- Unusual behaviour change
- Double vision

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to so do.
- Do not remove helmet (if present) unless trained to do so.

from McCrory et. al, Consensus Statement on Concussion in Sport. Br J Sports Med 47 (5), 2013

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