



Head Injury Information

Did You Know?

Rest is the key to a successful recovery. You should not return to an active lifestyle (sports, exercise, etc) until symptoms have completely resolved. It is also important to limit activities that require a lot of thinking or concentration as this may worsen your symptoms and delay recovery time. Once symptoms have completely subsided, a gradual return to physical activity as well as work or school will ensure that you make a full recovery without complications!

To ensure that your injury is treated properly, see a certified athletic trainer or your physician for a thorough evaluation as well as a detailed treatment plan and eventual return to activity.

What is a Concussion?

A concussion is a traumatic brain injury that temporarily disrupts normal function of the brain. A concussion occurs from a blow to the head but can also occur to an indirect blow elsewhere on the body. Concussions range from mild to severe depending on the severity and length of symptoms. Regardless of the severity, a concussion is an injury to the brain and therefore must be taken very seriously.

If any of the following occur, seek medical attention immediately:

- * Headaches, lightheadness
- * Nausea
- * Poor balance, Dizziness
- * Sensitivity to noise / light
- * Visual Problems
- * Numbness/Tingling
- * Drowsiness, fatigue
- * Sleep Disturbance
- * Feeling Slow
- * Sadness / Depression
- * Nervousness / Anxiety
- * Irritability

OBSERVE CLOSELY !

Check your son or daughter frequently for any signs or symptoms. Use medications only at the direction of your physician

Second Impact Syndrome

What is it?

Second Impact Syndrome is a dangerous condition that can occur if an athlete returns to sports before full recovery. If you receive a second blow to the head (even a relatively minor one) before the symptoms of the initial concussion have cleared, the consequences can be deadly.

A second blow to the head after a concussion can cause the brain to lose its ability to regulate blood flow properly. Engorgement of the blood vessels occurs which places excessive pressure on the brain. This pressure can result in rapid respiratory failure, coma and even death.

Prevention

Don't return to sports after a concussion until your symptoms have completely resolved and you have been **cleared by your physician or athletic trainer.**

This information is not intended to be, and should not be used as a substitute for appropriate medical care. If you have any doubt about the injury, consult a certified athletic trainer or physician immediately.

For more information, visit the ATSNJ on the web at www.atsnj.org

Concussion Q & A

What is a concussion?

A concussion is an immediate, temporary impairment of neural function as a result of a direct or indirect force to the brain. Also known as a “mild traumatic brain injury,” a concussion often results from a blow to the head, or from the head striking an object such as the ground or another athlete but can also occur from an indirect blow elsewhere to the body. Concussion can range from mild to severe, depending on the severity and length of the signs and symptoms.

What are the signs and symptoms of a concussion?

Many people think one has to lose consciousness (get knocked out) for a concussion to occur. This is not true. In fact, 90% of the sports-related concussions we deal with do not involve a loss of consciousness. Common signs and symptoms include headache, disorientation, confusion, difficulty remembering, blurred vision, nausea, vomiting, sensitivity to light or noise, difficulty concentrating, balance problems, feeling “slowed down,” drowsiness, simply “not feeling right” and in some cases, loss of consciousness.

What are the chances of a concussion causing bleeding in the brain?

Focal brain injuries involve bleeding injuries such as intracranial hemorrhage and hematomas, subdural hematomas, epidural hematomas and cerebral contusions. Fortunately, these serious injuries are uncommon in sports. Loss of consciousness, mental status deterioration and worsening symptoms raise the concern for a focal brain injury. A “lucid interval” (when athlete appears normal for a short time period after initial symptoms, then symptoms reoccur) also signals the possibility of a focal brain injury. *Diffuse brain injuries* are more common and occur when the brain is “shaken” in the skull from trauma, resulting in brain tissue damage and temporary impairment of neurological function. The brain is suspended in fluid within the skull, and can get “banged around” with a sudden force to the head (similar to the yolk in a raw eggshell), causing a diffuse brain injury.

Do I need to wake my son or daughter every few hours during the night?

There is still some considerable debate about the necessity of nighttime wake-ups. Wake-ups disrupt the athlete’s normal sleep pattern, which can lead to increased symptoms the next day due the combination of sleep deprivation and the concussion itself. However, you should wake your son or daughter to check for a decreased level of consciousness and persistent or worsening symptoms if: 1) the athlete experienced any loss of consciousness, 2) had a period of amnesia (memory loss or difficulty), or 3) if he or she still has symptoms at bedtime.

When can my son or daughter return to play?

Return to play decisions are based on the concussion’s severity and the athlete’s history of prior head injuries. For most minor concussions, a one week symptom-free waiting period is usually necessary to make certain the brain has fully recovered. Adolescents are generally managed more conservatively than college-aged and professional athletes since they appear to be at a higher risk for Second Impact Syndrome. Those who have had more than one concussion may need a longer recovery period. Concussed athletes should not return to activity until they have been cleared to do so by the physician or athletic trainer.

Does age affect how fast an athlete recovers from a concussion? Yes. One study that compared recovery rates between NFL football players and high school football players found that high school players took longer to recover from a concussion than the NFL players. A brain that is still developing may be more sensitive to trauma, which likely affects recovery time.

References:

Guskiewicz et al. National Athletic Trainers’ Association Position Statement: Management of Sport-Related Concussion. *Journal of Athletic Training*, 2004; 39(3) 280-297.

Pellman et al. Concussion in Professional Football: Recovery on NFL and High School Athletes Assessed by Computerized Neuropsychological Testing. *Neurology*, Vol. 58, No. 2 Feb. 2006.