

심혈관계 위험인자로서의 혈소판 유래 미세입자

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The Relationship of Platelet Derived Microparticles and Cardiovascular Risk Factors

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Purpose: Platelet derived microparticles (PMP) play a role in the processes of inflammation, coagulation and vascular function, all processes involved in the pathogenesis of cardiovascular diseases. We examined whether or not PMP in circulating in the peripheral blood of coronary heart disease (CHD) patients and non-CHD patients performed to coronary angiography are elevated.

Method: we included 60 patients with angina symptom and sign performed to coronary angiography. CHD patients were subsequently documented as having significant coronary atherosclerosis by angiography. The fasting blood sampling for measures of PMP, homocysteine, CRP, biochemical parameters was collected before angiography.

Results: sixteen DM and 30 hypertension of total patients were included. The mean age of sixty patients (male 23, female 37) is 58.8 ± 11.1 years and the means of PMP, homocysteine, LDL-cholesterol were $1517.2 \pm 911.1/L$, 9.7 ± 3.5 mol/L, 123.3 ± 30.9 mg/dL. There was a significant elevation of PMP at CHD than non-CHD ($N=60$) ($p < 0.05$). There was a significant elevation of PMP at CHD ($1850.5 \pm 899.2/L$) than non-CHD ($954.7 \pm 703.9/L$) in DM group ($N=16$) ($p < 0.05$) and at CHD ($1772.3 \pm 1021.1/L$) than non-CHD ($1294.1 \pm 749.6/L$) in hypertension group ($N=30$) ($p < 0.05$). Homocysteine, CRP and biochemical parameters were not significant difference between CHD and non-CHD.

Conclusion: We suggest that the elevation of PMP may be a risk factor of cardiovascular disease, sensitive than homocysteine, CRP and other traditional risk factors.

Key Words: 혈소판, 미세입자, 심혈관계 질환

Platelet, Microparticles, Cardiovascular disease