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# ASSOCIATION OF PREGNANCY-ASSOCIATED PLASMA PROTEIN-A (PAPP-A) GENE IVS6+95 POLYMORPHISM WITH ACUTE MYOCARDIAL INFARCTION

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**Objective** To investigate the association of pregnancy-associated plasma protein-A (PAPP-A) gene IVS6+95 polymorphism with acute myocardial infarction (AMI) in the Chinese Han population of Sunan region.

**Methods** Two hundred and fifty three patients with AMI and 162 control subjects who were free from coronary artery stenosis confirmed by coronary angiography were recruited into the study. The PAPP-A gene IVS6+95 polymorphism was measured by polymerase chain reaction and restriction fragment length polymorphism (PCR-RFLP).

**Results** Compared with those in the control group, there was no statistical difference of the frequencies distribution of the GG (48.76% vs 43.25%), CG (46.80% vs 49.60%) and CC (4.32% vs 7.15%) genotype, and C allele (27.78% vs 30.73%) in AMI group (all  $p$  value>0.05). Subgroup analysis showed that the frequencies of CC genotype in female AMI were significantly higher than those in the control group (16.13% vs 2.41%,  $p=0.007$ ). Furthermore, after adjustment for conventional risk factors by multiple logistic regression analysis showed that there was significant correlation between PAPP-A gene IVS6+95 CC genotype with the risk of AMI ( $p=0.002$ ) and the female AMI ( $p=0.000$ ).

**Conclusion:** The PAPP-A gene IVS6+95 CC genotype is closely associated with risk of AMI and may be an independent risk factor of AMI, especially in female AMI in the Chinese Han population of Sunan region.