ID 43: Study of β2-adrenergic receptor polymorphisms among hypertensive
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Polymorphisms within Beta2-adrenergic receptor (β2AR) gene have been repeatedly linked to hypertension. Among the β2AR polymorphisms detected, Arg16Gly and Gin27Glu codons were considered the two most important variations. Arg16Gly especially, has been found to be significantly associated with hypertension in Caucasian and black subjects. The amino acid substitution at this codon may lead to abnormal regulation of β2AR activity. The aim of the present study was to assess the association between β2AR polymorphisms and hypertension in our population. METHODS: This case-control study consisted of 100 unrelated subjects (50 hypertensive and 50 matched normal controls). Arg16Gly and the Gin27Glu polymorphisms were analysed by polymerase chain reaction-restriction fragment length polymorphism assay. RESULTS: There were no significant evidence of association in allelic and genotypes distribution of Arg16Gly and Gin27Glu with elevated blood pressure and hypertension. CONCLUSION: These findings suggest that the variation within codon 16 and 17 of β2AR gene were unlikely to confer genetic susceptibility for hypertension in our population samples.