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**RELATIONSHIP OF PARAOXONASE 1 GENE
POLYMORPHISMS AND CORONARY HEART DISEASE**

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Objectives The relationship of paraoxonase 1 gene polymorphisms and coronary heart disease has not been confirmed. This study aimed to detect PON-1 genotype (L55M and Q192R) in patients with coronary heart disease and compare with healthy control.

Methods Consecutive patients underwent coronary angiography in our catheter laboratory in 2011 were recruited in CHD group or control group in accordance with the results of coronary angiography. L55M and Q192R genotype were detected in both groups by matrix-assisted laser desorption/ionisation time-of-flight mass spectrum (MALDI-TOF-MS).

Results A total of 364 cases were recruited in CHD group, 90 cases enrolled in control group. In CHD group, 338 L55L, 26 L55M, 164 Q192R, 46 Q192Q, 154 R192R were detected. In control group, cases of L55L, L55M, Q192R, Q192Q, R192R were 87, 3, 49, 13, and 28 respectively. There is no statistical difference between CHD group and control group by χ^2 test. R192R was higher in trend in CHD group (χ^2 measure 3.766, $p=0.052$).

Conclusions Relationship between paraoxonase 1 gene polymorphisms and coronary heart disease has not been confirmed in this study, but a higher trend of R192R was found. Further

investigation with larger volume focusing on the biological significances of PON-1 genotype should be encouraged.