coronary arteries were assessed by Gensini scoring system. The fasting serum concentrations of CatS and CysC were measured before angiography respectively. The SPSS11.0 system was applied to analyse the data. Compared with controls, serum levels of cathepsin S in CAD groups increased significantly and demonstrated positive correlation (r=0.69, p<0.0001) with Gensini score. After being corrected for other common factors (age, sex, blood pressure and blood lipid, etc) by multivariate stepwise regression analysis, this relationship also existed.  

**Conclusions** Serum levels of cathepsin S are associated with severity of atherosclerotic lesions of coronary arteries. The higher serum levels of cathepsin S are, the severer atherosclerotic lesions of coronary arteries are.

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**A CORRELATIONAL STUDY OF ACE GENE POLYMORPHISMS WITH RISK FACTOR WITH CORONARY HEART DISEASE IN HAINAN LI AND HAN NATIONALITY**

doi:10.1136/hrt.2010.208967.397

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**Objective** To probe into the relation of the ACE gene polymorphisms and the risk factor with coronary heart disease (CHD) in the Hainan Li and Han nationality.  

**Methods** Used the PCR to detect the polymorphisms of ACE gene insertion/deletion (I/D) in 150 patients with CHD and 150 healthy people from Hainan Li and Han nationality. The genotype frequencies and allele frequencies of DD, DI and II were 14.0%, 44.0%, 42.0% respectively, and the allele frequencies of D and I were 41.0% and 59.0%. In the healthy control of Hainan Li nationality, the genotype frequencies of DD, DI and II were 14.0%, 44.0%, 42.0% respectively, and the allele frequencies of D and I were 36.0% and 64.0%. There were significant differences both in the genotype frequencies of DD, DI and II, and in allele frequencies D and I between these two groups (p<0.05). There were no significant differences in the age, the blood pressure, the body mass index (BMI), the total serum cholesterol (TC) and the low density lipoprotein cholesterol (LDL-C) between these two groups (p>0.05). There was significant differences in the sex between these two groups (p<0.05). The triglyceride (TG) level in the CHD group was significantly higher than in the control (p<0.05). The high density lipoprotein cholesterol (HDL-C) level in the CHD group was significantly lower than the control (p<0.05).  

**Conclusions** There were notable correlation between the ACE gene I/D polymorphisms and the CHD in Hainan Li nationality. The ACE gene polymorphisms are the major gene that causes CHD in Hainan Li nationality. It may be the independent risk factor in CHD in Hainan Li nationality. So it is very important to intervene with ACEI inhibitors or angiotensin receptor blockers (ARB) in the early stage of CHD.