

I still remember the loud thwack of crashing plastic on the football field that sent a shiver through me as I sat in the bleachers silently whispering that God should allow No. 51, my son, to stand up. He and another player had crashed helmets during a play. Though he suffered a mild concussion, my son and the other player have, fortunately, not had health issues since.

What especially distressed me was my husband's experience as a high school football player. He suffered a concussion so severe that he did not remember being taken to the locker room. When he awoke, he was rambling gibberish and wandered into the opposing team's huddle, a disorientation that typically occurs with concussions. It took him several hours before he was lucid again. According to Head Case, a concussion management system company, some 47 percent of all reported sports concussions occur in high school football.

Concussions are an injury to the brain, though they may appear invisible. In the past, those who experienced concussions — as my husband and son did — were told to shake it off. Some concussions may include ongoing symptoms such as nausea and headaches, cognitive issues such as having challenges with concentration or memory, and emotional issues such as sadness and irritability, according to the Sports Concussion Institute.

Repeated concussions can cause irreparable damage. As we have seen in former NFL players and boxers (think

Muhammad Ali), the effects are devastating. As the Institute notes, a professional football player might receive some 900-1,500 blows to the head during a season. There have been recent reports of NFL players committing suicide attributed to chronic encephalopathy, a degenerative disease that occurs in people with multiple head traumas.

Concussions are not just limited to football. Boxers receive punches to the head at an estimate of 20 mph and the speed of a soccer ball being headed by a player is at the average of 70 mph, according to the Institute. Injuries also occur in lacrosse, ice hockey, wrestling, basketball, softball, field hockey, gymnastics and cheerleading. According to Head Case, some 3.8 million concussions were reported in 2012, double what was reported in 2002. A third of concussions occur during practice. Some 39 percent of these injuries are considered cumulative and increase catastrophic injury that results in permanent neurologic damage.

A 2014 class action lawsuit brought by 4,500 former members of the NFL brought heightened awareness to the issue in what PBS characterized as a "public firestorm." A third of these players suffer from neuro-cognitive issues such as Alzheimer's disease or dementia. The NFL has taken a defensive position on the matter.

So what can be done? Better data collection can establish the true extent of the issue, especially as it relates to young people. More studies about the repeated nature of head trauma are needed to understand the long-term effects. More safety rules about contact sports need to be established, and finally, the number of times a concussion occurs and time lapsed between concussions needs to be examined.

Many health care organizations have established concussion centers to help diagnose and treat brain injuries. The Concussion Legacy Foundation can help locate a facility in any geographic area of the country for more information or treatment. With more awareness about safety, we should be able to get back to the notion that sports should be fun and not life-endangering.

For more information:

http://www.pbs.org/wgbh/frontline/article/the-nfls-concussion-problem-still-has-not-gone-away/ http://www.huffingtonpost.com/entry/adrian-robinson-suicide-brain-nfl_

us 561edbb6e4b050c6c4a4417e

http://concussionfoundation.org/learning-center/concussion-clinics

http://www.headcasecompany.com/

http://concussiontreatment.com/

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