

Sports Medicine Monthly

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FOCUS ISSUE:

CONCUSSIONS:



Over the last decade, the word 'concussion,' which was previously a term used only by physicians and allied health care providers, has become an all too common term for most of the general public. For the most part, this understanding comes from today's media outlets that keep us abreast of whenever a prominent athlete sustains such a brain injury. For many people however, gaining understanding of what a concussion truly is and how it affects one's daily life has all to often come directly as a result of personal experience.

A concussion, by definition, is a mild form of Traumatic Brain Injury, or MTBI for short. Therefore, there is no such thing as an insignificant concussion. In athletics however, we frequently hear concussions described as getting one's 'bell rung' or 'just a ding' when, in actuality, these statements greatly oversimplify a much more severe traumatic episode.



According to the US Centers for Disease Control and Prevention:

- *Approximately 1.4 million concussions are sustained every year
- *Concussions account for 435,000 visits to the ER among the 0—14 age group
- *Athletic or recreational activity accounts for 135,000 visits to the ER in the 5-18 age group.

For this and other information from the CDC, visit their website at www.cdc.gov.

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Is it a Headache or a Concussion?

For the athlete, as well as the non-athlete, headaches can be a regular occurrence manifesting as a result of stress, sickness and disease, fatigue, and/or high blood pressure, and/or a variety of other health related issues. Therefore, because of this commonality among people of all activity levels, anyone who is active in athletics for themselves or anyone who coaches or has children who regularly compete should be aware of the differences between the standard headache and the not-so-standard concussion.



General Guidelines:

Concussions occur as a direct result of a traumatic, forceful blow to the head, neck, or body if the head is forcefully shifted. Although a headache can be a symptom of a concussion, because headaches occur for a variety of reasons other than a traumatic blow, the first questions that should be asked are "what caused this headache to start," and "was there a blow to the head?"

Now, just because there was a blow to the head, and there is now subsequently a headache, does not necessarily mean that a concussion is present. When evaluating an individual for the presence of a concussion, physicians and certified athletic trainers are



looking for specific findings and not just generalizations. An individual who has sustained a blow to the head and now only complains of a headache is very likely to have their condition improve with an ice bag and rest. An individual who has sustained a concussion however, will require removal from all activity, evaluation by a physician or certified athletic trainer, subsequent rest, and usually several days off from any activity that would elevate their blood pressure.

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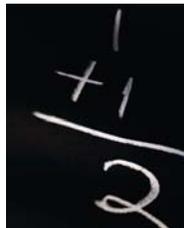
Because concussions will manifest with a variety of signs and symptoms, and whereas a headache is usually the only symptom for those who are truly sustaining just a headache, the presence or absence of the following signs and symptoms are very effective for determining the difference between a simple headache and a concussion.

#1. Post-Concussion Signs and Symptoms

Headache, Fatigue, Nausea, Vomiting, Disorientation, Blurred Vision, Pupils no longer equal to each other, sensitivity to noise, sensitivity to light, amnesia from before the episode, amnesia from after the episode

#2. Deficits in Cognitive Functioning

Individuals who have sustained a concussion will almost always demonstrate difficulty with even the most mediocre cognitive challenges, and/or an increase in symptoms with such.



Common tests include:

General Orientation:

Month, Date, Year, Day of the Week, approximate time,

Remembering a list of 5 random words for a period of 5-10 minutes.

Repeating a series of numbers in reverse order

Ex: 3 7 1 Response: 1 7 3

4 9 2 6 Response: 6 2 9 4

#3. Deficits in Balance

Individuals who have sustained a concussion will almost always demonstrate difficulty in balance in one or more of the following standing positions.

With the eyes closed, have the individual stand for 30 seconds in each of the following positions:

#1. Feet Together

#2. Single Leg Balance on
Non-Dominant Leg

#3. Tandem Stance with
Non-Dominant Leg in back

Returning to Play after a Concussion

The greatest source for return to play guidelines is the physician and/or the certified athletic trainer who are responsible for the health and well being of the patient. These individuals will be able to provide you with a step-by-step approach for a progressive exertional return to competition program. In the absence of such, some general guidelines include:



If there is a period of unconsciousness, regardless of length, or if the patient is repeatedly vomiting, Emergency Medical Services should be notified immediately.



If symptoms resolve in less than 10 minutes after the injury, and there is no return of symptoms after a moderate intensity workout (i.e. jumping jacks, jogging, sprinting, cutting, etc...), the individual may return to activity pending further symptoms.

If symptoms do not resolve after 10 minutes of removal from activity and rest, the individual should be examined by a physician or a certified athletic trainer.



Finally, if a physician or certified athletic trainer has removed an individual from activity, keep in mind that the same individual must clear the patient to resume activity.

A Note to the Reader.....

Central States Orthopedic Specialists does not endorse any of the organizations or research groups whose information has been published herein. Furthermore, information in this publication is provided for informational purposes only and not as medical advice, or as a substitute for the advice provided by your physician or other healthcare professional, or for diagnosing or treating a health problem or disease. This publication is designed to provide you, the reader with information only. It is your choice in how you apply the information given herein, and not a directive from Central States Orthopedic Specialist. It is simply an informative resource for you, the reader. As always, if you have specific questions regarding specific injuries, illnesses, policies, procedures, etc... speak with your Certified Athletic Trainer, or contact your physician.



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