METHODS The case-control studies involving hs-CRP in OSAS-related hypertension (case group) were searched from PubMed, Cochrane Library, China Academic Journals Full-text database, VIP Database, Chinese Biomedical Literature CD-ROM databases and full text database of China’s important meetings, and relevant periodicals were also searched manually. Two reviewers independently collected the data, and any disagreement, and confusion were resolved by using Revman 5.3.5. Standardized mean difference (SMD) and its corresponding 95% confidence interval (CI) were calculated to assess the association between hs-CRP and OSAS-related hypertension. We also assessed heterogeneity and evaluate variation. Different effect models were used according to the difference in heterogeneity. Sensitivity analysis was assessed by omitting one study at a time. Publication bias was examined by using funnel plot.

RESULTS Among the total 15 studies involving 2739 participants were included. The results of Meta-analyses showed that: a) The hs-CRP level in OSAS-related hypertension was significantly higher than control group (SMD=1.08, 95% CI (0.68, 1.49), P<0.01); c) The hs-CRP level in OSAS-related hypertension was higher compared with the with hypertension patients (SMD=0.93, 95%CI (0.34, 0.52), P<0.01); d) The hs-CRP level in OSAS-related hypertension was significantly higher than hypertension without OSAS patients (SMD=0.38, 95%CI (0.24, 0.52), P<0.01); e) The level of hs-CRP in ORAS-related hypertension was correlated with the different grades of OSAS; f) The meta-regression analysis showed modest but significant effect of AHI on serum level of CRP, and showed no significant influence of Age and BMI on CRP level.

CONCLUSIONS In summary, there appears to be some evidence indicating that the level of hs-CRP is higher in OSAS-related hypertension patients; these levels may be correlated to the level of severity of disease in these patients. Detecting hs-CRP can to some extent reflected OSAS. funnel plots suggested that there was heterogeneity and publication bias, the sample population may not represent the general population with OSAS-related hypertension, so the research results still need more high-quality studies to confirm.

GW26-e4605 The Cohort Study on Prediction of Incidence of all-caused Mortality by Metabolic Syndrome
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OBJECTIVES The aim was to evaluate the impact of metabolic syndrome (MS), MS individual component and 32 kinds of MS specific component combinations on all-caused mortality risk in a fixed cohort of MJ check-up population.

METHODS We observed the events of death in a fixed cohort, where the population was composed of 4542 individuals aged 35-74 who were examined at MJ Health check-up Center in 1997 as baseline examination, and were followed up to 2005. Median duration of follow-up was 3 years. The date was recorded if having death event. MS was defined according to the National Cholesterol Educational Program (the revised NCEP-ATPIII for Asian in 2004), the prevalence of MS was standardized according to the statistical yearbook of Taiwan. We constructed common COX regression model, simultaneously adjusting the classic risk factors (such as age, sex, smoking, drinking, exercise, family history, etc.), to examine the relationship between MS, MS individual component and 32 kinds of MS component patterns on the occurrence of death with the fixed cohort.

RESULTS 1) The standardized prevalence of MS was 29.76% (male: 30.39%, female: 29.53%). 2) There were 1749 persons died during the median 3-year follow-up, the death rate was 46 per 10,000 person years. The death rate were 75 and 31 per 10,000 person years for those with and without MS, respectively. 3) After adjustment for age, sex and classical risk factors, compared with subjects without MS, the hazard ratio of all-caused mortality was 1.26 (95% CI: 1.14~1.40). The all-caused mortality were more highly significant than other combinations (P<0.05) when the following three-component combinations and the four-component combinations exist: “elevated blood pressure + elevated glucose + elevated triglycerides”, “elevated blood pressure + elevated glucose + elevated triglycerides + low high density lipoprotein cholesterol”. After adjusting age, sex and classical risk factors, the HRs for those with 0 to 5 components were 1.22, 1.25, 1.33, 1.46, 1.92, respectively. There was a significant dose-response relationship between the number of MS components and the risk of all-caused death in the overall fixed cohort sample.

CONCLUSIONS In a large scale middle-aged Taiwan check-up population, MS may be associated with a much higher risk for all-caused mortality. These results may underline the fact that MS is a non-homogeneous syndrome and have a significant impact on detecting high-risk individuals suffering from metabolic disorders for preventing and controlling death.

GW26-e4787 Xinjiang Uighur adult population Blood glucose level and Ankle-to-Brachial Index: Results from the Cardiovascular Risk Survey
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OBJECTIVES To understand the blood glucose levels and ankle brachial index (ABI) and peripheral arterial disease (PAD) of the Uighur population in Xinjiang, explore Uighur population in Xinjiang impaired fasting glucose, diabetes and the related risk factors for ankle brachial index (ABI).

METHODS Four-stage selected random samples maternal age 35 and over were collected to analyze the prevalence and the relationship between the risk factors of peripheral artery disease and blood glucose level. The sampled adult population were collected 6 locality, including Urumqi Kelamayi, Fukang, the Turfan Basin locality, Hetian Chubuk, Hotan and Izik, the total population were collected 23 localities and 7 locality and 5 autonomous counties in Xinjiang. The proportion of male to female accounted for 50% each. Each individual were answered a questionnaire, received physical examination, ABI peripheral indicator survey and ankle brachial index(ABI) examination. A logistic regression analysis was also made to identify possible risk factors and their powers on the prevalence of PAD complicated in diabetes or impaired fasting glucose.

RESULTS A total number of 4260 adults were surveyed, the impaired fasting glucose total prevalence was 6.7%, the prevalence of male and female respectively were 6.9% and 6.5% respectively; The overall incidence of diabetes was 6.2%, the prevalence of male and female were 6.7% and 5.9% respectively; PAD prevalence was 6.8%, the prevalence of male and female were 4.9% and 8.6% respectively; The risk factors PAD with impaired fasting glucose or diabetes were age, smoking, body mass index, triglyceride and total cholesterol with significant difference( P<0.05).

CONCLUSIONS The results of this study shows that the higher prevalence of PAD with impaired fasting glucose or diabetes in Xinjiang Uighur adults. The prevalence of PAD increased substantially with aging. The risk factors of PAD complicated in impaired fasting glucose or diabetes included age, smoking, body mass index, triglyceride and total cholesterol in Xinjiang Uighur adults.

GW26-e3901 Prevalence and risk factors of hypertension among pre- and post-menopausal women: a cross-sectional study in a rural area of northeast China
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OBJECTIVES The aim of this study was to assess the prevalence and risk factors of hypertension in pre-menopausal women (Pre-MW) and post-menopausal women (Post-MW) and determine whether years since menopause (YSM) is associated with hypertension.

METHODS A cross-sectional study was conducted with 6242 women over 35 years of age (2616 Pre-MW and 3708 Post-MW). Questionnaires, measurements and blood biochemical indexes were collected.

RESULTS The overall prevalence of hypertension among women in rural northeast China was 48.8%, and it increased with age. Post-MW had a higher prevalence of hypertension than Pre-MW (62.4% vs. 29.7%, P<0.01). After controlling for confounding variables, overweight (OR=1.97, 95% CI: 1.72-2.25), obesity (OR=2.97, 95% CI: 2.30-3.84), diabetes mellitus (OR=2.13, 95% CI: 1.73-2.62), high triglycerides (OR=1.41, 95% CI: 1.20-1.65), and history of cardiovascular diseases in first-degree relatives (OR=1.60, 95% CI: 1.42-1.81) were associated with hypertension in all participants. However, abdominal obesity (OR=1.029, 95% CI: 1.05-1.18) was associated with higher odds among Post-MW only. Hypertension was associated with being post-menopausal (OR=1.22; 95% CI: 1.03-1.46), and the risk of hypertension reached a peak level in the <5-year group (OR=1.29; 95% CI, 1.07-1.57).

CONCLUSIONS Postmenopausal status was an independent risk factor for hypertension. The risk of hypertension was highest in Post-MW