F825  Pst I-RFLP of HLA-G in Koreans

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HLA-G is a non-classical class I MHC gene, on chromosome 6p 21.3, most notable for its restricted tissue distribution. The unique expression of this gene in extravillous cytotrophoblast at the maternal-fetal interface suggest that HLA-G play a key role in feto-maternal immunological interaction during pregnancy. HLA-G polymorphisms are in exon 2 (T31S, R35R), exon 3 (H93H, L110I) and exon 8 (Nucleotide 3775 G->A transition). The HLA-G polymorphisms were reported to be related to miscarriage. We determined the exon 8 variation of HLA-G by PstI-RFLP in 198 unrelated Korean. In HLA-G, Genotype frequency of HLAG*AI/HLAG*AI, HLAG*AI/HLAG*A2 and HLAG*A2/HLAG*A2 were 13.8 %, 47.1% and 39.1%. The allele frequency of HLAG*AI(PstI negative), and HLAG*A2(PstI positive) were 0.37 and 0.63. No deviation from the expectation according to the Hardy-Weinberg equilibrium was found. The HLAG*A2/HLAG*A2, a common genotype, in Koreans (0.63), is similar to Japanese (0.69).

F826  Polymorphism of Cytochrome P4502E1 in Alcoholics.

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Alcohol dehydrogenase, aldehyde dehydrogenase and cytochrome P4502E1(CYP2E1) involved in alcohol metabolism. Ethanol-inducible cytochrome P4502E1 catalyzes the oxidation of ethanol, producing acetaldehyde and free radicals. CYP2E1 is located in the 3-4 layers of hepatocytes most proximal to the central vein. CYP2E1 enzyme activity in the liver can vary ~50-fold. This suggests that genetic factors may play important roles in the development of alcoholic liver disease. Polymorphism of CYP2E1 in the 5'-flanking region has the change from G (CYP2E1Gc1) to C (CYP2E1Gc2) at position -1259. CYP2E1Gc2 allele might affect the increasing of CYP2E1 mRNA in alcoholics. We examined the 5'-flanking region of CYP2E1 by PCR-RFLP in Koreans. In alcoholics, the genotype frequency of CYP2E1Gc1/CYP2E1Gc1, CYP2E1Gc1/CYP2E1Gc2 and CYP2E1Gc2/CYP2E1Gc2 was 76%, 24% and 0%, respectively, whereas in normal individuals that was 63%, 33% and 4%. The allele frequency of CYP2E1Gc2 allele (0.12) in alcoholics was lower than that (0.21) in healthy controls but was not significantly. In this data, individuals with CYP2E1Gc2 allele are less susceptible to alcohols than those with CYP2E1Gc1 allele.