



# Injury Prevention - Treatment and Concussion Protocol

## ACL Injury Prevention

The ACL injury rate in females is at least twice that of male soccer players. Pre-season training programs and in-season warm up programs focusing on proprioception and neuromuscular conditioning has shown promising decreases in ACL injury rates for both male and female soccer players. Information regarding these programs is readily available online.

## Recovery from Ankle Sprains

Initial care after sprains should consist of rest, ice, compression and elevation (R.I.C.E).

Non-steroidal anti-inflammatories (NSAIDs) may also be beneficial. A functional rehabilitation program incorporating early range of motion exercises has been shown to enhance recovery. Proprioception or balance training is instrumental in recovery as well as prevention of future sprains.

## Head Injury Guidelines

When a player or players collide heads whether with each other or with an object, such as a goal post, play should be stopped immediately. The safety of the player or players involved is of prime concern. There is no higher priority.

### Assessment

Perform a primary survey that the player's airway, cervical spine, breathing and circulation are secure.

- ✓ Quickly assess the player's mental state using AVPU Scale:
  - A- Alert, V- Responds to Voice, P- Responds to Pain, U- Unresponsive
- ✓ Assess pupil size, equality and reactivity

### Protocol of Immediate Assessment

- ✓ If player is unresponsive or only responding non-purposefully to pain, then call 911 as player needs to be sent to the hospital.
- ✓ If player has any focal neurological signs, then call 911 as player needs to be sent to hospital.
- ✓ If none, proceed to secondary assessment

### Secondary Assessment

Perform secondary assessment looking specifically at:

- ✓ Deformity, tenderness, or muscle spasm in neck or cervical spine
- ✓ Head-scalp bruising, facial fractures, cuts, swelling, tenderness, bruising behind ears, bleeding from ear drum, dental trauma, or soft tissue injuries in mouth, swelling or bleeding from nose, reflexes on motor skills, or any other injuries observed.

Gain as much information as possible regarding incident, specifically determine:

- ✓ Time, mechanism and circumstances of injury.... basically what happened
- ✓ Loss of consciousness

- ✓ Nausea and vomiting ( in this case , how many times player vomited )
- ✓ Other injuries sustained

## **Head Injury Protocol**

### **Minor Head Injury Protocol**

#### Symptoms

- ✓ No loss of consciousness, one or less episodes of vomiting, stable and alert, may have scalp bruising or cut.

#### Protocol

- ✓ Player may be discharged to the care of their parents, but recommendation is to send to Emergency Care for further examination.

#### Management of Player at Home and if Player needs Further Hospital Care

- ✓ Becomes unconscious, confusion, persistent headache, vomiting, bleeding or watery discharge from nose or ears.

### **Moderate Head Injury Protocol**

#### Symptoms

- ✓ Brief loss of consciousness at time of injury, drowsy but does respond to voice, two or more episodes of vomiting, persistent headache, up to a single brief ( <2 min.) convulsion immediately after impact, large scalp bruise or cut.

#### Protocol

- ✓ Immediately call 911 for hospitalization. Player may be discharged home if there is improvement at 4 hours to normal conscious state and no further vomiting.

#### Management of Player at Home and if Player needs Further Hospital Care

- ✓ Becomes unconscious, confusion, persistent headache, vomiting, bleeding or watery discharge from nose or ears.

### **Major Head Injury Protocol**

#### Symptoms

- ✓ More than a brief loss of consciousness at time of injury
- ✓ Decreased conscious state – responsive to pain only or unresponsive
- ✓ Bleeding or watery discharge from nose or ears
- ✓ Weakness in motor skills or unequal pupils
- ✓ Penetrating head injury
- ✓ Seizures

#### Protocol

- ✓ Call 911 as player needs immediate admittance into physicians care
- ✓ Prevent secondary brain insults by maintaining a patent airway
- ✓ Spine immobilization
- ✓ Control Seizures

Provided by:

[http://www.rch.org.au/clinicalguide/guideline\\_index/Head\\_Injury\\_Guideline/](http://www.rch.org.au/clinicalguide/guideline_index/Head_Injury_Guideline/)

Concussions:

<http://www.ontariosoccer.net/player/sports-medicine/concussions>