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THE EXPRESSION OF THE PROTEASOME EACH SUBUNIT IN HUMAN ATHEROSCLEROTIC PLAQUE

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Wang Chun-ling, Wang Ming-xiao, Wang jia, Wang Chun-ling. *Heart Center, Mei-tan General Hospital, Beijing 100028, China*

Objectives To evaluate the expression of the proteasome each subunit in human atherosclerotic plaque.

Methods In carotid endarterectomy specimens from 16 carotid stenosis patients as the case group, that divided into the plaque and the areas adjacent to the plaque. And carotid endarteriums were obtained from four patients undergoing Aortic replacement surgery, selected relatively normal arterial intima (Subclavian artery and Innominate artery) as the control group. Content of

proteasome each subunit was evaluated by HE staining and Western Blot analysis.

Results

1. In case group patients have higher incidence in diabetes, Hyperlipidaemia and possibility of smoking;
2. α_1 -7Subunits in the normal arterial endarteriums group, the edge portion of the atherosclerotic plaque, the core part of the atherosclerotic plaque showed no significant difference; β_6 -7Subunit expression in these three groups no significant difference; β_2 Subunits no expression; $\beta_1, 3, 4, 5$ Subunit express highest in the normal control group, the weakest in the core part; β_{1i}, β_{5i} Subunits express highest in the atherosclerotic plaque core part, the weakest in the normal control group.

Conclusions Immune proteasome is upregulated in atherosclerotic plaques in the core organisation, so we speculate β_1, β_5 subunits in the process of atherosclerotic plaque formation play an impotent role.