

Educational background and previous brain injury may be associated with higher risk of frontotemporal dementia

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Two recent studies from the University of Eastern Finland show that educational background and previous traumatic brain injury may

potentially affect the risk of frontotemporal dementia.

Frontotemporal dementia (FTD) is one of the most common causes of dementia in working-age people. FTD spectrum disorders have, depending on the subtype, major effects on behavior, linguistic functions and cognitive processing. Many [genetic mutations](#) have been implicated as contributing to these disorders, but their non-genetic and thus potentially preventable risk factors remain unknown and scarcely studied.

According to a recent study conducted at the University of Eastern Finland, [patients](#) with frontotemporal dementia were, on average, less educated than patients with Alzheimer's disease. In addition, FTD patients who did not carry a genetic mutation causing the disease were less educated and had a higher prevalence of cardiac disease compared to FTD patients carrying a mutation. The researchers utilized extensive data from over 1,000 patients, including patients from Finland and Italy, with all the most common subtypes of FTD represented.

In addition to patients with FTD and patients with Alzheimer's disease, the study included a [control group](#) that did not have a diagnosis of any neurodegenerative disease. The results were reported in *Annals of Clinical and Translational Neurology*. Based on the study, it seems that patients with different subtypes of the FTD spectrum, and patients with genetic and non-genetic disease, are different in terms of several risk factors.

A second study shows that previous traumatic brain injury may increase the risk of FTD, especially in patients who did not carry a causal genetic mutation. In addition, patients who had suffered a head injury appeared, on average, to develop FTD earlier than others. The researchers compared Finnish FTD patients with patients with Alzheimer's disease, and with healthy controls. The findings were reported in *Journal of*

Alzheimer's Disease.

"These results offer a better understanding of the disease mechanisms and, possibly in the future, an opportunity to prevent [frontotemporal dementia](#)," says Doctoral Researcher and lead author of both articles Helmi Soppela of the University of Eastern Finland.

More information: Helmi Soppela et al, Traumatic Brain Injury Associates with an Earlier Onset in Sporadic Frontotemporal Dementia, *Journal of Alzheimer's Disease* (2022). [DOI: 10.3233/JAD-220545](https://doi.org/10.3233/JAD-220545)

Helmi Soppela et al, Modifiable potential risk factors in familial and sporadic frontotemporal dementia, *Annals of Clinical and Translational Neurology* (2022). [DOI: 10.1002/acn3.51619](https://doi.org/10.1002/acn3.51619)

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