GW23-e1889

ELASTICITY OF BLOOD VESSEL DECREASED INDUCED BY AGING IS THE MAIN FACTOR OF VASCULAR SENESENCE

doi:10.1136/heartjnl-2012-302920d.32

Huimeng Qi, Xiaojuan Bai, Hongyu Zhou, Bing Wu, Xiaojuan Bai. *Departments of Gerontology and Geriatrics, The First Affiliated Hospital of China Medical University*

Objectives To explore the ankle brachial index (ABI) and brachial-ankle pulse wave velocity (baPWV) in the same group of healthy people in longitudinal section. To investigate the elasticity of blood vessel decreasing rate with aging.

Methods Based on the healthy people cohort in 2008 in Shenyang, the healthy people were divided into <45-years old, 45–54 years old, 55–64 years old, 65–74 years old and >74 years old groups according 2008 age. We conduct 310 self-control analysis after 3 years later. They finished biochemistry, carotid ultrasonograph, limb blood pressure detected by arteriosclerosis detector (systolic blood pressure, diastolic blood pressure, pulse pressure), baPWV, ABI and so on.

Results There are significant differences between serum total cholesterol, lower-density lipoprotein, systolic blood pressure, diastolic blood pressure, pulse pressure, ABI, baPWV, ABI changed value and baPWV changed value in different groups in 310 healthy people ($p<0.05$). There are positive correlation between serum lower-density lipoprotein, serum uric acid, systolic blood pressure, diastolic blood pressure, pulse pressure, ABI, baPWV, baPWV changed value and age ($p<0.05$). There is negative correlation between ABI changed value and age. There are significant differences of high-density lipoprotein, lower-density lipoprotein, serum uric acid, fasting plasma glucose, systolic blood pressure, diastolic blood pressure, pulse pressure, ABI, baPWV in the twice examination ($p<0.01$) after self-control analysis.

Conclusions There are association between age and ABI and baPWV. Elasticity of blood vessel decreased induced by aging is the main factor of vascular senescence.