ASSOCIATION OF THE RS7257062T/C OF ASP GENE POLYMORPHISM AND CORONARY HEART DISEASE

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Objective To investigate the association of the rs7257062T/C polymorphism of ASP gene with coronary heart disease (CHD) and the influence of serum lipid levels in Chinese Han population patients of Xinjiang.

Methods The polymorphism of gene in 425 patients with CHD and 439 controls was analysed by polymerase chain reaction restriction fragment length polymorphism; the serum lipid levels were detected as well.

Results The frequencies of TT, TC and CC genotype were 70.1%, 25.60% and 4.2% in the CHD group, while they were 48.3%, 42.8% and 8.9% in the control group. There was a significant difference in the distribution of genotypes between the two groups (p<0.01). Logistic regression analyses adjusted for age, gender, smoking, serum total cholesterol, presence of hypertension and diabetes revealed that individuals carrying CC genotype had an increased risk of CHD compared with TT genotype (OR=0.351, 95% CI: 0.172~0.716). There was also a significant difference in serum triglyceride level in genotypes between these two groups (P). Patients in CHD group who carried CC and TC genotypes had lower serum triglyceride level than the TT genotype carriers.

Conclusion The rs7257062T/C polymorphism of ASP gene has an influence on the serum triglyceride level in Han population of Xinjiang. This polymorphism might be associated with development of CHD, and the CC genotype might be a protective factor in the development of CHD.