1.62; 95% CI 1.01 to 2.58) and BCA (OR, 2.39; 95% CI 1.79 to 3.18), with newly detected increased IMT of BCA (OR, 1.60; 95% CI 1.11 to 2.30), and with newly detected plaque of BCA (OR, 2.14; 95% CI 1.57 to 2.93).

Conclusions There were distinct associations between snoring and carotid atherosclerosis, which provides evidence for a relation between snoring and subclinical atherosclerosis.

e0267 PREDICTION OF THE NEWLY-IDENTIFIED CAROTID PLAQUE WITH BLOOD LIPID LEVELS IN CHINESE ELDERLY POPULATION

doi:10.1136/hrt.2010.208967.267

Wang Wei, Huo Yong, Zhao Dong, Liu Jing, Sun Jiayi, Wang Miao, Wu Yangfeng. *Department of Epidemiology, Capital Medical University Affiliated Anzhen Hospital, Institute of Beijing Heart, Lung and Blood Vessel Diseases, Beijing China*

Objective To provide the changing prevalence of carotid plaque in a Chinese elderly population from 2002 to 2007 and accordingly evaluate the predictive effect of baseline lipid levels of interest on the newly-identified carotid plaque.

Methods All study subjects were recruited from two cohorts, viz. the People's Republic of China/United States of America Collaborative Study (USA-PRC Study) and the Chinese Multi-provincial Cohort Study (CMCS). The baseline examination was taken in 2002 including CVD risk factors and B-mode ultrasound of carotid artery and the second examination was carried out in 2007. The carotid plaque was measured in a total of 2000 subjects aged 47–79 years (mean 63 year).

Results 1. During these 5 years, the prevalence of carotid plaque increased from 30.3% to 62.2% and from 21.5% to 51.5% for men and women, respectively. The newly-identified carotid plaque incidence reached 41.8% for men and 34.1% for women. 2. With the increase of baseline total cholesterol (TC), low-density lipoprotein cholesterol (LDL-C), triglyceride (TG, except for men), non-high-density lipoprotein cholesterol (non-HDL-C), and total to high-density cholesterol ratio (TC/HDL-C) levels, the artery plaque incidence significantly increased in both sexes ($p < 0.05$). 3. Cross-stratification analysis of LDL-C, TG and HDL-C for carotid plaque incidence indicated the existence of conjoint effects between LDL-C and HDL-C, LDL and TG, as well as between TG and HDL-C, on the elevated carotid plaque. For example, at the normal levels of LDL-C and HDL-C, the plaque incidence was 23.3%, whereas the abnormal levels of these two lipids yielded an exceedingly high incidence of 49.0%. 4. In multifactorial analysis, higher LDL-C, non-HDL-C and TC/HDL-C was recognised as an independent factors of carotid plaque incidence (RR=1.44, 95% CI 1.07 to 1.94; RR=1.45, 95% CI 1.08 to 1.96; RR=1.59, 95% CI 1.14 to 2.23 in men; RR=1.47, 95% CI 1.13 to 1.92; RR=1.35, 95% CI 1.04 to 1.75; RR=1.64, 95% CI 1.20 to 2.23 in women).

Conclusions The prevalence of carotid plaque increased rapidly in a Chinese elderly population. Elevated LDL-C, non-HDL-C and TC/HDL-C levels serve as predictor of carotid plaque incidence.

e0268 SUBENDOCARDIAL VIABILITY RATIOS IN RESIDENTS OF A COMMUNITY IN JINAN CITY, SHANDONG PROVINCE

doi:10.1136/hrt.2010.208967.268

Liu Zhendong, Lu Fanghong, Zhao Yingxin, Wang Shujian, Yang Jianmin. *Cardio-cerebrovascular Control and Research Center, Institute of Basic Medicine, Shandong Academy of Medical Sciences*

Objective The subendocardial viability ratio (SEVR) measures myocardial perfusion related to cardiac workload. The chief aim of this work was to investigate the relationship between SEVR and cardiovascular risk factors.

Methods This study examined 1025 subjects, who underwent a health check-up with thorough medical examination between February and May 2008. Subjects were divided into six groups by age, and three groups by blood pressure. Plasma total cholesterol (TCH), high-density and low-density lipoprotein cholesterol (HDL-C, LDL-C), triglycerides (TG), fasting plasma glucose, and serum creatinine levels were measured enzymatically. Central aortic waveforms and pressures were calculated using a SphygmoCor pulse wave analysis (PWA) system.

Results The Buckberg SEVR gradually decreased as age increased, while the slopes of the aortic augmentation and aortic augmentation indices increased. The SEVR was $150.11 \pm 24.70\%$ in a pre-hypertension group and $139.87 \pm 24.98\%$ in a hypertension group, which was lower than the normal blood pressure group. Smoking, alcohol ingestion and deficiency in physical activity decreased SEVR. The SEVR was significantly associated with age, brachial systolic and diastolic blood pressure, brachial pulse pressure, aortic systolic blood pressure and pulse pressure, heart rate, aortic augmentation, aortic augmentation index at heart rate 75, total cholesterol, smoking and alcohol consumption.

Conclusion We found that SEVR decreased as age increased. SEVR was decreased in pre-hypertension compared to hypertension groups. Smoking, alcohol ingestion and deficiency in physical activity may be factors that affect SEVR.

e0269 IMPACT FACTORS ON BRACHIAL ANKLE PULSE WAVE VELOCITY IN XINJIANG HAN AND UYGUR HOSPITALISED PATIENTS

doi:10.1136/hrt.2010.208967.269

¹Hasimu Buaijaer, ²Ma Yitong, ²Maimaitiming Gulizhaer, ²Tang Baopeng, ¹Yuan Binbin. ¹Department of Cardiology, Nanjing Benq Hospital, The Affiliated Hospital, Nanjing Medical Hospital; ²Heart Center, The First Hospital, Xinjiang Medical University, Urumqi

Objectives To compare impact factors on Ankle Brachial Pulse Wave Velocity (baPWV) in Xinjiang Uygur and Han hospitalised patients and evaluate the clinical significance of baPWV.

Methods Using Colin-Noninvasive Atherosclerosis detector BP-203RPE II (VP-1000), baPWV was measured in 5000 Xinjiang Han and Uygur hospitalised patients from the first hospital of Xinjiang Medical University, including 2738 Han and 2262 Uygur. Patients were divided into baPWV ≥ 1400 cm/s (1573 Han, 1327 Uygur) and baPWV < 1400 cm/s groups (1165 Han, 935 Uygur). Multivariable logistic regression analyses were performed to identify factors associated with baPWV.

Results In both Han and Uygur, Patients with baPWV ≥ 1400 cm/s were older than those baPWV < 1400 cm/s, and more frequently had diabetes, stroke and hypertension. No significant differences in gender between two groups. Multiple regression analysis showed that baPWV was significantly associated with pulse pressure, age and hypertension. HDL-C might be protective factor for two ethnicities, Ca^{++} antagonist might be risk factor of baPWV for Uygur patients.

Conclusions In Xinjiang Uygur and Han hospitalised patients, higher baPWV was associated with generalised atherosclerosis. baPWV should be a routine measurement in hospitalised patients. Influenced factors were different in two nationalities, For Uygur patients, influencing of antihypertensives on baPWV should be under consideration.

e0270 THE TREND OF CARDIOVASCULAR DISEASE OF UYGUR POPULATION IN HOTAN XINJIANG CHINA. A SURVEY FROM 1996 TO 2005

doi:10.1136/hrt.2010.208967.270

¹Yakefu Kalibinuer, ²Hasimu Buaijaer, ¹He Bingxian, ²Yuan Binbin. ¹Heart Center, The First Hospital of Xinjiang Medical University; ²Department of Cardiology, Nanjing Benq Hospital, The Affiliated Hospital of Nanjing Medical University

Objective In order to understand better the trend of changes in cardiovascular disease of Uighur population in hotan prefecture. A ten year study from 1996 to 2005.