UNB Varsity Reds & Sport Clubs Concussion Protocol (August 2017)

The following is the concussion protocol that will be followed by all Varsity and Sport Club Athletes competing for the University of New Brunswick Varsity Reds and URec Sports Club programs.

The protocol follows the "Consensus statement on concussion in sport: the 5th International Conference on Concussion in Sport held in Berlin, April 2017". The conference was held with the world leaders on sport concussions.

Definition

"The Berlin expert panel modified the previous Concussion in Sport Group (CISG) definition as follows:

Sport related concussion (SRC) is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilised in clinically defining the nature of a concussive head injury include:

SRC may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head.

SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.

SRC may result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.

SRC results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged. McCrory, et.al 2017)"

"The suspected diagnosis of concussion can include one or more of the following clinical domains:
1. Symptoms—somatic (eg, headache), cognitive (eg, feeling like in a fog) and/or emotional symptoms (eg, liability);
2. Physical signs (eg, loss of consciousness (LOC), amnesia);
3. Behavioural changes (eg, irritability);
4. Cognitive impairment (eg, slowed reaction times);
5. Sleep disturbance (eg, insomnia).
If any one or more of these components are present, a concussion should be suspected.

McCrory – 2012

An athlete displaying one or more sign or symptoms of a concussion then will not return to play until they follow the return to play protocol. Must be symptom free for 24 hour period prior to commencing protocol.

Removal from Play

Any athlete who suffers a blow to the head during competition or practice **must be removed from play immediately** in order to be evaluated using the SCAT3 (Sport Concussion Assessment Tool 3). The athlete will be evaluated by a certified health care professional or a student therapist by administering the SCAT5 sideline assessment and the information forwarded to the UNB Head Athletic Therapist. The **athlete will not return to play the same day of play if displaying symptoms or the mechanism what deemed severe** (McCrory, 2017 et al.), and will complete a full assessment to determine the return to play protocol.

The key features of follow-up examination should encompass:

1. A medical assessment including a comprehensive history and detailed neurological examination including a thorough assessment of mental status, cognitive functioning, sleep/wake disturbance, ocular function, vestibular function, gait and balance.

2. Determination of the clinical status of the patient, including whether there has been improvement or deterioration since the time of injury. This may involve seeking additional information from parents, coaches, teammates and eyewitnesses to the injury.

3. Determination of the need for emergent neuroimaging to exclude a more severe brain injury (eg, structural abnormality).

Graduated Return To Play Protocol		
Rehabilitation Stage	Functional Exercise at each Stage	Ojective of the Stage
1. No Activity	Symptom limited physical and cognitive rest (72hrs)	Recovery
2. Light Aerobic Exercise	Walking, swimming, or stationary cycling keeping intensity <70% Max HR, No resistance training	Increase HR (Athlete will work in a heart rate zone that does not bring on significant symptoms, Sub-symptom threshold (SST)
3. Sport-Specific Exercise	Skating drills in hockey, running drills in soccer. No head impact activities.	Add movement (SST)

4. Non-Contact training drills	Progression to more complex training drills, eg. Passing drills in football and ice hockey. May start progressive resistance training.	Exercise, coordination and cognitive loading (SST)
5. Full Contact Practice	Following medical clearance, normal training (**Cleared by Doctor**)	Restore confidence and access functional skills, by coaching staff
6. Return to play	Normal Game Play	

Return to Learn

Please be aware that some individuals can return to being able to do low or even medium level exercise, but the cognitive side of functioning continues to bring on post-concussion symptoms. Should this be the case with any varsity or clue level athlete, the athlete will not return to athletic competition if they are unable to participate in symptom free academic
activity.

****Concussion is often an evolving injury, and signs and symptoms may be delayed. Therefore, erring on the side of caution (keeping an athlete out of participation when there is any suspicion for injury) is important.****

Written by Geoff Mabey – Head Athletic Therapist UNB Varsity Reds, August 2013 (Modification August 2017)

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