



# Wellness News Network™

Your Source for Health & Wellness Information

Issue 3, March 2018

## Concussions What To Watch For

Presented by:

### Introduction

A concussion is a traumatic brain injury that is caused by some sort of action that causes the head to jolt or move quickly back and forth. The Center for Disease Control and Prevention states in 2010 there were 2.5 million traumatic *brain* injuries in the United States. These injuries may vary in severity from mild to severe.<sup>1</sup>

This health problem has risen in the public eye in the last year - the result of several professional athletes being affected by concussions. A study published in the medical journal *Brain* indicates athletes who sustained concussions in early adulthood showed evidence of mental and physical deterioration 30 years after the event.<sup>2</sup>

Impact to the head can cause the brain to move inside the skull, which can lead to bruising, blood vessel damage, swelling and bleeding – sometimes severe enough to require immediate medical intervention to prevent serious brain damage or death.

Sport concussions grab most of the media attention, but this type of brain injury can result from car accidents, workplace incidents, falls and fights.

To get familiar with concussions, here are the most common symptoms:

- Headache
- Slurred speech
- Confusion
- Blurred vision
- Dizziness
- Light and noise sensitivity
- Nausea and vomiting
- Memory & concentration problems

If an injured person has symptoms that last beyond 15 minutes or loses consciousness a physician should evaluate them immediately.

### Sports and Concussions

About half a million children visit hospital emergency departments annually for treatment of traumatic brain injury.<sup>1</sup> The medical journal *Pediatrics* published a study that

### QUESTION?

Which of the following is another name for concussions?

- A) Migraine headache
- B) Mild traumatic brain injury
- C) Brain aneurysm

### ANSWER:

B) Mild traumatic brain injury

### True or false?

Concussions only happen in sports

### ANSWER: False

Car accidents, falls and fighting are also causes

### QUESTION?

Impact from concussions can cause the brain to...

- A) Bruise
- B) Swell
- C) Bleed
- D) All of the above

### ANSWER:

D) All of the above

Presented by:

showed hospitalized children who were labeled as having a concussion spent fewer days in the hospital compared to children who were labeled as having mild traumatic brain injury – even though the labels mean the same thing.<sup>3</sup>

An analysis of minor league hockey in Canada indicated there was a significant increase in head injuries, including concussions, among nine and ten year old players when hockey organizations allowed bodychecking for this age group.<sup>5</sup> Another troubling statistic revealed high school football players were more likely to suffer concussions and severe head injuries compared to college players. The *American Journal of Sports Medicine* published this evidence, noting there were 0.67 injuries per 100,000 players at the high school level but only 0.21 per 100,000 players at the college level.<sup>4</sup> One of the study authors suggested a possible reason could be that high schools do not usually have team physicians, unlike at the college level. This may result in improper diagnosis and players returning to the field before they have adequately recovered from their injury.

The Radiological Society of North America presented interesting research on soccer players and brain trauma. The study looked at 38 amateur players who frequently hit the soccer ball (several times daily) with their head. They scored 20% lower in verbal memory and processing speed compared to players who rarely hit the ball with their head. Brain imaging scans of the 38 players revealed microscopic

white matter, consistent with traumatic brain injury.<sup>6</sup>

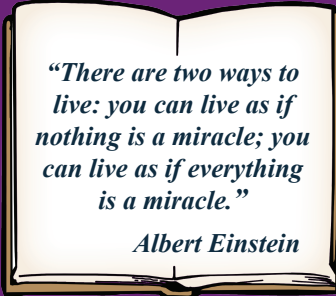
Currently, many athletes participate in baseline concussion tests that measure cognitive performance involving memory, concentration and reaction time. If an athlete suffers a suspected concussion, he retakes the test to see if any changes have occurred since the injury. However, health researchers at Loyola University uncovered the possibility of high false negative tests, which could mean an athlete returns to play prematurely.<sup>7</sup>

## Concussions and Chiropractic

One of the highest profile sport concussions cases is that of NHL superstar Sidney Crosby. After suffering concussions, Crosby had to endure an extensive break from playing hockey to rest and recuperate. While he was sidelined, Crosby received treatment from a team of chiropractic neurologists. The therapy consisted of non-invasive, drug free rehabilitation that included adjustments and receptor-based stimulation of the senses, exercise and dietary changes to boost the function of the brain and nervous system.<sup>8</sup> The treatment has helped many concussion sufferers to heal and recover more quickly from injury.

Your chiropractor wants you to take precautions to avoid concussions. While engaged in sports, use proper equipment. If you have any questions, talk to your chiropractor.

## Quote to Inspire



*“There are two ways to live: you can live as if nothing is a miracle; you can live as if everything is a miracle.”*

*Albert Einstein*

## References and sources:

1. Traumatic Brain Injury – Center for Disease Control and Prevention, website <http://www.cdc.gov/traumaticbraininjury>
2. Brain function decline in healthy retired athletes who sustained their last sports concussion in early adulthood - Brain, (in press) DOI: 10.1093/brain/awn347.
3. “My Child Doesn't Have a Brain Injury, He Only Has a Concussion” - Pediatrics, Vol. 125 No. 2 February 1, 2010, pp. 327-334.
4. Catastrophic Head Injuries in High School and College Football Players - Am J Sports Med July 2007 35 1075-1081.
5. Effect of bodychecking on rate of injuries among minor hockey players – Open Medicine, March 14, 2011. Vol. 5(1), pp.57-64.
6. News from the RSNA Annual Meeting: Heading a Soccer Ball Linked to TBI-like Brain Abnormalities - Neurology Today: 05 January 2012 - Volume 12 - Issue 1 - pp 20-22.
7. Baseline Neuropsychological Testing in Managing Sport-Related Concussion: Does It Modify Risk? - Current Sports Medicine Reports, 10(1):21-26, January/February 2011.
8. Chiropractic Neurology Addresses Symptoms of Vestibular Concussion: Specialized Intervention Speeds Recovery for NHL's Sidney Crosby – American Chiropractor, newsflash, Oct. 17, 2011.

**Disclaimer:** Information contained in Wellness News Network Newsletter is for educational and general purposes only and is designed to assist you in making informed decisions about your health. Any information contained herein is not intended to substitute advice from your physician or other healthcare professional.