Linkage of schizophrenia with \( TPH2 \) and \( 5\text{-}HTR2A \) gene polymorphisms in the Malay population

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ABSTRACT. The serotoninergic system has been implicated in the etiology of schizophrenia and other behavioral disorders. Association studies have focused on the tryptophan hydroxylase 2 gene \( (TPH2) \) and the 5-hydroxytryptamine receptor 2A gene \( (5\text{-}HTR2A) \). We genotyped two single-nucleotide polymorphisms, A1438G of \( 5\text{-}HTR2A \) and intronic rs1386494 of \( TPH2 \) in the Malay population, using a sample size of 289 schizophrenic patients and 130 healthy controls. We found a significant association of A1438G of \( 5\text{-}HTR2A \) with schizophrenia in Malays. On the other hand, \( TPH2 \) polymorphism was not associated with schizophrenia. This is the first genetic association study concerning schizophrenia in the Malay population.

Key words: Schizophrenia; Serotonin; \( 5\text{-}HTR2A \); \( TPH2 \); Single-nucleotide polymorphism