

The Genetic Polymorphisms of the Human Antithrombin III Gene in Korean Hypertensives

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In view of the effect of antithrombin III as a risk factor for essential hypertension, we investigated the 5' untranslated exon 1 length (I/D) polymorphism and intron 5'-Dde I RFLP of the human antithrombin III gene in the Korean patients with essential hypertension and normal controls. There were no significant differences in the allele, genotype and haplotype frequencies of these polymorphisms between normotensive and essential hypertensive subjects. The significant linkage disequilibrium was however, detected between two polymorphic sites. The I/D polymorphism was also significantly associated with BMI, TC and HDL-cholesterol levels, while Dde I RFLP with age and BMI. Therefore, our results suggest that the significant association between the genetic polymorphisms at the human antithrombin III gene and variable cardiovascular risk factor may reflect the potential role of human antithrombin III gene in cardiovascular function.

Keywords : Antithrombin III, Essential hypertension, Genotype