

Pediatric Mild Traumatic Brain Injury

Information for Parents/Patients

Overview of concussion

- A concussion is an injury that results from trauma to the brain. There is no structural damage to the brain. Head CT or MRI is normal.
- Common symptoms include headache, nausea, vomiting, dizziness, feeling foggy or mentally slow, irritability, fatigue, difficulty with sleep, confusion, trouble concentrating and a decrease in memory.
- Often, the person “looks” fine, but the person may report not feeling well. This is due to the chemical changes that happen within the brain cells as a result of the injury.
- Brief loss of consciousness may occur, but most individuals who suffer a concussion are never knocked unconscious.
- Approximately 10 – 20 percent of patients have symptoms lasting **longer than three weeks**.
- In April 2013, Ohio enacted new guidelines that an athlete **MUST** be removed from play for any symptoms suggestive of a concussion. The athlete cannot return to play the same day. An athlete may not return to sports until he/she obtains written clearance from a qualified medical professional.

Quick facts

- People sometimes do not show signs/symptoms of concussion for up to 72 hours after an injury.
- Headaches are the most common symptom of concussion, but lots of other symptoms may occur.
- People may hide or be unaware of symptoms and require questioning about how they feel and are functioning (sleep, homework, friends, appetite).
- We no longer “grade” concussions. There is now no such thing as a “mild-moderate-severe” or “Grade 1, 2 or 3” concussion. **A concussion is a concussion.** All head injuries are taken seriously and treatment is provided based on each individual's symptoms.
- Once a concussion occurs, a person may be more susceptible to the effects of head trauma and may suffer another concussion more easily than before.
- Depression and/or anxiety can present or worsen after concussion. If you experience these symptoms, please tell your doctor right away.
- A doctor may request detailed memory and concentration testing be done to help monitor symptoms and assist in treatment planning if symptoms aren't going away as expected.

Seek medical attention immediately if any of the following occur:

- Worsening headache
- Sudden change in vision
- Trouble with balance or walking
- Sudden increase in sleepiness or hard to wake up
- Inability to recognize people or places
- Repeated episodes of vomiting
- Unusual behavior or increasing confusion
- Any seizure activity – uncontrollable shaking of the arms and/or legs
- Numbness or weakness of arms and/or legs
- Slurred speech or trouble speaking

How is a concussion treated?

NO PHYSICAL ACTIVITY/EXERCISE – This includes all sports, gym and recess. It also includes activities such as climbing, running, riding bikes, pushups or weightlifting. Any physical activity will prolong concussion symptoms. After one concussion, the patient is at increased risk for another. DO NOT push yourself. Rest until symptoms improve. Your physician will provide a return-to-play plan and MUST clear a patient for return to practice or competition.

LIMIT MENTAL ACTIVITY – Activities that require focus/concentration like homework, job-related tasks and even reading should be avoided. Limit “screen time” as much as possible. This includes TV, computer, texting and video games. Watch TV no longer than 20 minutes per hour. If symptoms worsen during this time, then stop the activity immediately. Patients should not drive until cleared by a physician. Avoid bright lights and loud noises. Consider spending time in a quiet room with dim lighting when possible.

DIET/HYDRATION – Patients should have regularly scheduled meals and snacks. If the child feels sick to the stomach (nausea), give only clear fluids till the nausea resolves. Patients should drink plenty of water. A 100-pound child should drink at least 70 ounces per day. Avoid being in the sun or hot places. Wear sunglasses and/or a hat with a brim if it is bright outside.

SLEEP – Patients should be awakened every six hours on the first night to check that he/she can be awakened and act appropriately. After that, sleep is one of the most important ways to get better. Patients should have a regular early bedtime each night in a dark, quiet room. Sleep as late as possible, but do not stay up late at night. Napping should be discouraged as it can lead to difficulty sleeping at night-time and cause increased tiredness upon awaking.

PAIN CONTROL – Headache is the most common symptom of a concussion. Most headaches may be treated with acetaminophen (Tylenol®) as needed. If this does not provide adequate relief or if it must be taken multiple times per day, notify your doctor. If your headache suddenly and dramatically worsens in the first week, seek emergent medical care.

SCHOOL

- Your child should stay home and rest until symptoms improve. Your child should be able to focus for at least 30 minutes without symptoms before returning to school.
- Do not get all their homework sent home – let them catch up in school once they feel well. Pushing through school work may worsen symptoms and slow recovery.
- While at school, rest breaks can help if there are mild symptoms. Consider eating in a quiet area, not the loud lunchroom.
- Students who have symptoms may need extra help with school work, including note taking, extra time for test taking or make up tests once their symptoms resolve.
- School staff should be asked to notify parents if the student has trouble focusing, remembering new material, needs more time to finish tasks, or is more crabby than usual.

Concussion Symptom Score

You may be asked to complete a Concussion Symptom Score. This should be done daily at the same time. Take this with you when you follow up with a physician.

Follow-Up

The child should be seen for a follow-up in _____ day(s) at _____

Phone _____

For additional evaluation by the UH Rainbow Babies & Children’s Hospital Sports Medicine team, please call 216-983-PLAY (216-983-7529) or 216-983-HEAD (216-983-4223).