

BDNF VAL66MET POLYMORPHISM AND ANXIETY/DEPRESSION SYMPTOMS IN SCHIZOPHRENIA IN CHINESE HAN POPULATION

L. Liu

Shandong Mental Health Center, Jinan, China

Background: Although several lines of evidences suggest that the BDNF Val66Met polymorphism may be involved in the pathophysiology of schizophrenia, this association remains controversial. Here, we aim to investigate the genetic association between the BDNF Val66Met polymorphism and schizophrenia and to explore whether this polymorphism could influence the severity of clinical symptoms in schizophrenia patients in a Chinese Han population.

Methods: Genotyping of BDNF Val66Met polymorphism was carried out in 456 schizophrenia patients and 483 controls by the fluorescence resonance energy transfer method (FRET). The patients' psychotic symptoms were assessed using the Positive and Negative Syndrome Scale (PANSS). The general clinical data of schizophrenia patients were analyzed.

Results: There were significant differences in the genotype distribution and allelic frequencies of the BDNF Val66Met polymorphism between the schizophrenia group and normal control. Multiple linear regression analysis revealed that the BDNF Val66Met polymorphism explained approximately 16% for the variance of anxiety/depression symptoms in schizophrenia patients.

Conclusion: Our data provides evidence that the BDNF Val66Met polymorphism may be involved in the etiology of schizophrenia in Chinese Han population. Furthermore, the BDNF Val66Met polymorphism is a significant influencing factor on the severity of anxiety/depression symptoms in schizophrenia patients.