Mild Traumatic Brain Injury- Mild TBI/Concussion

Normal symptoms in the first few weeks following a mild traumatic brain injury are:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Thinking</th>
<th>Emotional</th>
<th>Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headaches</td>
<td>Sensitivity to light</td>
<td>Feeling mentally foggy</td>
<td>Irritability</td>
</tr>
<tr>
<td>Nausea</td>
<td>Sensitivity to noise</td>
<td>Problems concentrating</td>
<td>Sadness</td>
</tr>
<tr>
<td>Fatigue</td>
<td>Numbness or tingling</td>
<td>Problems remembering</td>
<td>Feeling more emotional</td>
</tr>
<tr>
<td>Occasional vomiting</td>
<td>Visual problems</td>
<td>Thinking slower</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Balance problems</td>
<td></td>
<td>Nervousness</td>
</tr>
</tbody>
</table>

Call your doctor or go to the emergency department if you experience any of the following:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Thinking</th>
<th>Emotional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worsening headaches or headaches unrelieved by medications</td>
<td>Feel very drowsy</td>
<td>Cannot recognize people or places</td>
</tr>
<tr>
<td>Seizures</td>
<td>Repeated vomiting</td>
<td>Increasing confusion</td>
</tr>
<tr>
<td>New neck pain</td>
<td>New slurred speech</td>
<td>Weakness or numbness in arms or legs</td>
</tr>
</tbody>
</table>

Returning to Daily Activities

1. Get rest. Keep the same bedtime every night.
2. Take daytime naps or rest breaks when you feel tired.
3. Limit physical activity as well as activities that require a high level of thinking or concentration. These activities can make symptoms worse if you push yourself too hard.
4. Drink plenty of fluids and eat carbohydrates or protein to maintain appropriate blood sugar levels.
5. As symptoms decrease, you may begin to gradually return to your daily activities. If symptoms worsen or return, lessen your activities and try again in a few days. Mild TBI symptoms can take up to 3 months or longer to completely resolve.
6. During recovery, it is normal to feel frustrated, sad and emotional. Be patient and allow yourself to rest when needed.

Please call the Neurotrauma Hotline with questions regarding your recovery at (513) 584-2804

Find more information at UCHealth.com/Neurotrauma
Mild Traumatic Brain Injury – Mild TBI/Concussion

What is traumatic brain injury?
Traumatic brain injury (TBI) is an injury to the brain caused by a blow or jolt to the head from blunt or penetrating trauma. The injury that occurs at the moment of impact is known as the primary injury. Primary injuries can involve a specific lobe of the brain or the entire brain. Sometimes the skull may be fractured, but not always. Immediately after the accident the person may be confused, not remember what happened, have blurry vision and dizziness, nausea and vomiting, or lose consciousness.

What are the symptoms?
Depending on the type and location of the injury, the person’s symptoms may include:
- Loss of consciousness
- Confusion and disorientation
- Memory loss/ amnesia
- Fatigue
- Headaches
- Visual problems
- Poor attention/concentration
- Sleep disturbances
- Dizziness/loss of balance
- Irritability/emotional disturbances
- Feelings of depression
- Nausea/Vomiting
- Seizures

What is the treatment?
Patients with a mild TBI usually do not require surgery. They generally need rest and, at times, medications or therapies to help relieve persistent symptoms.

What is the recovery for a mild TBI?
After a mild brain injury patients can have a wide variety of symptoms. Some patients may not experience any symptoms, while others can have severe symptoms such as headaches, dizziness, memory problems, sleep disorders, fatigue, high levels of emotions or, in some cases, seizures. Descriptions of the common problems people experience after a mild brain injury are listed below:

Headaches
Headaches are a very common problem after a TBI. Most patients with a TBI will experience headaches. Over-the-counter acetaminophen (Tylenol) is the best medication to treat your headaches. In most patients, headaches will go away within one month and they should gradually improve with time if your headache would worsen or become severe and unrelied by pain medication, call your health care provider or return to the emergency department.

Dizziness
Dizziness is another very common symptom. The dizziness should improve with time. However, if it becomes severe and makes it difficult to complete tasks, please contact your health care provider to discuss options for treating your dizziness.

Memory problems
Memory problems are common among patients with a TBI. This can range from problems with organizing tasks to remembering names or even the grocery list. This is called your short-term memory. Generally these memory problems are mild and will resolve over time. However, some patients may need to get help from a speech therapist. A speech therapist can help with ways to organize your thoughts and tasks, and provide tips to practice at home for improving your short-term memory.

Sleep disorders/Fatigue
Patients with a TBI can also have problems with sleep and fatigue. Initially, after a head injury, patients will feel tired, need frequent rest periods, and may want to sleep most of the time for the first several days. Patients may also have difficulty sleeping well at night. It is important to increase your activity level gradually every day. Increasing activity to include light exercise may help your symptoms improve. Keeping the same bedtime every night and increasing activity to include light exercise may help your symptoms improve. Keeping the same bedtime every night and reducing mental and physical stimuli for one hour before bedtime may aid in sleep. When going back to work it is important to take your activity tolerance into account. You might need to work part-time initially to build up your endurance before going back full-time. Like all other symptoms, these will diminish with time.

Emotions
After a TBI some patients have trouble controlling their emotions. This means they might get mad or angry in a situation where they normally would not. Some patients say they cry easily, even at a sad commercial on TV. This can be an adjustment and can cause strain on relationships. Caregivers or spouses may be more likely to notice small changes in personality. To identify specific changes caused by the TBI, contact the patient’s doctor. He or she can conduct a neuropsychological evaluation and create direction for further care.

Seizures
Seizures can occur anytime the brain is injured. Patients with a mild TBI are often not given seizure medications because they have a low risk of having a seizure. However, at the discretion of the medical team, some patients may be treated with medication for a short period after the injury to prevent seizures from occurring.

How can I prevent a TBI?
Tips to reduce the risk of a head injury:
- Always wear a helmet when riding a bicycle, motorcycle, skateboard, or all-terrain vehicle.
- Never drive under the influence of alcohol or drugs.
- Always wear your seat belt and ensure that children are secured in the appropriate child safety seats.
- Avoid falls in the home by keeping unsecured items off the floor, installing safety features such as non-slip mats in the bathtub, handrails on stairways, and keeping items off of stairs.
- Avoid falls by participating in an exercise program to increase strength, balance, and coordination.
- Store firearms in a locked cabinet with bulbs in a separate location.
- Wear protective headgear while playing sports.

When should I return to the emergency department?
After a patient is discharged home he/she will need constant supervision for 24-48 hours to watch for these changes listed below:

- If the patient has an increase in sleepiness
- If the patient is unable to be awakened from sleep
- If the patient has new onset nausea and vomiting or vomiting that is unable to be controlled with medication
- If the patient becomes confused or disoriented
- If the patient develops weakness on one side of their body
- If the patient develops difficulty talking or understanding what is being said
- If the patient has a seizure

If you have questions, concerns or would like to schedule an appointment to discuss your symptoms, please call the Neurotrauma Hotline. (513) 584-2804

Resources:
The Brain Injury Association:
www.biausa.org
www.biausa.org

Reviewed by: Amy Horner, RN; Laura Ngwenya, MD, PhD
Updated: 01.2017
This information is not intended as a substitute for professional medical care. Always follow your healthcare professional’s instructions.