O-66 - ASSOCIATION BETWEEN TYROSINE HYDROXYLASE GENE POLYMORPHISM AND SUSCEPTIBILITY TO EARLY-ONSET SCHIZOPHRENIA IN THE CHINESE POPULATION

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Objective: We investigated the relationship between tyrosine hydroxylase (TH) polymorphisms rs11042978, rs2070762 and rs6356 and early-onset schizophrenia in the Chinese Han population.

Subjects and methods: The tag single nucleotide polymorphisms (tag SNPs) rs11042978, rs2070762 and rs6356 in the TH gene were genotyped in 315 early-onset schizophrenics (188 male patients,127 female patients)and 391 controls subjects (219 males,172 females). Single nucleotide polymorphism association and haplotype analysis were performed.

Results: There were significant differences in allele and genotype frequencies between patients and normal control subjects for rs11042978 allele ($\chi2 = 4.47$, df = 1, P = 0.034) and genotype ($\chi2 = 6.35$, df = 2, P = 0.042). No statistically significant differences were found in allele or genotype between patients and normal control subjects for rs2070762 and rs6356. The haplotype analysis revealed that there were significant differences between patients and normal control subjects for haplotypes GAC ($\chi2 = 6.35$, P = 0.012).

Conclusions: Our study indicates that the TH gene may play major roles in the susceptibility to early-onset schizophrenia in the Chinese population.