F825 *Pst* I-*RFLP of HLA-G* in Koreans

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HLA-G is a non-classical calss 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 *Pst*I-RFLP in 189 unrelated Korean. In *HLA-G*, Genotype frequency of *HLAG*A1/HLAG*A1*, *HLAG*A1/HLAG*A2* and *HLAG*A2/HLAG*A2* were 13.8 %, 47.1% and 39.1%. The allele frequency of *HLAG*A1*(*Pst*I negative), and *HLAG*A2*(*Pst*I 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 (*CYP2E1*c1*) to C (*CYP2E1*c2*) at position -1259. *CYP2E1*c2* 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 *CYP2E1*c1/CYP2E1*c1*, *CYP2E1*c1/CYP2E1*c2* and *CYP2E1*c2 /CYP2E1*c2* was 76%, 24% and 0%, respectively, whereas in normal individuals that was 63%, 33% and 4%. The allele frequency of *CYP2E1*c2* allele (0.12) in alcoholics was lower than that (0.21) in healthy controles but was not significantly. In this data, individuals with *CYP2E1*c2* allele are less susceptible to alcohols than those with *CYP2E1*c1* allele.