

C511T polymorphism of interleukin1 β gene is not associated in type 2 diabetes mellitus a study in Malaysian population.

Abstract

The objective of this study is to determine the association between the C-511T polymorphism of Interleukin -1 β gene in T2DM with or without hypertension in Malaysian population. A total of 175 subjects were recruited for this study. Genotyping of C-511T variant was performed by Hot-start PCR-RFLP analysis. The frequency for CC, TC and TT genotypes of C-511T variant in IL-1 β gene was 25.45, 40 and 34.55% in T2DM 25, 51.67 and 23.33% in T2DM with hypertension and 21.66, 36.67 and 41.67% respectively found in controls ($p>0.05$). This study suggests that there was no significant difference in the genotypic distribution of C-511T polymorphism of IL-1 β gene between T2DM and controls. Therefore, C-511T variant in IL-1 β gene polymorphism is not considered an independent risk factor or not a predictor for T2DM in Malaysian population.

Keyword: Cytokines; Interleukin -1 β gene; PCR-RFLP; Polymorphism; Type 2 diabetes mellitus