UNDERSTANDING THEIR CONDITION: Concussion

IT'S COMMON to hear about concussions in sports, but the treatment for concussions has changed a lot in the past few years. Your child or athlete should go to a doctor and follow the instructions that are given. With the right approach, most concussions can be healed like any other injury. When recovering from a concussion, the fastest way to heal is to limit physical and mental activities. Most concussions can heal with full recovery, while others may lead to more serious injury if not recognized and treated the right way.

What causes a concussion?

Think of the brain inside your skull as an egg yolk within its shell. The bones of the skull, like an eggshell, protect the brain from objects that may strike it from the outside. Your brain, like the egg yolk, is cushioned inside the skull by a gel-like fluid that acts as a shock absorber. An impact or violent force that causes the brain to hit the skull bone can injure the brain. An indirect force to the face, neck, or body, like a whiplash injury, can also cause a concussion.

Forces from a concussion cause changes within your brain cells that make normal brain activity require more energy. Symptoms such as headaches can occur because the brain may have difficulty providing this extra energy. When this “energy crisis” is happening in your brain, it’s easier to become re-injured. This is why it’s important that you know the signs of a brain injury so you can keep your child safe.

What might someone expect with a concussion or head injury?

Signs and symptoms of a concussion can occur right away, or several hours after the injury. You may notice that your child has become clumsy, confused, or is not sure where they are or what day it is. You might even notice a change in their personality, memory, or sleeping patterns. More obvious signs, like vomiting or loss of consciousness, are definite signs of a concussion. Other symptoms like headaches, nausea, dizziness, loss of balance, sensitivity to light or noise, feeling sluggish or fatigued, difficulty concentrating, changes in vision, and fogginess are also signs of a concussion. Be sure to tell your child’s doctor and physical therapist of any reports like the ones listed above.

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<th>MENTAL</th>
<th>PHYSICAL</th>
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<td>Confusion</td>
<td>Headache</td>
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<td>Sadness</td>
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<td>Nervous or anxious</td>
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<td>Irritability</td>
<td>Poor concentration</td>
<td>Nausea and vomiting</td>
<td>Too much or too little sleep</td>
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DISCLAIMER: This handout is meant to be used as a general guide only. If you have specific questions, please discuss them with your provider.
How do I know if someone had a concussion?

Knowing if your child has a concussion can be difficult because everyone is affected differently. Imaging tests like a CT scan or MRI are not usually helpful because the test can look normal even when there is injury.2, 4 A concussion can happen even when someone does not lose consciousness or pass out; less than 10% of diagnosed concussions involve a loss of consciousness.2 Due to the differences in how people are affected, diagnosis is made mostly based on a medical exam and on how your brain is affected.

What should I do?

Management of a concussion begins immediately after the injury. Your child should be removed from play right away and tested on the sideline by a qualified healthcare provider. Continuing to play after a head injury increases the risk of having another concussion, which may lead to further injury and longer recovery time. Healthcare providers will rule out head or neck trauma, and may give a short sideline assessment that tests your child’s memory and attention.2 After this brief testing, an in-office medical visit may be needed for a more detailed exam. The initial treatments for sports-related concussion is rest and changes in daily activities.2, 4, 5 The child should be monitored frequently, but there is no need to wake them while sleeping.10 Loud music, television, and busy environments should be avoided if they make symptoms worse. School work and even attending school may need to wait if the student is having a hard time with school and homework. They may need to be excused from gym class and recess to avoid re-injury. Your child should drink plenty of water and eat healthy foods in order to heal. Medications may be needed if the symptoms of concussion last longer than 10 days.

Path to recovery after a concussion:

After a concussion, up to 80% of people will heal within 7-10 days.2 Recovery depends on not playing sports or doing strenuous activity while symptoms are going on. How long someone needs to take a break from sports or activity is different for each person and will depend on how quickly the symptoms go away.3, 4 Your child should only return to play once a medically-trained concussion expert decides it’s okay to return.

How can someone avoid a concussion?

Not all concussions can be prevented, but some may be avoided by taking certain precautions. At this time, it’s hard to prove that protective equipment, like mouth guards and helmets, can prevent concussions.2 Helmets will, however, protect against other serious forms of injury like a skull fracture. Coaches should encourage athletes to engage in safe play techniques and to follow the rules of the game. Each player must report an injury, even if it means taking a break.

Physical therapy for concussions:

Physical therapists play an important role in helping your child return to normal function after a concussion. Following a sports concussion, 50% of athletes have reported dizziness, imbalance, and vertigo, and therapists known as vestibular experts are specially trained to help with dizziness and balance difficulties.6 In addition to vestibular therapy, sports physical therapy may also help in the recovery of strength and conditioning necessary for return to play.2, 4, 9
UNDERSTANDING THEIR CONDITION: CONCUSSION (continued)

References:


