



Key Points Summary

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Primary Question this Study Addresses

In former male American football players, is genetic variation in transmembrane protein 106B (TMEM106B) associated with chronic traumatic encephalopathy (CTE) risk, pathological features, and ante-mortem dementia?

Study Findings That Add to Our Knowledge

The minor allele frequency in participants with CTE did not differ from previously reported neurologically normal controls. However, the minor allele was associated with reduced phosphorylated tau pathology and neuroinflammation in the dorsolateral frontal cortex, increased synaptic protein density, and dementia status.

Among CTE cases, TMEM106B minor allele was also associated with reduced ante-mortem dementia, but was not associated with TDP-43 pathology.

How Study Evidence Might Be Used in Practice

Although TMEM106B was not associated with CTE case-control status, variation in TMEM106B may have a protective effect on CTE-related outcomes.

The TMEM106B genotype may partially explain why some individuals experience more severe CTE-related outcomes than others, despite similar exposure to contact sports.

For more information on CTE, visit....

 [Resource](#)

To access the study abstract, click here:

 [Abstract](#)

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