FIBA CONCUSSION GUIDELINES

Valid to 1 July 2025

Aim

To provide guidance to team medical personnel in the management of sport related concussion (SRC) for FIBA events and protect the short- and long-term health of players.

These guidelines are for FIBA and other elite competitions to provide acute concussion management guidance.

Introduction

Concussion is a traumatic brain injury, induced by biomechanical forces to the head, or anywhere on the body, which transmit an impulsive force to the head. It usually results in rapid onset and short-lived neurological impairment, but the symptoms may evolve over the minutes, hours or days following the injury. The symptoms generally resolve without specific medical intervention. A brief period of relative rest for 24-48 hours followed by gradual return to activity, is the main treatment, and return to play should be overseen by the Team Doctor, who is familiar with the guidelines for management of concussion.

Any Player with a diagnosed concussion may *not* continue to play in that game (or continue to train) and should be cleared by the Team Doctor before returning to full training or playing.

Any Player with a suspected concussion should be removed from training or play and be assessed by the Team Doctor or other suitably experienced Medical Practitioner prior to return to training or play.

Preseason baseline testing of all Players is required (SCAT6, Cognigram, ImPACT or other). Formal neuropsychological assessment may be considered for players with a history of multiple or complex concussions.

Diagnosis

The diagnosis of concussion is clinical, with the presence of symptoms and signs suggestive of neurological dysfunction following direct trauma to the head or a transmitted force to the head. These might include loss of consciousness (which is relatively uncommon), convulsions or difficulty balancing or walking. Other symptoms and signs *may be* less obvious but include headache, dizziness, tinnitus, sensitivity to light or noise, nausea, poor concentration or memory. A full list of possible symptoms and signs can be found in the Sports Concussion Assessment Tool 6 (SCAT6). All Team medical staff should be familiar with the SCAT6.

The Concussion Recognition Tool 6 (CRT6) is a simple guide outlining how to recognize and manage concussion. This can be used by Team medical staff as well as other non-medically trained team members including coaches, high performance staff or referees.
Being clinical, a concussion diagnosis or its' exclusion cannot be made by non-healthcare trained individuals, e.g. players or coaches.

Game management

Any Player with a suspected or confirmed concussion should be removed from play or training for a medical assessment. If a concussion is confirmed, the Player cannot return to play in that game or continue training. If there is any doubt, the Player must not continue to participate that day.

If there is no doctor on site, then any Player with suspected or confirmed concussion may not continue to play or train and must assessed by a doctor before being allowed to return to play.

In all cases of head trauma, first aid principles apply including consideration of emergency referral if there is suspicion of spinal injury (neck pain or weakness/tingling/burning in the arms or legs), increasing confusion, repeated vomiting, seizures or a deterioration of conscious state.

The SCAT6 is the recommended concussion assessment tool. It should be used in addition to the usual medical assessment of an injured Player. Ideally it should be performed by the Team Doctor, but it is acknowledged that a physiotherapist might be the sole medical staff member in attendance. All Team Doctors and Physiotherapists should be familiar with use of the SCAT6. The assessment should ideally be off the court, in a quiet area. If some cases, the SCAT6 assessment can be delayed to half or full time to enable a more thorough assessment, as long as the Player is not permitted to play in the interim and is monitored to ensure there is no deterioration of mental state or development of symptoms.

If concussion is excluded after a full assessment by a Doctor, the Player can return to play but should be regularly monitored for symptoms.

When video of the incident is available, it should be reviewed by the assessing practitioner to confirm the mechanism of trauma and assist with detecting any subtle signs of concussion that might have been missed on the initial direct observation.

Concussion is a clinical syndrome that can have a delayed onset (up to 48 hours) or evolve over time. The Player should be instructed on what symptoms and signs to look for and instructed to report these should they occur.

Immediate and obvious signs of concussion, directly observed or on video review:

1. Loss of consciousness or prolonged immobility
2. No protective action in fall to floor
3. Impact seizure or tonic posturing one or more limbs
4. Confusion, disorientation
5. Memory impairment
6. Balance disturbance or ataxia
7. Player reports concussion symptoms
8. Dazed, blank stare, not their normal selves
9. Behaviour change atypical of the Player

The Player should be immediately removed from play and take no further part in the game.

Text Box 1. Signs and symptoms of Concussion.

Emergency care

A Player diagnosed with concussion should have a through medical and neurological examination to exclude more serious structural injuries to the brain, head and neck. If there are signs of a more serious condition being present, then the Player should be immediately transferred to a hospital which has an emergency neurosurgical service. Signs suggesting a more serious injury might include repeated vomiting, altered conscious state, convulsions, severe headache, altered sensation in the arms of legs, double or blurred vision or a deterioration of any of these with time.

Return to Play

A Player diagnosed with concussion requires a clearance from a Medical Practitioner, ideally a Team Doctor, to return to full team training and playing. Under no circumstance is a Player with confirmed concussion allowed to return to play or training on the day of the injury. For the avoidance of doubt, the Team physiotherapist cannot clear a Player to return to training or playing on the day of injury or following the Graduated Return to Play (GRTP) process.
In general, a Player will recover in 7 to 10 days, but this can vary from individual to individual and in exceptional cases, the Player might be cleared to train and play sooner. This will only be at the clinical discretion, and upon approval from, the Team Doctor. In many cases, the return to play will take considerably longer than 10 days. If the player is 18 years of age or younger, the priority will be return to school first and the process of return to play takes about a week longer.
An initial period of 24 – 48 hours relative physical and cognitive rest is required. Strict rest until complete resolution of symptoms has not been shown to be beneficial following sports related concussion.

Following the initial 24-48 hour period of relative rest, the Player may enter the GRTP program which is outlined in Text Box 2 below. Entry to this program can start even with some mild persistent symptoms.

The GRTP process, which starts after the 24-48 hours of relative rest, comprises five stages. All Players are expected to proceed through this process, with at least 24 hours per stage, and medical clearance prior to return to play.

In the first two stages of the GRTP, some symptoms are acceptable, but these should be mild and short lived (ie. worsen no more than 2 points on a 10-point scale and last for less than one hour).
In the final 3 stages of the GRTP, the Player must have no symptoms, either at rest or with intense activity. If there is recurrence of symptoms, they should return to stage 2.

The clearance to fully train and return to play should be made by the Team Doctor.
Baseline testing (e.g., SCAT6, Cognigram, ImPACT or other cognitive assessment) must have returned to baseline before a Player can return to play.

From a practical perspective, in rare instances where there is no Team Doctor, the Player will require at least two medical assessments. The first to confirm the diagnosis and commence the rehabilitation and the second to clear the Player for full training and play.

Graduated Return to Play (GRTP) – each stage to take at least 24 hours, can be longer (following the 24-48 hours of relative cognitive and physical rest)

1. **Light/moderate aerobic exercise (up to approx. 70% max HR), such as walking, slow jog or stationary bike**
2. **Simple basketball skills such as free throws and shooting as well as *jumping, sprints change of direction including head and neck movements,* away from team**

ONLY progress to Step 3 once symptom free at rest and with exertion

3. **Full intensity team training, for a limited duration, with no body contact, e.g. half court scrimmage for 20 to 30 minutes followed by basketball skills**
4. **Full *training*, including possible contact, *following* medical clearance**
5. **Return to play**

Any return of symptoms requires a return stage 2

Text Box 2. Graduated Return to Play (GRTP)

Young players

Players 18 years of age or younger require a more conservative approach and will usually take a little longer recovery time, typically 3 weeks or longer. The primary aim of rehabilitation of a younger player is to ensure cognitive recovery and consideration of their educational considerations.

This means that to compete in a FIBA Underage Competition a basketball player will have been through a thorough and uncomplicated rehabilitation period that will typically take 3 weeks.

Complex concussion cases

If the clinical symptoms or signs resulting from a concussion persist beyond that which were anticipated, the Team Doctor could consider referral to a neurologist, neurosurgeon, SEM physician or other specialist in the management of concussion. Players with history of multiple concussions, or where the apparent mechanism of injury appears to be very low impact might also benefit from a Specialist review.

The Player may be referred for a full neuropsychological assessment and may require a standard MRI to exclude structural brain damage. Other investigations will be undertaken as determined by the specialist examination. The Team Doctor should facilitate referral to a specialist upon specific request by the Player.

In difficult cases, the specialist is responsible for clearing the Player to return to full training and competition.

Education

All players, coaches and team support personnel should be briefed by the Team Doctor regarding the importance of appropriate management of concussion, the importance of being honest regarding symptoms and the short- and long-term risks of head trauma. All team personnel should be aware that the diagnosis and management of concussion is the exclusive domain of team healthcare personnel.

Professional leagues

In a professional league affiliated with FIBA, the same principles for the management of concussion exist as for a FIBA competition.

Authors

Dr Anik Shawdon and Dr Peter Harcourt
FIBA Medical Commission

References

Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport
https://bjsm.bmj.com/content/57/11/695

CRT6
https://bjsm.bmj.com/content/bjsports/57/11/692.full.pdf

SCAT6
http://www.sportsconcussion.co.za/sportconcussion/wp-content/uploads/2023/07/SCAT6-v6.pdf

SCOAT6
http://www.sportsconcussion.co.za/sportconcussion/wp-content/uploads/2023/07/SCOAT6-Instructions-v6.pdf

Child SCAT6
http://www.sportsconcussion.co.za/sportconcussion/wp-content/uploads/2023/07/Child-SCAT6-v5.pdf

Child SCOAT
https://bjsm.bmj.com/content/bjsports/57/11/672.full.pdf

Dr Ruben Echemendia, PhD, University of Michigan Concussion Centre Clinic: presentation on the 2022 Consensus and changes to the concussion recognition and assessment tools
https://www.youtube.com/watch?v=5P0Jj5wT9GY

Clark & Olson SCAT6 Application Demonstration: a useful example of the SCAT6 examination
https://www.youtube.com/watch?v=ASA-o29HWHI