

The Association between Alw I RFLP of Paraoxonase/Arylesterase Gene and Plasma HDL-Cholesterol Level

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Essential hypertension is considered to be a multifactorial disease that is influenced not only by environmental factors but also by genetic factors. Genes involved in lipoprotein synthesis, modification and metabolism are candidates for essential hypertension. The purpose of this study was to estimate gene frequencies of paraoxonase/arylesterase (PON1) gene in Korean population and investigate the relationship between genotypes of this gene and essential hypertension or cardiovascular risk factors. In order to estimate the genotype frequencies, Alw I RFLP of PON1 gene was used as genetic marker. There were no significant differences in allele and genotype frequencies between normotensives and essential hypertensives. However, Alw I RFLP of PON1 gene were significantly associated with plasma HDL-cholesterol level in Korean population (one-way ANOVA test, $P=0.008$). Therefore, our result suggest that this RFLP of PON1 gene may be protective marker on cardiovascular diseases in Korean population.

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