



HOCKEY CALGARY

October 15, 2013

A variety of proposals have recently been submitted to Hockey Calgary with regards to providing baseline testing and post-injury management for concussive injuries. These proposals are generally one-year contracts to provide initial testing of a variety of baseline skills (cognitive, physical, psychological) and an opportunity to monitor return-to-play with data driven decision-making. All programs come with a cost that varies from \$60.00-\$85.00 per player per year. The quality and expertise varies across different programs.

A review of current position papers and discussion with concussion experts at the University of Calgary occurred in regards to the importance of this type of testing for all players. Current evidence indicates that although neuropsychological assessment can be useful for physicians in the evaluation of concussive injuries, “at present, there is insufficient evidence to recommend the widespread routine use of baseline neuropsychological testing” (McCrory et. al., p257). In addition it is also stated that “concussion is a clinical diagnosis based largely on the observed injury mechanism, signs and symptoms” (McCrory, et. al., p257) and it remains difficult to be absolutely sure who should sit out and when. As a result, erring on the side of caution is always advisable. On consultation, Dr. Meeuwisse (University of Calgary Co-Chair, Sport Injury Prevention Research Centre, Faculty of Kinesiology, Leader, Brain Injury Research Initiative, Hotchkiss Brain Institute) indicated that

“If you consider the effort and cost, it is likely much more important to have other things in place, like:

- 1) Coach and parent education for "recognize and remove"
- 2) Distribute the Pocket Concussion Recognition Tool (see attached)
- 3) Developing a concussion management program with access to medical care, therapy, etc.”

It is suggested that the role of Hockey Calgary is to ensure that players have a safe hockey experience but that we do not take away a parents' ability to monitor and evaluate their own child's ability to play. To that end Hockey Calgary plans to focus on the ability of coaches/parents and players to “recognize and remove” players who may have sustained a concussion injury and support parents/coaches in their efforts to ensure appropriate first aid decisions are made on the bench/in the dressing room. In such a situation, parents are encouraged to consult a medical professional regarding appropriate return-to-play and to ensure that medical clearance has been given before a player returns to the ice to reduce the possibility of further injury and longer recovery times. Hockey Calgary encourages all parents/coaches and players to consult the on-line resources posted on our website (www.hockeycalgary.com) including the Hockey Canada Concussion App and the Pocket Concussion Recognition Tool to ensure they

have the materials needed to feel confident in removing players when a concussion injury is suspected or symptoms are reported/observed. In addition, continued partnerships with the University of Calgary are encouraged to develop opportunities to further explore the efficacy of baseline testing and develop coordinated interventions/therapies that are evidence based and accessible.

To this end, as part of our strategic initiatives, a Concussion Education program will be developed at Hockey Calgary over the 2013-2014 season. If an association or individual parent wishes to explore the services of companies that specialize in this area, it is recommended that they are clear on the benefits and drawbacks of this type of injury management service and consider that in relationship to the costs incurred. If there are further questions regarding this important topic, please feel free to contact members of Hockey Calgary who will endeavor to answer your questions or forward them to community experts.

Hockey Calgary
Safety Committee

References:

McCrory, P. et. al., *British Journal of Sports Medicine*, 2013. Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport held in Zurich, November 2012. **47**: 250-258.

www.hockeycanada.ca/apps for the adults and child version of the Hockey Canada Concussion Apps

<http://bjsm.bmj.com/content/47/5/267.full.pdf> to download the Pocket Concussion Recognition Tool

Pocket CONCUSSION RECOGNITION TOOL™

To help identify concussion in children, youth and adults



RECOGNIZE & REMOVE

Concussion should be suspected **if one or more** of the following visible clues, signs, symptoms or errors in memory questions are present.

1. Visible clues of suspected concussion

Any one or more of the following visual clues can indicate a possible concussion:

Loss of consciousness or responsiveness
Lying motionless on ground/Slow to get up
Unsteady on feet / Balance problems or falling over/Incoordination
Grabbing/Clutching of head
Dazed, blank or vacant look
Confused/Not aware of plays or events

2. Signs and symptoms of suspected concussion

Presence of any one or more of the following signs & symptoms may suggest a concussion:

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

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3. Memory function

Failure to answer any of these questions 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?"

Any athlete with a suspected concussion should be IMMEDIATELY REMOVED FROM PLAY, and should not be returned to activity until they are assessed medically. Athletes with a suspected concussion should not be left alone and should not drive a motor vehicle.

It is recommended that, in all cases of suspected concussion, the player is referred to a medical professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

RED FLAGS

If ANY of the following are reported then the player should be safely and immediately removed from the field. If no qualified medical professional is available, consider transporting by ambulance for urgent medical assessment:

- | | |
|--|---------------------------------|
| - Athlete complains of neck pain | - Deteriorating conscious state |
| - Increasing confusion or irritability | - Severe or increasing headache |
| - Repeated vomiting | - Unusual behaviour change |
| - Seizure or convulsion | - Double vision |
| - Weakness or tingling/burning in arms or legs | |

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to do so
- Do not remove helmet (if present) unless trained to do so.

from McCrory et. al, Consensus Statement on Concussion in Sport. Br J Sports Med 47 (5), 2013

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