



Sidcot
Live Adventurously

**Policy Name: Concussion Protocol
Policy 4.5**

25.04.2019

Sidcot School Concussion Protocol

This policy has been produced with guidance from the International Rugby Board (IRB), Rugby Football Union (RFU), 'Headcase' Resources, Great Britain Hockey and England Hockey. All of which have developed policies and advice from the Zurich Guidelines published in the Consensus Statement on Concussion in Sport, and adapted for rugby by the IRB.

The information contained in this policy is intended for educational and guidance purposes only and is not meant to be a substitute for appropriate medical advice or care.

If you believe that you or someone under your care has sustained a concussion we strongly recommend that you contact a qualified health care professional for appropriate diagnosis and treatment.

What is Concussion?

CONCUSSION MUST BE TAKEN EXTREMELY SERIOUSLY

- Concussion is a brain injury caused by either direct or indirect forces to the head.
- Concussion typically results in the rapid onset of short-lived impairment of brain function.
- Loss of consciousness occurs in less than 15% of concussion cases and whilst a feature of concussion, loss of consciousness is not a requirement for diagnosing concussion.
- Concussion results in a disturbance of brain function (e.g. memory disturbance, balance problems or symptoms) rather than damage to structures such blood vessels, brain tissue or fractured skull.

Concussion is only one diagnosis that may result from a head injury. Head injuries may result in one or more of the following:

- Superficial injuries to scalp or face such as lacerations and abrasions
- Subconcussive event – a head impact event that does not cause a concussion
- Concussion – an injury resulting in a disturbance of brain function
- Structural brain injury – an injury resulting in damage to a brain structure for example fractured skull or a bleed into or around the brain

Concussion in Children and Adolescents

It is widely accepted that children and adolescent athletes (18 years and under) with concussion should be managed more conservatively. This is supported by evidence that confirms that children:

- are more susceptible to concussion
- take longer to recover
- have more significant memory and mental processing issues
- are more susceptible to rare and dangerous neurological complications, including death caused by a second impact syndrome

Prevention Procedure

In order to try and reduce the risk of concussion the following guidance is followed:

- Ensure the playing or training area is safe e.g. playing area condition, safety equipment utilised
- Ensure correct playing techniques are coached and performed consistently by all players
- Explain the dangers of inappropriate tackles or styles of play and penalise them immediately if they occur
- Encourage players and parents to report any concussions that occur during any game and training sessions and to report concussions that occur out of school. It is essential that all parties involved communicate if a player is concussed

Diagnosis and Assessment of Concussion

Identifying concussion

All players with a suspected concussion where no appropriately trained personnel are present MUST be assumed to have a diagnosed concussion and **MUST** be removed from the field of play and not return to play or train on the same day. In this situation, players must be referred to a healthcare professional for further assessment.

The Pocket Concussion Recognition Tool (*see appendix 1*), developed by the Zurich 2012 Concussion Consensus Group, supports this Recognise and Remove message. This Tool highlights the signs and symptoms suggestive of a concussion.

Possible signs and symptoms of concussion

Visible clues of potential concussion - what you see

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

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

Symptoms of potential concussion - what you are told

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

- Headache
- Dizziness
- Mental clouding, confusion, or feeling slowed down
- Visual problems
- Nausea or vomiting
- Fatigue
- Drowsiness / Feeling like “in a fog” / difficulty concentrating
- “Pressure in head”
- Sensitivity to light or noise

Questions to ask - what questions to ask

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?”

If a player has signs or symptoms of a possible concussion that player must be:

RECOGNISED AND REMOVED

IF IN DOUBT, SIT THEM OUT

Diagnosing Concussion (*see appendix 2*)

The Zurich 2012 Concussion Consensus Statement is recognised as the best practice document for concussion management. It identifies concussion as being among the most complex injuries in sports medicine to diagnose, assess and manage. This paper also confirms that there is no perfect diagnostic test or marker for the immediate diagnosis of concussion in the sporting environment.

On field or pitch side management

A player with a signs or symptoms of concussion must be removed in a safe manner in accordance with emergency management procedures and medically assessed.

If a cervical spine (neck) injury is suspected, the player should only be removed by emergency healthcare professionals with appropriate spinal care training.

Team mates, coaches, match officials, team managers, administrators or parents who observe an injured player displaying any of the signs or symptoms after an injury event with the potential to cause a concussion **MUST** do their best to ensure that the player is removed from the field of play in a safe manner.

The School chooses to delay the concussion assessment until a 15-minute rest period has been undertaken this allow athletes time to rest prior to an assessment. This rest period is recommended to allow athletes to recover from game induced fatigue and avoid false positive results occurring due to this fatigue.

All players with a suspected or known concussion **MUST** go through a graduated return to play (GRTP) protocol.

Note:

Appropriately trained personnel are either a Medical Practitioner (Doctor) or a Healthcare Professional (Nurse / Paramedic).

Remember the 4 R's

- **Recognise** Know the signs and symptoms of concussion
- **Remove** If a player is concussed or there is even a potential concussion they should be removed from play immediately
Refer Once removed from play, the player should be referred to a medical practitioner (Doctor) or healthcare professional (nurse / paramedic) who is trained in evaluating and treating concussion
Rest Players must rest from exercise until symptom free and then a Graduated Return To Play (GRTP) must be followed
Under 19 years of age – 2 weeks rest followed by GRTP protocol
Individuals should avoid the following initially and then gradually re-introduce them:
Reading
TV
Computer games
Driving
Needing to miss a day or two of academic study is not unusual
- **Recover** Full recovery, being symptom free, from the concussion is required before return to play is authorised by a medical practitioner or healthcare professional.

- **Return** They must go through a GRTP and receive medical clearance in writing before returning to play.

Recurrent Concussions

Following concussion a player is at increased risk of a second concussion within the next 12 months.

Players with:

- A second concussion
- A history of multiple concussions
- Unusual presentations or
- Prolonged recovery

Should be assessed by a medical practitioner (doctor) with experience in sports-related concussions. If such a practitioner is not available then the player should be managed using the GRTP protocol from the lower age group as a minimum.

Onset of Symptoms

The signs and symptoms of concussion can present at any time but typically become evident in the first 24-48 hours following a head injury.

Recovery from Concussion

Recovery from concussion is spontaneous and typically follows a sequential course. The majority (80-90%) of concussions resolve in a short (7-10 day) period, although the recovery time frame may be longer in children and adolescents.

Players must be encouraged not to ignore symptoms at the time of injury and must not return to play prior to the full recovery following a diagnosed concussion. The risks associated with premature return to play include:

- A second concussion
- Increased risk of other injuries due to poor decision making or reduced reaction time associated with concussion
- Reduced performance
- Serious injury or death due to an unidentified structural brain injury
- A potential increased risk of developing long-term neurological deterioration

Protective Equipment

Rugby head guards **DO NOT** protect against concussion. They do protect against superficial injuries to the head such as cuts and grazes. This has been demonstrated in a number of research studies now. There is some evidence to suggest that they may increase risk taking behaviours in some players.

Mouth guards / gum shields do not protect against concussion either. However the School insists that all players wear a mouth guard to protect against dental and facial injuries during training and matches.

Graduated Return to Play (GRTP)

All players with a diagnosed or potential concussion must go through a graduated return to play (GRTP) program as outlined in this document (*see appendix 3*).

A GRTP programme should only commence if the player:

- has completed the minimum rest period for their age
- is symptom free and off medication that modifies symptoms of concussion.

Medical or approved healthcare professional clearance is required prior to commencing a GRTP.

The management of a GRTP should be undertaken on a case by case basis and with the full cooperation of the player. The commencement of the GRTP will be dependent on the time in which symptoms are resolved.

It is important that concussion is managed so that there is physical and cognitive rest (avoidance of activities requiring sustained concentration), until there are no remaining symptoms for a minimum of 24 consecutive hours without medication that may mask the symptoms. Concussion/November 2015

The Graduated Return to Play Program

The GRTP Program contains **FIVE** distinct stages:

- The first stage is the recommended rest period for the athlete's age
- The next Three stages are training based restricted activity
- Stage 5 is a return to play

Under the GRTP Program, the Player can proceed to the next stage if no symptoms of concussion are shown at the current stage (that is, both the periods of rest and exercise during that 24-hour period).

If any symptoms occur while progressing through the GRTP protocol, the player must return to the previous stage and attempt to progress again after a minimum 24-hour period of rest has passed without the appearance of any symptoms.

Prior to entering Stage 5, a Medical Practitioner or approved healthcare professional and the Player must first confirm that the player can take part in this stage. Full contact practice equates to return to play for the purposes of concussion. However, return to play itself shall not occur until Stage 5.

The GRTP applies to all sporting activities.

Conclusion

Concussion is a serious injury that if not treated correctly can have significant long term effects. However when playing contact sports and participating in other physical activities concussion is always a risk factor whatever precautions are taken. We aim to minimise the possible risks by ensuring that our student follow the advised concussion procedures as advised by all the sporting governing bodies.

We will always advised that further professional medical advice is sought if you have any concerns about whether or not your child is suffering from concussion and report any such injury to the School as soon as possible so that we can provide the appropriate care during their recovery.

Links

NHS Services

There are a number of NHS services or resources that HCPS may find useful:

- NHS Direct (www.nhsdirect.nhs.uk)
- NHS Choices (www.nhs.uk)
- Specialist Minor Head Injury Clinics. (www.nhs.uk/service-search)
- NICE Guidelines (<http://publications.nice.org.uk/head-injury-cg56>)
- United States CDC Concussion Education website (www.cdc.gov/concussion)

Other Services

Headway, the brain injury charity specialise in providing advice, support and rehabilitation services to individuals and their families following a head injury. (www.headway.org.uk)

References

McCrory P, Meeuwisse WH, Aubry M et al. **Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport** held in Zurich, November 2012. Br J Sports Med 2013;47:250–258.

Putukian M, Raftery M, Guskiewicz K, et al. **On field assessment of concussion in the adult athlete**. Br J Sports Med 2013;47:285–288.

Makdissi et al. **Natural History of Concussion in Sport: Markers of Severity and Implications for Management** Am J Sports Med 2010 38: 464-471.

Echlin et al. **Return to play after an initial or recurrent concussion in a prospective study of physician-observed junior ice hockey concussions: implications for return to play after a concussion**. Neurosurg Focus 29 (5):E5, 2010; 1-5.

Broglio et al. ***The Relationship of Athlete-Reported Concussion Symptoms and Objective Measures of Neurocognitive Function and Postural Control***. Clin J Sport Med - Volume 19, Number 5, September 2009; 377-382.

Teasdale G, Jennett B. ***Assessment of coma and impaired consciousness: A practical scale***. The Lancet. 1974 July 13, 1974:81-4.

Giza CC, Hovda DA. ***The Neurometabolic Cascade of Concussion***. J Athl Train. 2001Sep;36(3):228-35.

Brooks JHM, Fuller CW, Kemp SPT, Redin DB. ***Epidemiology of injuries in English Professional Rugby Union: Part 1 match injuries***. Br J Sports Med. 2005 Oct 39 (10) 757- 66.

Roberts S. ***RFU Community Rugby Injury Surveillance Project 2011/12 Season Report***. (unpublished).

McCrory P. 2012. ***4th International Conference on Concussion in Sport. How have the professional team sports and federations responded to the Zurich 2008 guidelines***. 1st November. Zurich.

Wrightson P, Gronwall D. ***Concussion and sport: a guide for coaches and administrators***. Pat Management. 1983(March):79-82.

Appendix 1

Pocket Concussion Recognition Tool

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

© 2013 Concussion In Sport Group

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:

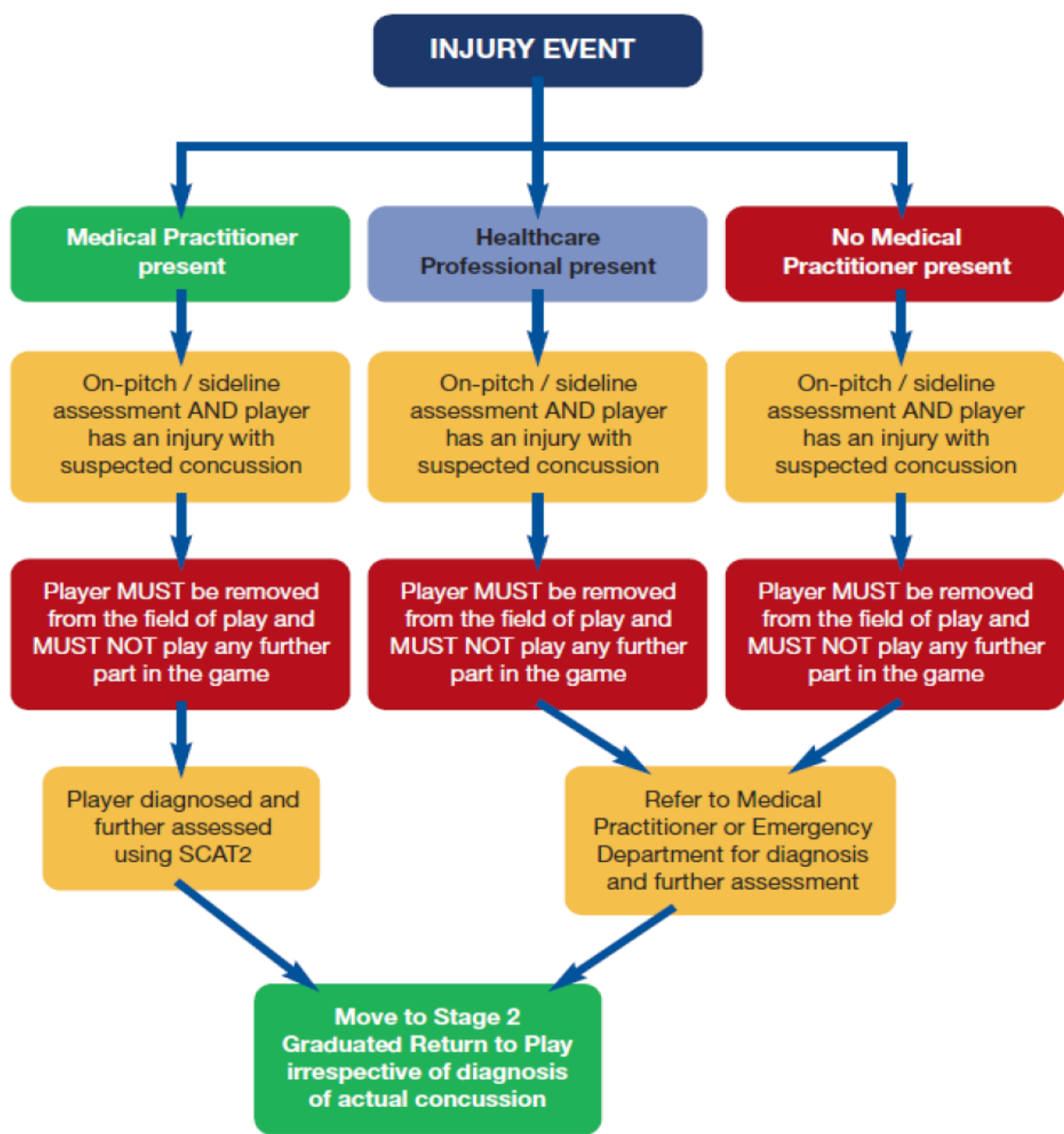
- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to do so.
- Do not remove helmet (if present) unless trained to do so.

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

© 2013 Concussion In Sport Group

Appendix 2

Diagnosis and Initial Management of Concussion



Appendix 3

Graduated Return To Play (GRTP) following a Concussion

Name of player:.....

Symptoms displayed:

--	--	--	--

- All players must be medically cleared to play if a concussion has be noted
- This applies to all club / school sides a player belongs to and it is the responsibility of the player or parent / guardian to advise other teams they may represent of the concussion
- The earliest a player can return to play is 23 days
- Stage 1 requires 14 days of no activity followed by 2 days, symptom free at each Stage (2-5) with Stage 5 occurring on day 23 (minimum) of the graduated return to play

Stages	Date of Injury	Recommendation	Date Completed	Questions from staff completed satisfactorily	
				Sign	Comments
		Assessed by School Doctor if the student is a boarder and Home GP/HCP or equivalent if a day student			
Stage 1	0 to 14 days	No activity for 14 days			
Stage 2	Date started:	Light involvement in PE and Games lessons <i>1 school week symptom free</i>			
Stage 3	Date started:	Light involvement in team training – non contact <i>48 Hours symptom free</i>			
Stage 4	Date started:	Assessed by School Doctor if the student is a boarder and Home GP/HCP or equivalent if a day student			
		Full contact practice <i>48 Hours Symptom free</i>			
Stage 5	Date started:	Return to play			

Signature of player:.....

Signature of School Doctor / GP / Health Care Professional (HCP):.....

Date:.....