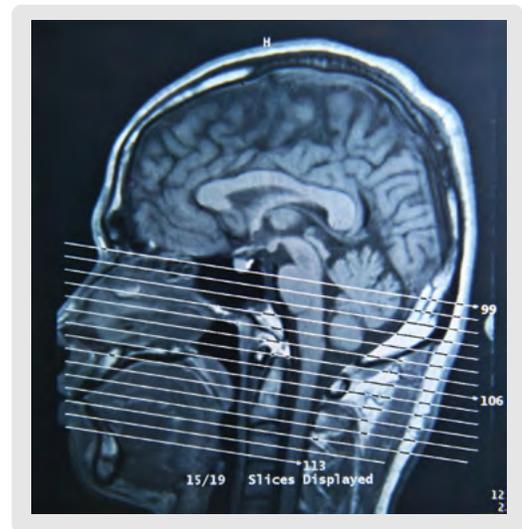


UNDERSTANDING CONCUSSIONS

A head injury is arguably the most nagging, intolerable pain a person can experience. Unless you live in a bubble, you've probably knocked your head once or twice (or more!). Sometimes you may not experience any symptoms following the hit to the head, or maybe you have a headache for a few days. How do we determine if a bump is just a bump or if it is something more serious like a concussion?

A concussion is a type of “closed head injury” caused by a traumatic event, such as a bump, strike, or jolt to the head. Concussions are typically not life-threatening, however they can change the way your brain functions and should be treated with the same caution and care. Concussions and other closed head injuries can potentially create various side effects including, but not limited to visual disturbances, headaches, learning difficulties, an inability to focus, behavioral issues, and balance/coordination issues. Some of these problems can even have a lasting effect on your overall functionality. To quickly treat or prevent the prolonged effects of a concussion it is important to know and understand the signs and symptoms. **The earlier a concussion is detected, the more successful your treatment plan will be.**



BACKGROUND

In order to fully understand how a closed head injury can have a long term effect it is helpful to learn how the brain functions normally. Contrary to what you may believe, the human skull, or cranium, is not one solid bone. The cranium is made up of smaller bones that move in a very specific “respiratory motion.” This “motion” directly affects your brain’s responsibilities, so you can see how an injury to the head can cause the brain to operate at a compromised level. Without the proper attention and care, these adverse effects on your brain will continue to alter your functionality.

To identify prolonged neuropsychological effects of concussions, a group of neurosurgeons studied a group of high school athletes, a demographic prone to this type of injury. The study included athletes with no concussion history, symptom-free athletes with a history of one concussion, athletes with a history of two or more concussions, as well as athletes who experienced a concussion a week before the testing. All athletes were put through a clinical interview, symptom checklist, and neuropsychological assessment tests. The results of the study showed that **athletes with recent concussions performed significantly worse on measures of attention and concentration than athletes with no concussion history.** The neurosurgeons’ collective conclusion was that there were subtle yet significant prolonged neuropsychological effects in young athletes with a history of two or more previous concussions.²

[1] Healthy You Manual

[2] Clinical Studies Print Out

SOLUTION

So how can you protect yourself from a concussion and its prolonged effects? A concussion isn't going to occur in the most idyllic situation, i.e., in a hospital surrounded by neurologists. Like all things, they could happen when you least expect it, to even the safest of people. Even scarier, they could happen when you are totally alone. Whether you are experiencing a potential concussion or you are witnessing someone who is, here are the signs and symptoms to pay attention to:³

- 1 Vacant stare
(disoriented, baffled facial expression)
- 2 Delayed responses
(slow to understand questions or instructions)
- 3 Inattention
(easily distracted, inability to follow conversations)
- 4 Disorientation
(unable to identify the date, time, or place)
- 5 Slurred or incoherent speech
(making confused or puzzling statements)
- 6 Incoordination
(stumbling, inability to walk in a straight line)
- 7 Inappropriate emotionality
(appearing distraught, crying for no apparent reason)
- 8 Memory problems
(repeatedly asking a question that has already been answered)
- 9 Loss of consciousness
(unresponsiveness to stimuli)

Remembering this list could help you or a friend judge the severity of a possible concussion, but don't forget about yourself! Share these signs and symptoms with your co-workers, teammates, or loved ones, to ensure that you are protecting yourself in case you become the victim of an accident that results in a concussion. The quicker you assess the situation, the closer you are to receiving proper treatment and diminishing long-term side effects.

[3] The National Academies Press