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Genetic Variation of Human Plasminogen Activator Inhibitor-2 Gene in Koreans.

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The fibrinolytic system may be regulated by changes in plasminogen and plasminogen activators. Plasminogen activator inhibitor-2 (PAI-2) is a member of the serine protease inhibitor gene family, and it is particularly similar to chicken ovalumin. Elevated levels of PAI may be associated with increased risk of coronary artery. Here we investigated the genotype distribution of PAI-2 gene in unrelated Koreans. The allele frequencies of EcoRI RFLP by Southern analysis are as followed: P1 (1.2 kb), P2 (2.3 kb), 0.812, 0.188, respectively. P1 allele is more frequent than that of Dutch population. Although we cannot exactly explain the effect of variations of PAI-2 polymorphism on PAI-2 level, The variation of PAI-2 gene may be involved as a factor for pathogenesis of cardiovascular or fibrinolytic systems.

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DNA Polymorphism of Apolipoprotein D Gene in Koreans

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Apolipoprotein D (Apo D) is found mostly in the HDL density range. Although the precise role of apo D in lipid metabolism is not known, apo D has a stabilizing effect on lecithin-cholesterol acyltransferase (LCAT) and thereby may be involved in cholesterol esterfication and transport to the liver for catabolism. We investigated the TaqI RFLP of apo D gene in unrelated Koreans. The allele frequency identified are as follow; D1 (2.2 Kb), D2 (2.7 Kb), 0.22, 0.78, respectively. D2 allele of Koreans is less frequent than that of Americans. In a view the effects of plasma apo D concentration on LCAT activity, polymorphism of apo D gene which affects apo D level may be involved in the LCAT deficiency.