Procedure for the Management of Head Injuries

Leicester Grammar School Trust

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Last reviewed: September 2018

Next review: September 2019

Aim

The aim of this document is to ensure the Leicester Grammar School (LGS) pupils receive a high standard of care following a Head Injury. The care will reflect current practice and national sporting recommendations. Head injuries often occur during contact sports such as rugby but they can also occur in other activities such as falls and cycle accidents.

Caring successfully for a pupil or adult with a head injury relies on good communication with colleagues, parents, sports coaches, visiting school personnel et al.

Terms of reference:

Head injury is a trauma to the head that may or may not include injury to the brain. (MOSA)

Note: an injury to the face, jaw or nose can also result in a head injury

Concussion is the sudden but short-lived **loss of mental function** that occurs after a blow or other injury to the head. (MOSA)

Procedure (Refer to appendix one for a flow chart of this procedure)

In the event a head injury is sustained during a sporting activity, the pupil should be removed from play so that a concussion assessment can conducted. The pupil should not return to play until this assessment has taken place.

1. In all cases where a head injury has been sustained, the pupil should receive an assessment by a trained nurse, medical personal or an appropriately trained member of staff. The assessment will be carried out using one of the two following methods:

   The **Sports Concussion Assessment Tool 5 (SCAT5)** represents a standardised method of evaluating injured players for concussion. It should only be used by Medical Professionals.

   The **Pocket Concussion Recognition Tool 5 (Pocket-CRT)** is designed to be used by sports coaches when they think one of their athletes may have suffered a concussion. The Pocket-CRT has 3 brief components; visual observations, symptoms and memory. This is an essential tool to be kept in every equipment bag or with every team manager in the case when a medical personal is not available. (Appendix Two)

2. An accurate history of the head injury should be obtained not only from the pupil but also from other witnesses such as coaches, referees and spectators.

3. **When a serious head injury has occurred or if marked concussion is present, the pupil should be immediately transferred to hospital via ambulance. A member of staff should accompany the pupil. Parents must be informed.**

   Symptoms may include:

   - Athlete complains of neck pain (ensure spinal immobilisation)
   - Deteriorating conscious state
   - Increasingly restless, agitated or combative
   - Severe or increasing headache
   - Repeated vomiting
   - Seizure or convulsion
   - Double vision
   - Weakness or tingling/burning in arms or legs

   (Pocket-CRT 2017)

4. If ANY concerns regarding the pupil's condition are raised or concussion is suspected during a sporting activity (one or more of the visible cues, signs, symptoms or errors in memory questions are present on the pocket-CRT), the pupil should not return to play for the remainder of the event and a more thorough medical assessment be sought. The pupil's parents must be contacted and a decision regarding the speed and mode of transportation to a medical facility must be made.

5. If the pupil has been assessed by a trained nurse, medical professional or an appropriately trained member of staff and no symptoms are present, they may return to play after 10 minutes. Parents must be informed. The pupil's condition should be continually assessed from the side-lines to detect any changes.

6. A Head Injury Report must be completed in all cases (Appendix Three). A copy must be provided to the Hospital (if appropriate), Parents, School Nurse (the next working day) and the Head of Rugby (the next working day).

7. Parents should be verbally notified of the head injury, informed of the signs and symptoms to observe for and a head injury advice sheet provided (Appendix Four). The parents should be advised to seek medical assessment if they are concerned about the health of their child.

8. All LGS staff to be made aware of the head injury sustained by the pupil via morning briefing and/or e-mail the next working day. This is to ensure any concerns or changes in behaviour are identified promptly and the pupil is sent to the School Nurse for assessment.

9. It is the parents and pupil's responsibility to inform any sporting clubs attended outside school of the head injury. It is also expected that parents and/or pupils will inform the school of any head injury which has occurred outside of school and the supporting advice given by the assessing medical professional.

The Return To Play Protocol (RTPP) and Graduated Return To Play (GRTP)

Any pupil who has a head injury and been given a diagnosis of concussion or suspected concussion, must be managed under the RTPP/GRTP pathway, regardless of how or where the concussion occurred.

The RTPP/GRTP pathway has been published by the Rugby Football Union (RFU) and adapted for use by LGS (appendix five)

The RTPP acts as mandatory guidelines on the timing of return to training and match play for contact sport at LGS, it emphasises the necessity for follow-up checks and supervision. The advice is currently a supervised return to sport over a period of 2 to 3 weeks dependent on the age of the pupil.

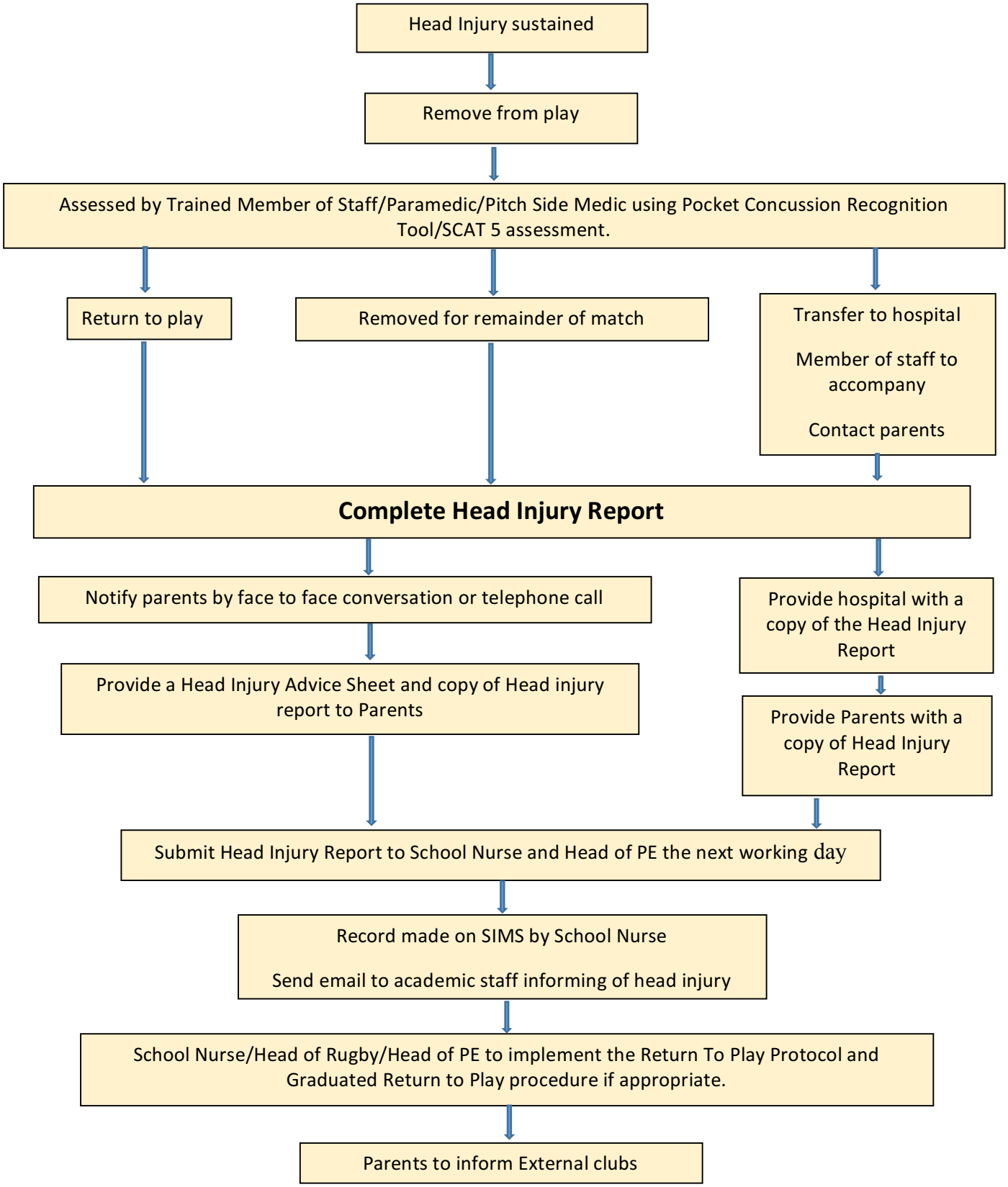
The RTPP is based around a period of minimum rest and then a supervised Graduated Return to Play (GRTP) (Appendix Six). The GRTP will be carried out for all pupils following a concussive head injury under the supervision and guidance of the Head of rugby/Head of PE/School Nurse and under the care of the pupil's GP. Sports staff will have access to the RTPP and understand the importance of undertaking the stepped approach to returning to full match play and of discussing any concerns during this phase with the School Nurse/Head of Rugby/Head of PE. The Pupil's GP should formally clear the pupil to return to full match play.

It is recognised that on occasions concussion may not be evident until several days after the event or injury. In this event the RTPP should be implemented as soon as a diagnosis of concussive head injury has been made and the GRTP process adhered to.

As part of the process, it is also prudent to consult with the pupil's teachers to ensure that their academic performance has returned to normal prior to commencing their GRTP.

Appendix One- Head Injury Management Flow Chart

Head Injury Management Flow Chart



Appendix Two - Pocket Concussion Recognition Tool (Pocket CRT-5)

CONCUSSION RECOGNITION TOOL 5©

To help identify concussion in children, adolescents and adults

Supported by

RECOGNISE & REMOVE

Head impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 (CRT5) is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

STEP 1: RED FLAGS – CALL AN AMBULANCE

If there is concern after an injury including whether ANY of the following signs are observed or complaints are reported then the player should be safely and immediately removed from play/game/activity. If no licensed healthcare professional is available, call an ambulance for urgent medical assessment:

- Neck pain or tenderness
- Double vision
- Weakness or tingling/ burning in arms or legs
- Severe or increasing headache
- Seizure or convulsion
- Loss of consciousness
- Deteriorating conscious state
- Vomiting
- Increasingly restless, agitated or combative

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Assessment for a spinal cord injury is critical.
- Do not attempt to move the player (other than required for airway support) unless trained to so do.
- Do not remove a helmet or any other equipment unless trained to do so safely.

If there are no Red Flags, identification of possible concussion should proceed to the following steps:

STEP 2: OBSERVABLE SIGNS

Visual clues that suggest possible concussion include:

- Lying motionless on the playing surface
- Slow to get up after a direct or indirect hit to the head
- Disorientation or confusion, or an inability to respond appropriately to questions
- Blank or vacant look
- Balance, gait difficulties, motor incoodination, stumbling, slow laboured movements
- Facial injury after head trauma

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STEP 3: SYMPTOMS

- Headache
- "Pressure in head"
- Balance problems
- Nausea or vomiting
- Drowsiness
- Dizziness
- Blurred vision
- Sensitivity to light
- Sensitivity to noise
- Fatigue or low energy
- "Don't feel right"
- More emotional
- More Irritable
- Sadness
- Nervous or anxious
- Neck Pain
- Difficulty concentrating
- Difficulty remembering
- Feeling slowed down
- Feeling like "in a fog"

STEP 4: MEMORY ASSESSMENT

(IN ATHLETES OLDER THAN 12 YEARS)

Failure to answer any of these questions (modified appropriately for each sport) 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?"

Athletes with suspected concussion should:

- Not be left alone initially (at least for the first 1-2 hours).
- Not drink alcohol.
- Not use recreational/ prescription drugs.
- Not be sent home by themselves. They need to be with a responsible adult.
- Not drive a motor vehicle until cleared to do so by a healthcare professional.

ANY ATHLETE WITH A SUSPECTED CONCUSSION SHOULD BE IMMEDIATELY REMOVED FROM PRACTICE OR PLAY AND SHOULD NOT RETURN TO ACTIVITY UNTIL ASSESSED MEDICALLY, EVEN IF THE SYMPTOMS RESOLVE

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Davis GA, et al. Br J Sports Med 2017;51:872. doi:10.1136/bjsports-2017-097508CRT5
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Appendix Three- Head Injury Report

Head Injury Report (PLEASE WRITE FIRMLY)

Name

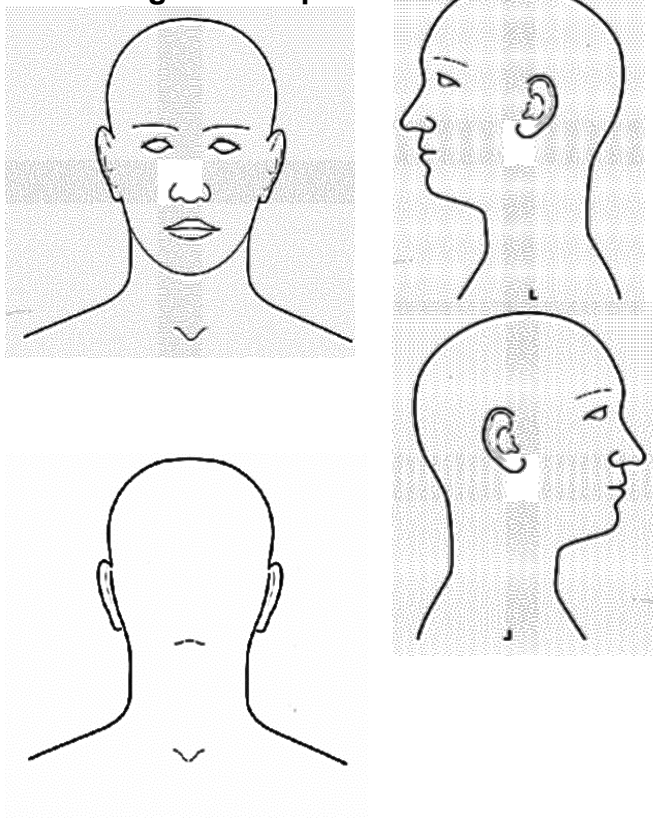
Date

Position played

Mechanism of injury

☐ Collision
☐ Fall
☐ Open play
☐ Contact with Ball
☐ Contact with Stick

Mark region of impact



Visual cues – what do you see?
(tick all applicable)

a) ☐ Dazed, blank look
b) ☐ Lying motionless on ground/slow to get up
c) ☐ Unsteady on feet/balance problems or falling over/incoordination
d) ☐ Loss of consciousness or responsiveness
e) ☐ Confused/not aware of play or events
f) ☐ Grabbing/clutching of head
g) ☐ Seizure (fits)
h) ☐ More emotional/irritable than normal

Verbal cues – what are you told?
(tick all applicable)

a) ☐ Headache
b) ☐ Dizziness
c) ☐ Mental clouding, confusion or feeling slowed down
d) ☐ Visual problems
e) ☐ Nausea or vomiting
f) ☐ Fatigue
g) ☐ Drowsiness/feeling like 'in a fog'/difficulty concentrating
h) ☐ Pressure to head
i) ☐ Sensitivity to light

Treatment given
(tick all applicable)

a) ☐ Removed from play
b) ☐ Assessed by medical personnel
If so, who?

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c) ☐ No further treatment, parents informed
d) ☐ Transferred to hospital by parents
e) ☐ Transferred to hospital by school transport
f) ☐ Transferred to hospital by ambulance
g) ☐ Advice leaflet provided

Any other comments

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revised June 2016

Head Injury Advice

To be given to the parent/carer who will be responsible for the pupil over the next 24 hours

Name of pupil: _____

Date: _____

Important – If any of the following occur seek medical assistance via the nearest Accident and Emergency Department.

- Change in speech e.g. slurring
- Change in ability to understand or communicate
- Change in ability to walk e.g. staggering.
- Increased drowsiness/difficulty in awakening
- Vision upset (blurring, double vision, increase light sensitivity)
- Weakness of any limb
- Vomiting (more than twice)
- Neck stiffness
- Increasing headache (not responding to simple painkillers)
- Unusual behaviour or symptoms

Your child may experience other symptoms over the next few days which should disappear over the next 2 weeks. These may include mild headache, feeling sick (without vomiting), dizziness, irritability or bad temper, problems concentrating or problems with memory, tiredness, lack of appetite or problems sleeping.

If you are concerned about any of these symptoms or they do not go away after 2 weeks, seek medical advice.

If the pupil has been told they have **concussion** then they will not be allowed to return to contact sport until they have been told they are fit to play by a Doctor. This will also mean the pupil needs to refrain from vigorous physical activity such as: using the gym, swimming, house sports, until the rest period ends.

A return to sport will be managed by the pupil's Doctor, School Nurse, Head of Rugby and Head of Sport.

Appendix Five- Return To Play Protocol (RTPP)

This document is produced with reference to and following the guidelines set out by England Rugby and World Rugby.

The following timeline and process will take place where concussion signs and symptoms have been evident at the time of injury. Please note that not all head 'knocks' will result in concussion and therefore this process will not always need to be followed. Where there is any doubt over whether concussion has occurred, this process will be followed:

1.	Head Injury Occurs
2.	2 weeks complete rest + symptom free
3.	Clearance by Doctor is recommended is recommended at this point. We are unable to provide this at school
4.	Graduated Return to Play – 48 Hours at each stage (outlined below)
5.	Clearance by Doctor is recommended at this point.
6.	Return to Play – Earliest 23 days

During rest period these should be avoided initially and then introduced gradually:

- Reading
- TV
- Computer games

It is reasonable for a student to miss a day or two of studies. If injury occurs during a school fixture, the school nurse and other staff will be made aware of the situation.
The time periods stated above are a minimum. These will be extended if symptoms are still present.

Appendix Six- Graduated Return to Play (GRTP)

The GRTP will be undertaken on a case by case basis and always with full cooperation or the player and parents/guardians.

The School Nurse will be involved throughout and will assess each pupil prior to starting the next stage. We recommend that you consult your GP to make sure they are happy with the progress being made. We also ask that all necessary information resulting from this consultation is passed on to the Head of Rugby and/or School Nurse.

Each of the following stages will last **at least** 48 hours. They must also be symptom free for 24 hours prior to starting Stage 2. If necessary a player can go back a stage.

Stage	Rehabilitation Stage	Exercise Allowed	Objective
1	Rest	Complete physical rest without symptoms	Recovery
2	Light aerobic exercise	Walking, swimming or stationary cycling. Stay <70% of Max. Heart rate. No resistance training	Increase heart rate and assess recovery
3	Sport-specific exercise	Running drills. No head impact.	Add movement and assess recovery
4	Non-contact training	Increase complexity. E.g. passing and kicking. Start progressive resistance training	Add exercise and coordination and cognitive load. Assess recovery
5	Full contact training	Normal training resumes	Restore confidence and assess functional skills. Assess recovery
6	Return to Play	Player rehabilitated.	Safe return to play.

Stages 2-4 are able to be monitored in school during Games afternoons or Physical Education lessons.
It is strongly recommended that after Stage 4 a Medical Practitioner is consulted. Confirmation of clearance will be required by the school in order to ensure this procedure has been followed. **It is the player's or parent's responsibility to obtain medical clearance before returning to play.**

If the injury occurred as a result of poor technique, this skill will be corrected prior to returning to a contact situation.