

혈액투석환자에서 small dense 저밀도지단백과 관상동맥질환과의 관련성

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임고은 · 장지은 · 여영선 · 김순배

Association between Small Dense Low Density Lipoprotein Levels and Coronary Artery Disease in Chronic Hemodialysis Patients

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Background/Aims: Small, dense low density lipoprotein (sd-LDL) is a newly recognized risk factor for coronary artery disease (CAD) in the general population. This study was performed to evaluate the relationship between sd-LDL, and CAD and cardiovascular risk factors such as other lipid profiles and hemostatic factors, in patients with chronic hemodialysis (CHD).

Methods: Thallium SPECT was performed to evaluate for CAD in 126 CHD patients. Coronary angiography was performed in patients with positive thallium SPECT. CHD patients were classified into CAD and non-CAD group. LDL subfractions, other lipid profiles, and hemostatic factors were measured.

Results: The proportion of sd-LDL, and mean LDL size did not differ between CHD patients and healthy controls. Twenty-eight CHD patients had CAD by thallium SPECT and coronary angiography. The proportion of sd-LDL and mean LDL size did not differ between CAD and non-CAD patients. Age, diabetes mellitus presentation and hs-CRP levels were significantly higher, and prealbumin and apolipoprotein A1 levels were significantly lower, in the CAD group ($p < 0.05$). The proportion of sd-LDL was positively correlated with TG ($p < 0.001$), apolipoprotein B ($p < 0.05$) and fibrinogen ($p < 0.05$).

Conclusion: This study showed that sd-LDL is not increased in CHD patients and is not associated with CAD in such patients.

Key Words: 혈액투석, small dense 저밀도지단백, 관상동맥질환

Small Dense LDL, Coronary Artery Disease, Hemodialysis