Correlation between AGT gene polymorphism of Han population and occurrence of coronary heart disease in Hainan province

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To explore the association between AGT gene polymorphism of Han population and occurrence of coronary heart disease (CHD) in Hainan province. Methods: Allele-specific PCR was used to detect the polymorphic of T174M and M235T in 334 patients with CHD and 193 healthy control group, the genotype frequency and alleles were compared between the two groups. Results: There are significant differences in the allele frequency distribution of M235T polymorphism between CHD patients and controls ($\chi^2 = 4.314, P = 0.038$); significant difference in the genotype frequency of T174M polymorphism was also observed between two groups ($P = 0.047$, Fisher's exact test). Conclusions: The polymorphism of M235T and T174M in AGT gene was significantly correlated with CHD in Han ethnic in Hainan province. Presence of 235M allele of M235T polymorphism was correlated with higher risk of CHD among Han population in Hainan province. 174TT and 174MM genotype of polymorphism of T174M in Han population of Hainan province can increase the risk of CHD prevalence.

[KEY WORDS] Angiotensinogengene (AGT) gene; DNA Polymorphism; Coronary Heart Disease (CHD); Han population