Genetic Variation of Apolipoprotein AI-CIII Gene Cluster in Korean Essential Hypertensives

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The apolipoprotein AI and CIII (apo AI and CIII) play an important role in the metabolism of plasma lipoproteins and lipids. The apo AI-CIII gene cluster is located in chromosome 11q23, and more than 20 different RFLPs have been described in this gene cluster. To search gene cluster for a useful genetic marker on the essential hypertension in Korean population, the ditribution of two restriction fragment length polymorphism (Msp I and Sst I RFLPs) of the apo AI-CIII gene cluster and their association on essential hypertension was investigated in total 163 Korean individuals. The distribution of the genotypes of all RFLPs was optimal in Hardy-Weinberg equlibrium in this population. The Msp I RFLP of the apo AI gene was significantly associated with essential hypertension in Korean population (P<0.05). Therefore, this result suggest that this polymorphism of the apo AI gene may be useful as a genetic marker on the essential hypertension in Korean population.

BIOENGINEERING AND TECHNOLOGY