[gw22-e0278] **VALUES OF BIOMARKERS IN THE DIAGNOSIS OF CORONARY HEART DISEASE**

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Objective To clarify the value of plasma levels of high sensitivity C reactive protein (hs-CRP), soluble CD40 ligand (sCD40L), monocyte chemoattractant protein-1 (MCP-1), interleukin 8 (IL-8), interleukin 6 (IL-6), P-selectin, tissue-type plasminogen activator (tPA) in detecting the existence of coronary lesions.

Materials and methods Total of 170 subjects were enrolled in this study, including 129 cases of confirmed coronary heart disease by coronary angiography from February 2009 to January 2010 at Qilu Hospital of Shandong University, and 41 cases without coronary heart disease as the control group. There were 39 cases of SAP, 43 cases of UAP and 47 cases of AMI. sCD40L, MCP-1, IL-8, IL-6, P-selectin and tPA were measured by flow cytometric method in EDTA anticoagulated blood. Hs-CRP was measured by nephelometry in plasma content. The performance was strictly in accordance with the instructions.

Results Plasma levels of the tested biomarkers in each group Concentrations of plasma hs-CRP in SAP patients had no significant changes compared with the control (p=0.085). They were significantly higher in UAP group and AMI group than in the control and SAP (p<0.00001, p<0.00001). Plasma levels of sCD40L and MCP-1 in SAP, UAP and AMI group all were significantly higher than those in control group (p=0.006, p<0.00001, p<0.00001), and they were higher in AMI group than in SAP group (p<0.05). Plasma levels of MCP-1, IL-8, IL-6, P-selectin, tPA in each CHD group was higher than those in control group (all p<0.05). The differences in the three CHD groups were not significant (p=NS). Areas under ROC curve of the six factors were obtained by taking the plasma values of each biomarker in the stable and unstable angina as the test variables, and coronary heart disease as the state variables. The result showed that the areas under ROC curve for sCD40L was 0.743 (p<0.00001), for MCP-1 was 0.674 (p=0.008), for IL-8 was 0.641 (p=0.014), for IL-6 was 0.779 (p<0.00001), for tPA was 0.759 (p<0.00001) and for P-selectin was 0.675 (p=0.003). Univariate binary Logistic regression analysis of each variable for CHD showed that each had predictive value, however, multivariate logistic regression analysis showed only IL-6 had the role of predicting CHD, OR=1.857 (p=0.007).

Conclusion The plasma levels of sCD40L, MCP-1, IL-8, IL-6, tPA and P-selectin in CHD can reflect the existence of coronary atherosclerosis. Of the biomarkers, IL-6 had the greatest value for diagnosing CHD and had great clinical significance.