

## **GETTING YOUR BELL RUNG: CONCUSSIONS**

“Having your bell rung” while playing sports is nothing new. In the past, athletes were taught to shake off the cobwebs after suffering a mild concussion. Only recently have concussions been treated more seriously by the sports and medical community. Unlike a broken arm or sprained ankle, a concussion cannot be seen or felt by the athlete. However, the lasting effects of a concussion can be far worse than a broken arm or sprained ankle and should not be treated lightly by coaches or parents.

A concussion is any direct or indirect hit to the head that can cause a change in behaviour, awareness, and/or physical feeling. In a concussion, the brain moves violently within the skull so that brain cells all fire at once, much like a seizure. Recent studies reveal patients who suffer a concussion appear to have the brain activity of people in a coma. If an athlete has any of the following signs or symptoms he or she may have suffered a concussion:

1. Confusion
2. Amnesia
3. Disturbed vision
4. Alteration in consciousness
5. Disturbed balance
6. Failure to understand
7. Headache
8. Dizziness
9. Ringing in the ears
10. Nausea and vomiting

There are generally three (3) different grades of concussions:

Grade 1 (mild): there is no loss of consciousness, there is confusion and post-injury amnesia is less than 30 minutes.

Grade 2 (moderate): there is loss of consciousness for less than five (5) minutes or post-injury amnesia greater than 30 minutes but less than 24 hours .

Grade 3 (severe): there is loss of consciousness for more than five (5) minutes or post injury amnesia greater than 24 hours.

I recommend that sports teams develop a baseline of each athlete's cognitive and mental status before every season. Coaches and trainers can easily do this with a series of mental status questions that evaluate:

- 1) orientation (month, date, day of week, year, time)-5 points
- 2) immediate memory (recall of 5 words in 3 separate trials)-15 points
- 3) delayed memory ( recall of 5 words 5 minutes later)-5 points
- 4) concentration (reciting 5 sets of numbers backwards starting with 2 digit numbers working up to a 7 digit number)-5 points

Each correct answer is worth 1 point for a total of 30 points. An athlete should score 25 or higher and be symptom free before returning to competition.

By establishing a baseline for each player, the trainer can obtain an objective measure of an athlete's mental status before and after they have suffered a concussion and can use these tests to help monitor the player's recovery from a concussion. Recovery from a concussion depends on the grade and the number of concussions that the athlete has sustained over time. As always, after suffering a concussion, an athlete should be fully evaluated by a physician to determine if or when an athlete can return to play their sport.