O-65 - EFFECT OF BRAIN-DERIVED NEUROTROPHIC FACTOR (BDNF) VAL66MET POLYMORPHISM ON EARLY ONSET SCHIZOPHRENIA IN CHINESE HAN POPULATION

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Schizophrenia is a chronic psychiatry disorder with high heritability. Schizophrenic patients with early age at onset trend to have more genetic component and thus may be an attractive subpopulation for genetic studies. Brain-derived neurotrophimc factor (BDNF) is considered as candidate gene for schizophrenia. A single nucleotide polymorphism (BDNF Val66Met) was reported to be associated with schizophrenia, although discrepancy remains. The aim of this study was to evaluate the association between BDNF Val66Met polymorphism and schizophrenia using an early onset sample in Chinese Han population. Our sample consisted of 353 schizophrenic patients with onset before age 18 and 394 healthy age and sex matched controls. All subjects were ethnically homogenous Han Chinese origin. No significant differences of genotype or allele distribution were identified between the patients and controls. However, the Met allele was significantly associated with an earlier age at onset in male schizophrenic patients (Kaplan-Meier log-rank test P=0.005), but not in females (P=0.289). The BDNF Val66Met polymorphism has an important effect on the age at onset of schizophrenia in a gender-specific manner, and this may provided a significant genetic clue for the etiology of schizophrenia. Therefore, further studies are required to uncover the exact role of BDNF in the development of schizophrenia.