Concussion

Information For Parents

Concussions and Your Children

March 19, 2012

What is a concussion?

A concussion is a traumatic brain injury that is caused by a blow or jolt to head or body, or any other injury that shakes/bounces the brain in the skull. Research suggests that children and teens are more vulnerable to concussions and require a longer recover period than an adult. A concussion is a serious injury and may have lasting consequences.

How is the brain impacted?

The damage to the brain is microscopic. The tearing the cells causes abnormal movement of Calcium, Potassium, Glutamate and other substances. While the chemical changes are occurring in the brain the brain also restricts blood flow to the damaged area at a time when the demand for blood is greater. This mismatch of supply and demand will further increase cell damage. These changes in blood supply help explain why people with concussions need more rest to recuperate and prevent symptoms from worsening.

What should I expect after a concussion?

Post-concussion symptoms will often times interfere with a child’s ability to do academic work, participate in the classroom setting and function interpersonally with peers and parents. Signs and symptoms can be physical, behavioral and cognitive.

<table>
<thead>
<tr>
<th>Physical</th>
<th>Behavioral</th>
<th>Cognitive</th>
<th>Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blurry/double vision</td>
<td>Anxious</td>
<td>Memory loss</td>
<td>Fatigue</td>
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<tr>
<td><strong>Headache</strong></td>
<td>More emotional than normal</td>
<td>Poor concentration</td>
<td>Excessive sleep</td>
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<tr>
<td>Vomiting</td>
<td>Normal</td>
<td>Slow reaction time</td>
<td>Hard time falling asleep</td>
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<tr>
<td>Dazed look</td>
<td>Irritability</td>
<td>Sad</td>
<td></td>
</tr>
<tr>
<td>Poor balance</td>
<td>Sad</td>
<td>Easily upset/angered</td>
<td></td>
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<tr>
<td>Dizziness</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sensitivity to light and noise</td>
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<td></td>
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<tr>
<td>Loss of Consciousness</td>
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Special points of interest:

- Signs and Symptoms of a concussion
- Statistics of concussions
- Tips for recovery

Concussion Information For Parents
Recovering From a Concussion

What is cognitive rest and how will my child benefit from it?

A child will recover more quickly with rest, not just physical rest but mental rest which is known as “cognitive rest”. The brain needs to rest from mental activities such as using computers, tv, video games, texting, and loud noises/bright lights. The brain will take longer to heal if the brain is actively engaged. As symptoms lessen, increase use of these activities may be allowed.

What is Second-impact Syndrome?

Athletes that have sustained a concussion are not allowed to return to play that day and need to be evaluated by a physician. A premature return to sports can result in a significant neurological injury and even death, a condition known as second impact syndrome. High school aged athletes are most vulnerable to this event.

When should my child return to school?

Children should not return to school until they have been evaluated by a medical professional and are symptom free. The high stimulation environment created by the school can be overwhelming for a child still recovering from a concussion. Many of the signs and symptoms of a concussion will return if a child returns to school to early. Temporary school accommodations can be made while the student is recovering.

When should my child return to sports or physical activity?

Athletes that have sustained a concussion are not allowed to return to play that day and need to be evaluated by a physician experienced with concussions.

Statistics

- 80% of people with a concussion aren’t diagnosed
- Brain injury is leading cause of death in children and adolescents
- Only 10% of people who receive a concussion lose consciousness
- Currently, we have had 30 concussions at Salem High since the fall.