

Brain injury raises dementia risk, US study finds

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Ryan Lamke poses for a photograph in Washington on Thursday, July 14, 2011. Lamke was a corporal in the Marine Corps and served as an infantry assault man in Iraq. While in Fallujah, Iraq in 2005, he sustained traumatic brain injury, orthopedic injuries to his left arm and post traumatic stress disorder(.AP Photo/Jose Luis Magana)

(AP) -- A large study in older veterans raises fresh concern about mild brain injuries that hundreds of thousands of troops have suffered from explosions in recent wars. Even concussions seem to raise the risk of developing Alzheimer's disease or other dementia later in life, researchers found.

Closed-head, traumatic brain injuries are a legacy of the Afghanistan and Iraq wars. [Body armor](#) is helping troops survive bomb blasts, but the long-term effects of their head injuries are unknown.

Other research found a possibly high rate of mild cognitive impairment, or "pre-Alzheimer's," in some retired pro-football players, who take many hits to the head in their careers.

The studies, reported Monday at the Alzheimer's Association International Conference in France, challenge the current view that only moderate or severe brain injuries predispose people to dementia.

"Even a concussion or a mild [brain injury](#) can put you at risk," said Laurie Ryan, a neuropsychiatrist who used to work at Walter Reed Army Medical Center and now oversees Alzheimer's grants at the U.S. National Institute on Aging.

Don't panic - this doesn't mean that every soldier or student athlete who has had a concussion is in danger. Pro-football players and boxers "are almost a different species from us" in terms of the repeated blows they take to the head, said William Thies, the Alzheimer's Association's scientific director.

It does mean you should try to avoid one, by fall-proofing your home and wearing helmets and [seat belts](#), he said. About 1.7 million brain injuries occur each year in the U.S.

Troops also need to prevent any further harm, said Dr. David Cifu, national director of physical medicine and rehabilitation for the Veterans Health Administration.

"What the people who have had a head injury and read this should do is to exercise and eat right and take their medicines and take their aspirin

and do meditation to reduce stress - reduce risk factors that are modifiable," he said. The new study is "a great start," but limitations in its methods mean that it can't prove a brain injury-dementia link, he said. More definitive studies are starting now but will take many years to give results.

The veterans study was led by Dr. Kristine Yaffe, a University of California professor and director of the Memory Disorders Clinic at the San Francisco VA Medical Center. The Department of Defense and the National Institutes of Health paid for the work.

"It's by far the largest" study of brain injury and dementia risk, she said. "It's never been looked at in veterans specifically."

Researchers reviewed medical records on 281,540 veterans who got care at Veterans Health Administration hospitals from 1997 to 2000 and had at least one follow-up visit from 2001-2007. All were at least 55 and none had been diagnosed with dementia when the study began. This older group was chosen because dementia grows more common with age, and researchers needed enough cases to compare those with and without brain injuries.

Records showed that 4,902 of the veterans had suffered a [traumatic brain injury](#), or TBI, ranging from concussions to skull fractures. Researchers don't know how long ago the injuries occurred. Many participants were Vietnam War vets and their injuries were during active duty. None were due to strokes - those cases were weeded out.

Over the next seven years, more than 15 percent of those who had suffered a brain injury were diagnosed with dementia versus only 7 percent of the others - a more than doubled risk. Severity of the injury made no difference in the odds of developing dementia.

"It's not just one kind of TBI or super-severe TBI" that poses a danger, Yaffe said.

That worries Ryan Lamke, 26, a medically retired Marine who lives in suburban Washington, D.C. He suffered a traumatic brain injury from multiple blast exposures in 2005 in Iraq. "I'm diagnosed as a moderate (brain injury) but it feels like a mild," said Lamke, who relies on electronic calendars and other gadgets to stay organized. He's a student at Georgetown University and works part-time as a government relations intern for a private firm.

"I have to read for twice as long as my classmates" to accomplish what's needed, he said. "I've not found a doctor so far who can give me a true understanding of what's going to happen 20 or 30 years down the road."

Troops will need close monitoring in the years ahead and treatment for post-traumatic stress, depression and other conditions that can lead to cognitive problems, experts said.

"While we don't want people frightened to think they're going to be permanently impaired, a mild traumatic brain injury does not necessarily mean" no long-term problems, said Dr. Gregory O'Shanick, a psychiatrist and chairman of the board of the advocacy group Brain Injury Association of America.

The other study is follow-up work on nearly 4,000 retired National Football League players surveyed in 2001. New surveys were sent in 2008 to 905 of them who were over 50. Of those who responded, 513 had spouses who could complete the part assessing the players' memory.

"We were surprised that 35 percent of them appeared to have significant cognitive problems," said lead researcher Dr. Christopher Randolph of Loyola University Medical Center in Chicago.

Researchers sent 41 of them to the Center for the Study of Retired Athletes at the University of North Carolina in Chapel Hill. Tests showed they had [mild cognitive impairment](#) that resembled a comparison group of much older patients from the general population.

The results are preliminary, and suggest the players have higher rates of impairment than would be expected for their age, but they also have more dementia risk factors, such as obesity, high blood pressure and diabetes, Randolph said.

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