Relation between vascular endothelial damage, platelet activation and acute coronary syndrome

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

[ABSTRACT] Objective: To investigate the relation between vascular endothelial damage, platelet activation and acute coronary syndrome. Methods: A total of 40 patients with acute coronary syndrome served as study group, 35 patients of stable angina pectoris as control group 1, and healthy volunteers in outpatient department as control group 2. CD62p, CD63, GP II b / III a receptor complex were determined by flow cytometry, FIB-C was determined by scattering turbidimetry, vWF and ET-1 were measured by ELASA, NO was determined by enzymic method, and endothelium-dependent vasodilation was measured by color Doppler. Results: vWF and ET-1 in study group were significantly higher than those of control group 1, control group 2 (P<0.05); NO and FMD were significantly lower compared with those of control group 1, control group 2 (P<0.05). CD62p, CD63, GP II b / III a receptor complex and the FIB-C in study group were significantly higher than those of control group 1 and control group 2 (P<0.05). Conclusions: Indexes of vascular endothelial damage and platelet activation change significantly in acute coronary syndrome patients, indicating that vascular endothelial damage and platelet activation have a relationship with acute coronary syndrome.

[KEY WORDS] Acute coronary syndrome; Vascular endothelial injury; Platelet activation; Correlation