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Don't Let Kids Play Football

By BENNET OMALU DEC. 7, 2015



Credit Tamir Kalifa for The New York Times

Sacramento — WE'VE known since 1964 that cigarette smoking is harmful to your health. We've known for more than 40 years that alcohol damages the developing brain of a child. We've known since the mid-70s that asbestos causes cancer and other serious diseases. Knowing what we know now, we do not smoke in enclosed public spaces like airplanes; we have passed laws to keep children from smoking or drinking alcohol; and we do not use asbestos as an industrial product.

As we become more intellectually sophisticated and advanced, with greater and broader access to information and knowledge, we have given up old practices in the name of safety and progress. That is, except when it comes to sports.

Over the past two decades it has become clear that repetitive blows to the head in high-impact contact sports like football, ice hockey, <u>mixed martial arts</u> and boxing place athletes at risk of permanent brain damage. There is even a Hollywood movie, "Concussion," due out this Christmas Day, that dramatizes the story of my discoveries in this area of research. Why, then, do we continue to intentionally expose our children to this risk?

If a child who plays football is subjected to advanced radiological and neurocognitive studies during the season and several months after the season, there can be evidence of brain damage at the cellular level of brain functioning, even if there were no documented concussions or reported symptoms. If that child continues to play over many seasons, these cellular injuries accumulate to cause irreversible brain damage, which we know now by the name Chronic Traumatic Encephalopathy, or C.T.E., a disease that I first diagnosed in 2002.

Depending on the severity of the condition, the child now has a risk of manifesting symptoms of C.T.E. like major depression, memory loss, suicidal thought and actions, loss of intelligence as well as dementia later in life. C.T.E. has also been linked to drug and alcohol abuse as the child enters his 20s, 30s and 40s.

The risk of permanent impairment is heightened by the fact that the brain, unlike most other organs, does not have the capacity to cure itself following all types of injuries. In more than 30 years of looking at normal brain cells in the microscope, I have yet to see a neuron that naturally creates a new neuron to regenerate itself.

We are born with a certain number of neurons. We can only lose them; we cannot create new neurons to replenish old or dying ones.

In 2011, the two leading and governing professional pediatrics associations in the United States and Canada, the American Academy of Pediatrics and the Canadian Pediatric Society, published a position paper recommending that children should no longer be allowed to engage in high-impact contact sports, exemplified by boxing, and willfully damage their developing brains.

Since then, researchers have independently confirmed that the play of amateur or professional high-impact contact sports is the greatest risk factor for the development of C.T.E. Where does society at large stand now, knowing what we know?

As physicians, it is our role to educate and inform an adult about the dangers of, for example, smoking. If that adult decides to smoke, he is free to do so, and I will be the first to defend that freedom. In the same way, if an adult chooses to play football, ice hockey, mixed martial arts or boxing, it is within his rights.

However, as a society, the question we have to answer is, when we knowingly and willfully allow a child to play high-impact contact sports, are we endangering that child?

Our children are minors who have not reached the age of consent. It is our moral duty as a society to protect the most vulnerable of us. The human brain becomes fully developed at about 18 to 25 years old. We should at least wait for our children to grow up, be provided with the information and education on the risk of play, and let them make their own decisions. No adult, not a parent or a coach, should be allowed to make this potentially life-altering decision for a child.

We have a legal age for drinking alcohol; for joining the military; for voting; for smoking; for driving; and for consenting to have sex. We must have the same when it comes to protecting the organ that defines who we are as human beings.

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