

Association of Monocyte Chemoattractant Protein (MCP) 1 gene 2518 A/G Polymorphism with Type2 Diabetic Nephropathy in South Indian Population

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A promoter polymorphism (-2518 A/G) of Monocyte Chemoattractant Protein (MCP)-1 gene located on chromosome 17 have been studied in different ethnic population in various disease conditions including type 2 diabetes and its complication. The main aim of the present study was to examine the association of G allele frequency of A/G polymorphism of MCP1 gene in South Indian subjects with or without type2 diabetic nephropathy (DN). This study includes 75 diabetic subjects, 75 diabetic subjects with nephropathy and 85 healthy volunteers as control subjects. Genotyping of A/G polymorphism was performed by PCR-RFLP method. The significant difference

was found in age, body mass index, total cholesterol, high density lipoprotein cholesterol, triglyceride, urea and creatinine level, between the case and control subjects. GG genotypic frequency of A/G polymorphism was significantly higher in T2DM diabetic nephropathy subjects (26.67 % *vs.* 8.24%; $P=0.001$) than in T2DM s (13.33 % *vs.* 8.24 %; $P=0.198$) and control subjects. G allele frequency was higher in diabetic nephropathy group (49.33 %) than in control subjects (21.18 %). The result obtained in this study shows an increase in the frequency of G-A substitution in MCP-1 gene at position (-2580) among south Indian type 2 diabetic nephropathy subjects.