[gw22-e0880] **INTERVENTION STUDY OF ATORVASTATIN ON EXPRESSION OF PECAM-1 AND P-SELECTIN**

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Objective To establish the model of rabbit with hypercholesterolaemia-atherosclerosis and observe the changes of blood lipid density, and the positive expression of platelet/endothelial cell adhesion molecule-1 (PECAM-1) and P-selectin (P-selectin, CD62P) in the rabbit aorta tissues. Then we investigated the influence of atorvastain to them.

Methods Thirty healthy male white New-Zealand rabbits, were randomly divided into three groups: normal control group (group A), high-cholesterol diet group (group B) and high-cholesterol diet plus atorvastatin treatment group (group C). Density of the total cholesterol (TC), low-density lipoprotein cholesterol (LDL-C) were evaluated. All segments of ascending aorta tissues were to determine the expression of PECAM-1 and P-selectin by RT-PCR, and the results were to do semi-quantitative analysis by UVP gel imaging system package Vision Works LS software.

Results To the end of the trial, two rabbits died in Group A, four rabbits died in Group B, three rabbits died in Group C, And atherosclerosis model successfully established. The levels of TC, LDL-C were greater ($p<0.05$) in Group B than those in Group A and Group C, and the levels of TC, LDL-C were also greater ($p<0.05$) in Group C than those in Group A. The positive expression of PECAM-1 and P-selectin were significantly higher in Group B than in Group A, the expression of them was lower in Group C than in Group B, but still higher than in Group A.

Conclusions Atorvastatin can effectively regulate lipid metabolism. PECAM-1 and P-selectin might be the two important atherogenic adhesion molecules. The adhesion molecules could promote the migration of inflammatory cells, further exacerbated the inflammatory response and participated the pathogenesis of atherosclerosis. Atorvastatin can reduce the expression of this two adhesion molecules, PECAM-1 and P-selectin.