

Concussions Happen



As a parent and a pediatrician I have seen more than my fair share of concussions in all age groups. Concussions are mild traumatic brain injuries (mTBI). There are an estimated 3.8 million concussions due to sports injuries alone every year. There are many more due to accidents such as falls, play, moving vehicles and so on. The event is usually a blow to the head or body that causes significant movement of the brain within the skull so that brain function is interrupted. This interruption can be as mild as a headache or as complex as to cause multiple symptoms including physical, emotional, cognitive, and sleep issues. Loss of consciousness occurs infrequently and is not necessary associated with severity of the concussion.



Current diagnosis is based on the symptoms reported by the patient. There are no clear or objective diagnostic markers to make the identification or severity of concussion easy. Brain CT and MRI imaging are of little benefit. If you suspect you or someone has had a concussion timely medical attention is strongly advised. A physician will determine the severity of the concussion and what rehab is necessary for recovery.



As for rates of concussions in sports, football has the highest rate. Surprisingly girls have higher concussion rates than boys do in similar sports such as basketball, soccer and lacrosse. Why are our young

female lacrosse players not required to wear helmets, but the boys are required to wear helmets? Athletes 18 years old and younger are at severe risk for permanent brain damage even from minor impacts or blows. This is because their brains are still developing and maturing. Interestingly the college athlete will recover faster from a

more significant blow than the high school athlete. The young athletes will take 2 to 14 times as long to recover than their older counterparts.

Current recommendations for recovery from concussions include complete rest and refraining from all activities that require physical exertion and cognitive function (using the brain). That means no sports, cell phones, texting, TV, loud noises or loud music, computer use and no studying, including reading and going to school. Patients need to be headache free for at least 3-4 days prior to restarting any of these activities. The recommendations further state the concussed person should restart activities at part time, such as half time. If symptoms of the concussion return the patient stops all activities until symptoms subside.

I like to compare a concussion to a sprained ankle. When we sprain our ankle it hurts, swells up, turns black and blue, and we are unable to walk on it. Many times the only symptom for a concussion is a headache. The concussed patient looks otherwise normal, but in reality the injury is much more severe and may have lifelong negative consequences like depression, impaired brain function, inability to control emotions, sleep issues, and physical impairments to name just a few. Parkinson's disease and dementia are associated with more frequent or severe concussions.

We will not be able to prevent all concussion, but we can take preventive measures such as wearing a helmet anytime we are engaged in activities that may cause head injuries such as riding a bike or roller blading. My question to all my patients is: "How many concussions are too many?" My answer is just one.

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