Hitting Soccer Balls With Your Head May Lead to Brain Injuries

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Repetitively hitting a soccer ball with your head may, over time, lead to brain injuries that can affect memory, according to study findings presented at the annual meeting of the Radiological Society of North America and reported by Bloomberg.

Soccer is the world's most popular sport, with about 18 million Americans heading out to the field. Brain injuries in sports are receiving national attention as sports organizations review safety procedures and enact safety guidelines. Soccer balls can go as fast as 34 miles an hour in amateur games and twice that in professional matches—enough to cause some damage.

For the study, researchers at the Gruss Magnetic Resonance Research Center at Yeshiva University's Albert Einstein College of Medicine in New York City looked at brain images of 39 amateur soccer players. On average, the players were 31 years old, and all had been playing soccer since childhood.

Researchers found that players who "headed" the ball more than 1,300 times a year (a few times per day) were more likely to have injuries in areas of the brain responsible for attention, memory, planning, organizing and attention.

While a 2010 American Academy of Pediatrics (AAP) report found that there wasn't enough information to link repetitive heading with permanent cognitive impairment, the AAP did state that heading should only be taught when the child can learn the proper technique and has coordinated head, neck and upper body use.

Still, researchers said the next step is determining how much heading a person can do before suffering a brain injury.

"We have the potential for an intervention that could really mitigate this problem, which is to do further research to completely define the range of heading that's safe," said Michael Lipton, director of the Magnetic Resonance Research Center.