

changes that may cause CHD in Hainan Li and Han nationality. The higher TG level and the lower HDL-C level may be risk factors in Hainan Li and Han nationality.

[gw22-e0983]

### A STUDY THE RELATION OF ACE GENE POLYMORPHISMS AND RISK FACTOR WITH CORONARY HEART DISEASE IN HAINAN LI AND HAN NATIONALITY

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10.1136/heartjnl-2011-300867.570

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

**Methods** Used the polymerase chain reaction (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 observed. Specific PCR detection was performed for patients who have been determined as DD by normal PCR to reduce misclassification rate.

**Results** In the CHD group of Hainan Li nationality, the genotype frequencies of DD, DI and II were 24.7%, 32.7%, 42.6% 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 ( $p < 0.05$ ). In the CHD group of Hainan Han nationality, the genotype frequencies of DD, DI and II were 23.3%, 45.4%, 31.3% respectively, and the allele frequencies of D and I were 46.0%, 54.0%. In the healthy control of Hainan Han nationality, the genotype frequencies of DD, DI and II were 13.3%, 42.0%, 44.7% respectively, and the allele frequencies of D and I were 34.3%, 65.7%. 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 ( $p < 0.05$ ). The multiple logistic regression analysis showed that the triglyceride (TG) level in the CHD group was significantly higher than in the control ( $p < 0.05$ ) and the high density lipoprotein cholesterol (HDL-C) level in the CHD group was significantly lower than the control in both nationality ( $p < 0.05$ ).

**Conclusions** There were notable correlation between the ACE gene I/D polymorphisms and the CHD in Hainan Li and Han nationality. The ACE gene polymorphisms are the major gene