

Prevalence of psychiatric disorders in genetic FTLD kindreds

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State of the Art: In behavioral variant frontotemporal dementia (bvFTD), kindreds (first and second-degree relatives) of probands with *C9orf72* repeat expansions are reported to have higher rates of psychiatric illness than sporadic bvFTD. It is not known how specific these findings are to *C9orf72*. We assessed the prevalence of psychiatric illness in families across genetic forms of FTLD, including *C9orf72*, *MAPT*, and *GRN*.

Methods: Pedigrees of probands (n=31) enrolled in the ALLFTD consortium at Columbia University with FTLD-spectrum disorders and confirmed pathogenic mutations in *C9orf72* (n=18), *MAPT* (n=10), and *GRN* (n=3) were analyzed. The psychiatric history for the kindreds (n=630) of each proband was recorded. Logistic regression was used to compare the rates of psychiatric illness in *C9orf72*, *MAPT*, and *GRN* kindreds.

Results: Relatives of *MAPT* probands had higher rates of psychiatric illness than *C9orf72* (16% vs. 8%, $p = 0.02$). There was no significant difference between *GRN* and *C9orf72* kindreds ($p = 0.26$). The percentage of probands with at least 1 family member with a psychiatric illness was greater in the combined *MAPT* + *GRN* families (85%) than in *C9orf72* (61%), though this difference was not significant ($p = 0.17$).

Conclusion: Analysis of pilot data suggests that psychiatric illness in genetic FTLD kindreds may not be confined to *C9orf72* and may be more common in *MAPT* kindreds. Future research will aim to determine differences in the types of psychiatric illness present in forms of genetic FTLD and compare these results to those of sporadic FTLD families.

Conflicts of interest

None reported.