
FAMILIAL LIABILITY, THE BDNF-VAL66MET POLYMORPHISM AND PSYCHOTIC-LIKE EXPERIENCES

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Background/Objectives:

Familial liability to both severe and common mental disorder predicts psychotic disorder, psychotic symptoms and psychotic-like experiences (PLe). However, the relation between familial liability and psychosis outcome may be associated with genetic variation. We investigated the influence of familial liability on PLe in a nonpsychotic, general population based group, and the potential moderating effect of the BDNFVal 66Met polymorphism.

Methods:

PLe and familial liability were assessed in 313 individuals (mean age 38.6±13.3; gender: 43% males). Familial liability was obtained using the questions from Family Interview for Genetic Studies and dichotomized to none or at least one mental disorder in the first degree relatives (parents and siblings). PLe (visual and auditory hallucinations) were assessed through relevant questions in CID1 2.1 G section on psychotic disorders. The sample undergone clinical reinterviews with the Structured Clinical Interview for DSMIV. BDNF val66met (rs6265) was genotyped using standardized procedures.

Results:

Familial liability was associated with PLe (OR= 1.8; CI: 1.1-3.0; p: 0.012). The association between familial liability and PLe was significant in individuals with Val/Val allele (OR= 2.2; CI: 1.2-4.1; p: 0.009) whereas there was no evidence for an association between familial liability and PLe in Met carrier individuals.

Conclusion:

Individuals with a familial liability for mental disorders are more likely to report PLe. Val/Val genotype reported more PLe when exposed to familial liability than did individuals carrying Met allele. Therefore, the observed gene-environment interaction effect may be partially responsible for individual variation in response to familial liability.