

e0251 EPIDEMIOLOGIC SURVEY OF OVERWEIGHT AND OBESITY AMONG RESIDENTS AGED ≥ 60 YEARS IN RONG-GUI COMMUNITY

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Objective To investigate prevalence of overweight and obesity among residents aged ≥ 60 years in rong-gui community.

Methods 1372 ones (570 males, 802 females, 68.03 ± 6.62 years) of total 1503 residents aged ≥ 60 years in the 2 villages which were randomly exemplified in rong-gui community were investigated. Investigative items included age, sex, body height, body weight, waist circumference (WC), hip circumference (HC), fasting plasma glucose (FG), total cholesterol (TC) and triglyceride (TG).

Results Of total 1372 residents, the combined prevalence of overweight and obesity was 39.4%. Prevalence of overweight, obesity were 29.4%, 10.0% respectively. Prevalence of male were 30.8%, 6.0%, and female, 28.5%, 12.8% respectively. Prevalence of residents aged 60–69 years were 31.2%, 11.3%, 70–79 years were 27.0%, 9.1% and ≥ 80 years were 25.2%, 2.0% respectively. The difference between male and female, among three age groups were not significant. 2) of total 1372 residents, prevalence of central adiposity were 34.6%, male was 15.9% and female was 52.4%, female significantly higher than male ($p < 0.01$). 3) The FG, TG, SBP, DBP of residents with overweight, obesity or central adiposity were higher than residents with normal weight or WC ($p < 0.01$). 4) By Pearson correlation analysis, we found that overweight, obesity and central adiposity were obviously correlated with FG, TG, SBP, DBP ($p < 0.01$), were not correlated with TC.

Conclusion (1) Of total 1372 residents, the combined prevalence of overweight and obesity was 39.4%. Prevalence of central adiposity were 34.6%, female was 52.4%, female significantly higher than male. (2) Overweight, obesity and central adiposity were obviously correlated with FG, TG, SBP, DBP.

e0252 PREVALENCE OF METABOLIC SYNDROME IN XINJIANG KAZAK POPULATIONS

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Objective To estimate the prevalence of metabolic syndrome (MS) in Xinjiang Kazak populations.

Methods A cross sectional study was conducted in 1610 kazak participants aged from 19 to 98 (mean \pm SD, 46.7 ± 12 ; 654 men and 956 women) year in Xinjiang Yili. The International Diabetes Federation consensus worldwide definition in 2005 was used in the study. According to IDF 2005 criteria, populations were divided into MS group and non-MS group.

Results The crude prevalence rate of MS by the IDF 2005 criteria was 40.1% (44.8% in men and 36.9% in women).

Conclusions MS is highly prevalent in Kazak populations in Xinjiang, particularly among men. To find out high-risk MS groups is an important measure for preventing early atherosclerosis.

e0253 EPIDEMIOLOGICAL CHARACTERISTICS AND REFERENCE RANGES OF BRACHIALANKLE PULSE WAVE VELOCITY IN CHINA

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Introduction The present study aimed to examine the epidemiological distribution and to develop the gender- and age-specific reference ranges of brachial-ankle pulse wave velocity (baPWV) in China.

Materials and Methods A total of 21, 094 subjects (15–92 years) were recruited in a cross-sectional study which was conducted from June 2007 to June 2008 in China. The population was divided into 3 clinical subgroups in our study: (1) Subgroup 1: subjects with atherosclerotic cardiovascular diseases; (2) Subgroup 2: subjects with atherosclerotic risk factors; (3) Subgroup 3: “healthy subjects” without any atherosclerotic cardiovascular diseases and atherosclerotic risk factors.

Results The average baPWV among subgroup 1 to 3 were $1,724.3 \pm 429.1$, $1,603.5 \pm 358.8$, and $1,389.9 \pm 288.4$ cm/s, respectively. BaPWV as a variable was not fit of normal distribution in both genders. There was no significant difference between male and female for baPWV in subgroup 1 ($p > 0.05$). While baPWV was higher in females than males in subgroup 2, it was lower in females than in males in subgroup 3 (all $p < 0.05$). BaPWV was dramatically increased with age in both genders (all p for trend < 0.05). The gender- and age-specified reference ranges for baPWV by percentiles in healthy subjects were presented in the study. The receiver operator characteristic curve demonstrated that a baPWV of 1,450 cm/s was useful to discriminate either cardiovascular diseases or atherosclerotic risk factors (sensitivity 62.1%, specificity 69.5%).

Conclusions We should combine the reference ranges and the cutoff value of baPWV to screen and prevent atherosclerotic cardiovascular diseases in clinical practices.

e0254 POLYMORPHISMS IN THE SAA12 GENE ARE ASSOCIATED WITH CAROTID INTIMA MEDIA THICKNESS IN CHINESE HAN HEALTHY SUBJECTS

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Aims Serum amyloid A protein (SAA) is not only an inflammatory factor, but also an apolipoprotein that can replace apolipoprotein A1 (apoA1) as the major apolipoprotein of HDL, which has been linked to atherosclerosis. However, the relationship between genetic polymorphisms and common carotid artery intima-media thickness (IMT) in healthy subjects remains unclear. We investigated the role of the SAA1 and SAA2 gene polymorphisms with IMT in a cohort of healthy subjects participating in the Cardiovascular Risk Survey (CRS) study.

Methods Anthropometric and B-mode ultrasound of the carotid IMT were measured in 1914 subjects (849 men; 1065 women) recruited from 7 cities in Xinjiang, the west China. Four SNPs (rs12218, rs2229338, rs1059559, and rs2468844) were genotyped by use of PCR—restriction fragment length polymorphism (PCR-RFLP) method.

Results There was significant difference between mutational genotype (CC+CT genotype) and wild genotype (TT genotype) of rs12218 in carotid IMT [(0.070 \pm 0.03) cm vs (0.084 \pm 0.03) cm; $p < 0.001$], and the difference remains significant after multi-adjusted (adjusted for the sex, age, blood pressure, BMI and HDL) [(0.068 \pm 0.002 cm vs 0.081 \pm 0.003 p = 0.008)]. This relationship was also observed in rs2468844 after multi-adjusted but did not found in rs2229338 and rs1059559 before and after multi-adjusted.

Conclusions Both rs12218 of the SAA1 gene and rs2468844 of SAA2 gene are associated with carotid IMT in healthy Chinese Han subjects.