Concussions in Floorball

Although Floorball is a quite safe sport with only a few severe head injuries the injury statistics collected by the IFF in major IFF Events and the study completed in 2016 show that the proportion of head/face injuries in the study was notable (18%). Fortunately, most of them were minor injuries. However, the number of head/face injuries should be taken into consideration and therefore the IFF has prepared guidelines for diagnosing and follow up on head injuries.

Concussion affects athletes at all levels of sport, from the part-time recreational athlete to the full-time professional. If managed appropriately most symptoms and signs of concussion resolve spontaneously. Complications can occur, however, including prolonged duration of symptoms and increased susceptibility to further injury. There is also growing concern about potential long-term consequences of multiple concussions.

Over recent years there has been elevated public awareness of sport-related concussion and increased focus on the importance of diagnosing and managing the condition promptly, safely and appropriately.

The IFF has therefore prepared this concussion document that can be utilised by sport administrators, medical practitioners, coaches, parents and athletes who are seeking information regarding the timely recognition and appropriate management of sport-related concussion. This document includes the following parts: Key points for players, coaches parents and support staff, Concussions – First Aid Check Up and the Concussion recognition tool (SCAT 5) & Return to play protocol as a separate documents.

The aim is to include clear, unequivocal and reliable information to be readily accessible to all members of the floorball community.

Key points for players, coaches, parents and support staff

- Concussion is a type of brain injury that occurs from a knock to the head or body.
- Recognising concussion is critical to ensure appropriate management and prevention of further injury.
- The Concussion Recognition Tool 5 (SCAT 5) is recommended to help recognise the signs and symptoms of concussion.
- First aid principles apply in the management of the athlete with suspected concussion. This includes observing first aid principles for protection of the cervical spine.
- Any athlete suspected of having concussion should be removed from sport and not allowed to return to sport that day.
- This athlete should be reviewed by a medical professional familiar with management with concussions. Even if the athlete is awake or responsive SCAT 5 should be assessed.
- Features that suggest more serious injury and should prompt immediate emergency department referral include SCAT 5 symptoms (like for example: neck pain, increased confusion, agitation or irritability, repeated vomiting, seizure, weakness or tingling/burning in the arms or legs, reduced level of consciousness, severe or increasing headache, or unusual behaviour, see more from SCAT 5).
- When assessing a patient with suspected concussion, a medical practitioner will ask about details of the event as well as past medical history and then assess the patient, including

asking about symptoms, signs, testing memory function and concentration, balance and neurological function.

- Once a diagnosis of concussion has been confirmed, the main treatment for concussion is rest. After 24–48 hours of rest, light intensity physical activity is allowed as long as such activity does not cause a significant and sustained deterioration in symptoms.
- The activity phase should proceed as outlined below with a minimum of 24 hours spent at each level, which takes a minimum of one week. The activity should only be upgraded if there has been no recurrence of symptoms during that time. If this occurs there should be a 'step down' to the previous level for at least 24 hours (after symptoms have resolved). Check return to play protocol for details.
- Children and adolescents take longer to recover from concussion.
- The long-term consequences of concussion, and especially multiple concussions, are not yet clearly understood.

Signs and symptoms of a concussion

To observe	What the athlete may report
The athlete is • dazed, absent, slow, and confused • moving awkwardly, noticeably, uncoordinatedly • forgetting the competition place, his position, the game details • consciousness disorders of short duration, memory loss (amnesia) for the accident or the time before / after it • have a loss of consciousness *** • Behaving differently ("change of essence")	• Often only a few symptoms, such as fog, headache, "soft knees" • nausea • dizziness • "bell ringing" • lack of balance / incoordination • visual disturbances (lightning, stars, double vision) or hearing impairments • Paralysing sluggishness, slowing down, fatigue • Light sensitivity / noise sensitivity • lack of concentration or memory disorders

**** VERY IMPORTANT: It does not need unconsciousness or vomiting to diagnose a concussion! Pay attention to changes in consciousness and in case of doubt always act in favour of the athlete's health!*

When to hospital?

The concussions can have different symptoms. There are no clear guidelines on which symptoms or occurrences an emergency medical examination must be initiated. Prefer to go to the hospital rather too early than later, as there can be serious complications.

Mandatory medical check-up (by a doctor, preferably in a hospital with CT / MRI) should take place at:

- Any short-term loss of consciousness
- Remaining or intensification of symptoms (blurred vision, fog, severe tiredness, increased headache, multiple vomiting, balance and walking disorders, altered mental behaviour)
- occurrence of neurological symptoms (e.g., pupillary changes)
- Delayed onset of symptoms (e.g., increasing deterioration of the condition after hours)
- cervical pain

Reason for a medical emergency investigation: Even with a slight craniocerebral trauma that can lead to bleeding in the brain. For this reason, after a thorough neurological examination, the physician is assigned a 24-hour monitoring, which takes into account whether the patient has symptoms of a brain injury.