TO EXPLORE THE RELATIVE RISK FACTORS OF THE PHENOMENON OF SLOW CORONARY FLOW

doi:10.1136/heartjnl-2012-302920l.15

Zheng Xuewei, Han Zhanqing, Qiu Chunguang, Han Zhanqing. The First Affiliated Hospital of Zhengzhou University

Objectives To explore the relative risk factors and the possible pathogenesis of the phenomenon of slow coronary flow. Studies in the past show that the phenomenon of slow coronary flow is related to microcirculation functional disturbance, endothelium dysfunction, inflammatory disease about coronary artery and so on. But the specific pathogens is still not clear.

Methods Select 50 persons who were verified as slow coronary flow by coronary angiography, with 50 healthy persons serving as controls, who there is no obvious stenosis according to the result of the coronary angiography. Extract the slow coronary flow patients’ blood from the coronary sinus during the process of coronary angiography for group A, their blood from their elbow vein for group B, and 50 healthy persons’ blood from their coronary sinus for group C. Triglyceride, cholesterol, low density lipoprotein, high density lipoprotein, CRP and serum uric acid were measured by biochemical laboratory of the clinical inspection centre of our hospital. IL-6 and endothelin were
calculated according to the enzyme linked immunosorbent assay. 

Results  The result was that there is no significant difference of the three group such as the triglyceride, cholesterol, low density lipoprotein and high density lipoprotein. The research also show that the value of CRP (5.60±0.97), IL-6 (74.32±9.83) and endothelin (148.84±46.58) of the group A were of significant difference of the group B and the group C, which the value of CRP (4.07±0.85), IL-6 (50.8±10.77) and endothelin (96.47±32.50) of the group B and the value of CRP (2.52±0.74), IL-6 (34.28±7.62) and endothelin (48.32±15.65) of the group C. It can also be seen that serum uric acid also of significant difference between the group A (332.65±64.87) and the group C (287.91±69.73), but of no significant difference between the group B (296.94±66.48) and the group C (287.91±69.73).

Conclusions  This investigation suggested that the CRP, IL-6, endothelin and serum uric acid may be influencing factors of the phenomenon of slow coronary flow. Besides, it demonstrate that there maybe of great difference between the blood from the coronary and from the external vein of a same person. Many investigation previously which compared the difference of some biochemistry indexs in the external vein to certify which were probably risk factors may not be strict.