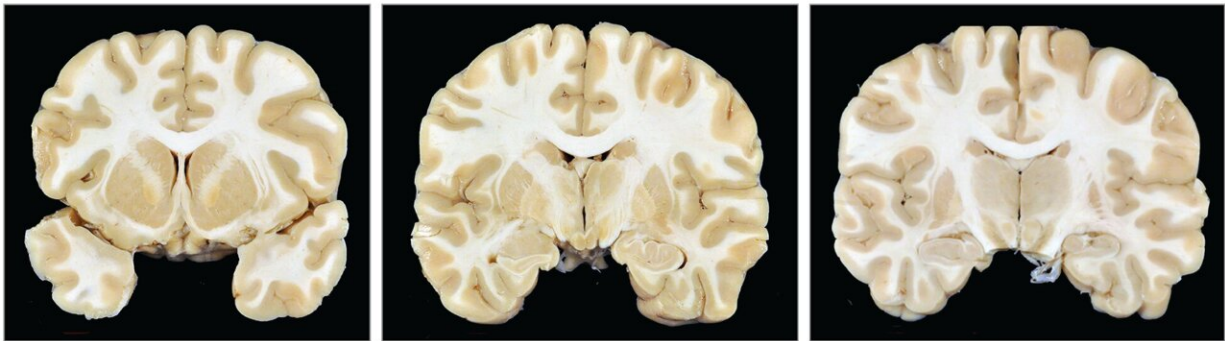


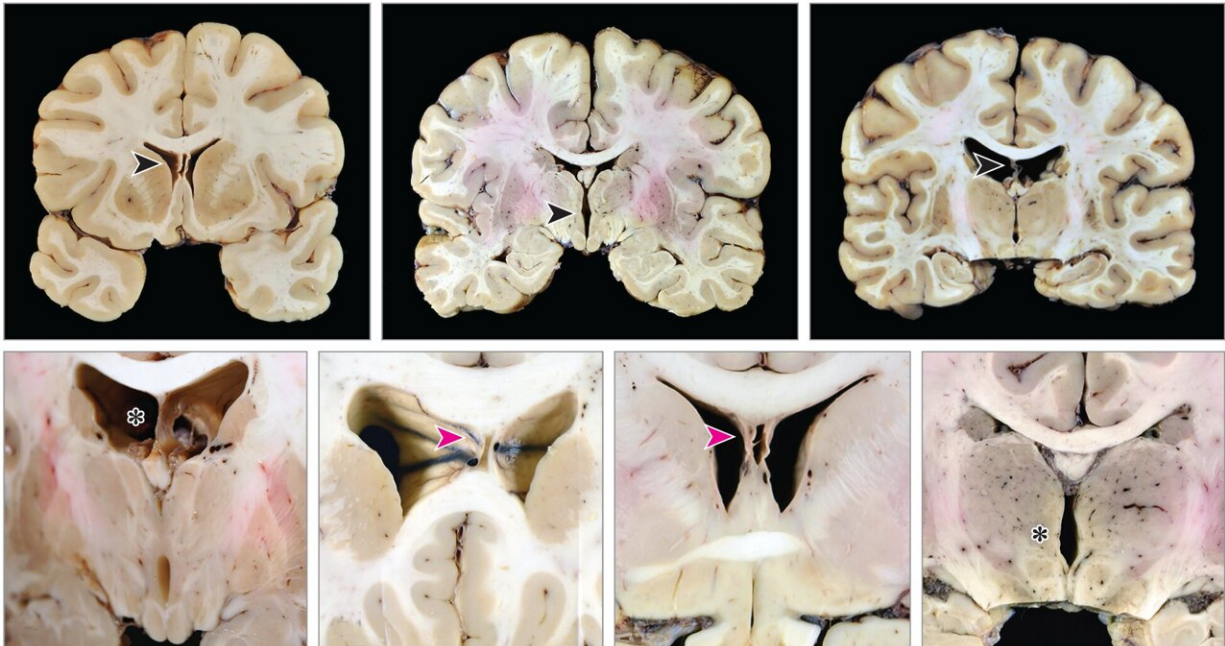
Brain injury prevention in contact sports is essential, expert says

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A Control aged 27 y



B Young athletes with CTE



Gross Neuropathologic Features Associated With Chronic Traumatic Encephalopathy (CTE) in Young Athletes. A, A 27-year-old control. Coronal

brain sections at the level of the caudate, accumbens, and putamen (left); anterior thalamus and mammillary bodies (center); and midthalamus (right). B, Young athletes with CTE. Examples of macroscopic brain abnormalities in CTE. Cavum septum pellucidum (top left; arrowhead), thalamic notch (top center; arrowhead), degeneration of fornix (top right; arrowhead), enlargement of the frontal horns of the lateral ventricles and septal fenestrations (bottom left; asterisk), enlargement of the frontal horns of the lateral ventricles and cavum septum pellucidum (2 bottom center images; arrowheads), and thalamic notch (bottom right; asterisk). Credit: *JAMA Neurology* (2023). DOI: 10.1001/jamaneurol.2023.2907

A new study recently published in *JAMA Neurology* provides insights into the complex and intricate relationship of contact sports and the risk of dementia.

"There is abundant evidence of a link between [contact sports](#), such as football, and dementia later in life," says Domenico Pratico, M.D., Director of the Alzheimer's Center at Temple University (ACT).

"[It's] rather alarming that more than 40% of [young athletes](#) under 30 had developed clear features of chronic traumatic encephalopathy (CTE)," says Pratico, "and this was associated with clinical symptoms of depression, apathy and problems with decision making."

Football, [ice hockey](#), soccer and rugby were the highest represented sports corresponding to repetitive head injury.

"CTE starts early," cautions Pratico, "and for this reason, it is extremely important to implement science-based protocols to reduce the risk of young athletes developing CTE, and to not underestimate the clinical manifestation of CTE in an individual who has sustained a traumatic brain injury."

More information: Ann C. McKee et al, Neuropathologic and Clinical Findings in Young Contact Sport Athletes Exposed to Repetitive Head Impacts, *JAMA Neurology* (2023). [DOI: 10.1001/jamaneurol.2023.2907](https://doi.org/10.1001/jamaneurol.2023.2907)
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Provided by Alzheimer's Center at Temple University Lewis Katz
School of Medicine

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