

Concussions tied to rise in dementia risk decades later

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(HealthDay)— A serious head injury may increase the risk for dementia

even decades later, a new, large study suggests.

A traumatic [injury](#) to the brain—such as a concussion from a sports collision or a motor vehicle accident—is already associated with short-term risk of dementia. But the new research finds that, although the risk decreases over time, it still continues for many years.

"The main finding is the strong association between a previous [traumatic brain injury](#) and the risk of dementia," said the study's senior author, Peter Nordstrom.

"The association is stronger for more severe or multiple traumatic brain injuries, and the association persists for more than 30 years after the trauma," added Nordstrom, a professor of geriatric medicine at Umea University in Sweden.

This isn't the first study to link traumatic brain injuries (TBIs) and later problems with memory and thinking. A number of studies have looked at professional athletes—such as football players, boxers and mixed martial arts fighters—and have found a connection to later serious brain troubles. These include dementia or chronic traumatic encephalopathy (CTE), a [degenerative brain disease](#).

As with previous studies, this one can't yet prove a cause-and-effect relationship or point to exactly how a TBI might trigger later dementia.

This study did, however, look at a very large number of people from the general population in Sweden. It began with more than 3.3 million people aged 50 or older in 2005.

From that group, the researchers found more than 164,000 people who had brain injuries serious enough for them to seek care at an emergency department from 1964 through 2012, Nordstrom said.

The investigators also looked at more than 136,000 people who were diagnosed with dementia during the study follow-up period.

The researchers matched each of the people in those two groups with two healthy people to serve as a control group.

A third group consisted of almost 47,000 siblings pairs, of which only one sibling had experienced a serious head injury.

During the first year after a head injury, the risk of dementia was about four- to sixfold higher. The risk dropped quickly, but never returned to normal. Even 30 years after the [brain](#) injury, the odds of dementia were 25 percent higher, the findings showed.

In some cases, it's possible that [dementia](#) developed first and contributed to the head injury, the researchers suggested.

Dr. Daniel Kaufer is director of the memory disorders program at the University of North Carolina at Chapel Hill. He said, "This study clearly illustrates that TBI is something we need to pay attention to and track." Kaufer was not involved with the new study.

"People are really starting to pay attention to TBI and aren't taking it lightly," Kaufer added.

"It's not only about short-term consequences anymore—like whether Gronk can play in the Super Bowl this weekend," he said, referring to the New England Patriots tight end Rob Gronkowski, who recently suffered a concussion. "It's concern about the long-term risk of developing cognitive symptoms," Kaufer explained.

Just as doctors follow high blood pressure and high cholesterol, they need to track [brain injury](#) in a more systematic way, Kaufer said.

Dr. Ajay Misra, chairman of neurosciences at NYU Winthrop Hospital in Mineola, N.Y., said this study is important largely because of its size, and that it confirms what people knew intuitively.

But he noted the jury is still out on whether this relationship is causal.

While research continues, the experts suggested taking steps to avoid TBI whenever possible. Some [people](#) might choose to stop playing contact sports, or not allow their child to play. "I think we'll see more of that," Kaufer said.

The most important thing to remember, however, is to protect your head. That can often be accomplished by wearing a helmet when participating in activities such as riding a motorcycle or a bicycle, he said.

The study was published online Jan. 30 in *PLOS One*.

More information: Peter Nordstrom, professor, geriatric medicine, Umea University, Sweden; Ajay Misra, M.D., chairman, department of neurosciences, NYU Winthrop Hospital, Mineola, N.Y.; Daniel Kaufer, M.D., director, memory disorders program, University of North Carolina at Chapel Hill; Jan. 30, 2018, *PLOS One*, online

Learn more about traumatic brain injury from the [U.S. National Institute of Neurological Disorders and Stroke](#).

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