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Title: ScreeningCodon 233, 234 and 276 Polymorphisms in Exon 3 ofInsulin Receptor Gene in Type 2 Diabetes Mellitus Patients of Kashmir Valley .

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Abstract
The prevalence of type 2 diabetes mellitus has reached epidemic proportions worldwide. Several single-nucleotide polymorphisms (SNPs) investigated in the genes of insulin signaling pathway have been associated with type 2 diabetes. We investigated three single nucleotide polymorphisms at codon 233, 234 and 276 in exon 3 of insulin receptor gene in type 2 diabetic patients of Kashmir valley. 468 subjects comprising of 198 type 2 diabetic cases and 270 non diabetic controls were included in the study. PCR-RFLP technique was used for genotyping.Amplified products were digested withMspI, RsaI and FokI restriction enzymes. Results were validated by direct sequencing of amplicons. All the subjects were monomorphic as no genotypic or allelic variation was observed in either cases or controls. Our study elucidates that substitutions at codon 233, 234 and 276 in exon 3 of insulin receptor gene do not occur in our population and thereby has no role in conferring any risk or genetic predisposition towards development of type 2 diabetes.

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