Disrupted-in-Schizophrenia-1 (DISC1) gene as genetic markers of schizophrenia susceptibility

Talib, N.A.¹, Kuciaiah, N.², Musa, R.³, Abdullah, K.⁴, Sulaiman, W.A.W.⁵, Razak, T.A.⁶

¹Kulliyyah of Medicine, Malaysia
²Kulliyyah of Pharmacy, International Islamic University Malaysia, Malaysia

Abstract

Introduction: There are substantial evidences that suggest DISC1 function in neurodevelopment thus support the locus as candidate gene of schizophrenia and potential target for the treatment of schizophrenia. Objectives: The aim of the study is to assess the association of DISC1 gene as genetic susceptibility marker of schizophrenia. Methods: This is an unmatched case control study with the total of 225 unrelated schizophrenia patients and 350 control healthy individuals. Seventeenth SNPs within DISC1 gene were selected based on HapMap data constructed using the Haploview. The SNPs were genotyped using PCR-RFLP assay. Results & Discussion: We found significant differences in genotype and allele frequencies between patients and controls for two SNPs, rs6558971 (p=0.039, OR=1.425[1.035-1.990]) and rs2538979 (p=0.036, OR=1.351[1.02-1.79]). Conclusion: The study provided significant evidence of DISC1 gene as a marker of schizophrenia susceptibility. © 2014 Asian Pacific Tropical Medicine Press.

Indexed keywords

- disrupted in schizophrenia 1 protein
- schizophrenia
- genetic markers
- genetic susceptibility
- genetic variation
- haplotype
- human
- major clinical study
- molecular biology
- priority journal
- schizophrenia
- single nucleotide polymorphism

ISSN: 22221808
Original language: English
Source Type: Journal
Document Type: Article
DOI: 10.1016/S2222-1808(14)60337-5