Conclusions: ABSI could not predict the new onset of hypertension in Chinese adult population from Chengdu community during 15-years follow up, while BMI/ WC could.

GW25-e2117
Investigation of the prevalence of obstructive sleep apnea hypopnea syndrome and cardiovascular disease in the population of Navy veteran who is older than or equal to 60 years old
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Objectives: To investigate the prevalence of obstructive sleep apnea hypopnea syndrome (OSAS) and cardiovascular disease in the population of Navy veteran who is older than or equal to 60 years old.

Methods: There are 1961 Navy veteran who is older than or equal to 60 years old were inrolled. Everyone finished the standardized questionnaire. Polysomnography (PSG), ordinary and/or dynamic electrocardiogram, blood pressure and coronary angiography was performed for each one.

Results: In all 1961 people, 531 (27.1%) people have OSAS, 366 (18.7%) people with cardiovascular disease increased with the severity of OSAS. And prove that obese, high BMI (kg/m2) and neck circumference (CM) were risk factors for OSAS, and the risk of cardiovascular disease increased with the severity of OSAS.

Conclusions: The prevalence of OSAS and cardiovascular disease was significantly increased among Navy veteran who is older than or equal to 60 years old. The prevalence of cardiovascular disease in patients with OSAS was significantly higher than that of non-OSAS people. And prove that obese, high BMI (kg/m2) and neck circumference (CM) were risk factors for OSAS, and the risk of cardiovascular disease increased with the severity of OSAS.

GW25-e2130
Renal function decline has a different effect on predicting CVD risk in various populations- a Chinese longitudinal study
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Objectives: Chronic kidney disease (CKD) is generally considered an independent risk factor for cardiovascular disease (CVD) development, but rates in individuals with estimated glomerular filtration rate (eGFR)<60 ml/min/1.73 m² are uncertain. The purpose of this study was to examine the association between eGFR and Framingham global CVD risk score (FRS) in a Chinese population with no CVD.

Methods: A total of 333 participants were divided into three groups based on FRS. The Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation, and CKD-EPI equation for Asians (CKD-EPI-ASIA) were used to measure eGFR.

Results: A significant inverse association between eGFR and FRS was confirmed with Pearson correlation coefficients of -0.669 (-0.678 in CKD-EPI equation) and -0.658 (-0.665 in CKD-EPI-ASIA equation). This association gradually diminished with progression from the low- to high-risk groups (eGFR<60 ml/min/1.73 m²) and CKD-EPI-ASIA equation). In the low- or moderate-risk new-groups, this association became stronger with increased FRS (eGFR<60 ml/min/1.73 m²) in CKD-EPI-ASIA equation). In the low- or moderate-risk new-groups, this association became stronger with increased FRS (eGFR<60 ml/min/1.73 m²) in CKD-EPI-ASIA equation). In the low- or moderate-risk new-groups, this association became stronger with increased FRS (eGFR<60 ml/min/1.73 m²) in CKD-EPI-ASIA equation).

Conclusions: Renal function has a different effect on predicting CVD risk in various populations. With increasing FRS and decreasing eGFR, it is also independently associated with CVD, even in individuals with eGFR<60 ml/min/1.73 m².

GW25-e4539
Prevention of Cardiovascular Disease in HIV-Infected Patients
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Objectives: World Health Organization (WHO) estimates that cardiovascular disease (CVD) and human immunodeficiency virus (HIV) will top the causes for global mor-tality and disability in 2030. How to develop and implement effective primary pre-vention strategy in HIV-infected patients with high cardiovascular risk is of paramount importance. We conduct this retrospective study to assess cardiovascular risk and implement prophylactic strategy as well as aspirin use in patients with HIV infection. Methods: Federally-funded Ryan White program helps coordinate comprehensive medical care for uninsured HIV-infected patients. The medical records of 115 consecutive HIV-infected adults (>18 years old) from January to December 2012 were reviewed. Multiple variables of socio-demographic characteristics, laboratory findings and treatment were collected. Framingham risk score (FRS) was calculated to assess 10-year cardiovascular risk, and D/A/D score based on traditional cardiovascular risk factors as well as HIV-specific factors was calculated to assess 5-year cardiovascular risk.

Results: A total of 115 HIV-infected individuals (mean age: 44.5 years) were included in this cross-sectional study. In federally funded Ryan White program, the prevalence of cardiovascular risk factors were markedly higher than those in D/A/D study, notably hypertension (32.2% vs 7.2%), obesity (23.8% vs 4.8), and diabetes (9.6 vs 2.8). The proportion of HIV-infected patients with low, intermediate and high cardiovascular risk were 65.2%, 20.0% and 14.8% using FRS, while 44.3%, 47.0% and 8.7% using D/A/D prediction. Further analysis showed that FRS, D/A/D and stroke risk score correlated well. Even if we implement appropriate approach ensuring that no progression of the underlying risk factors, patients with high cardiovascular risk are estimated to be doubled in the next 10 years. After screening with the United States Prevention Services Task Force (USPSTF) recommended criteria, 57 patients (52.8%) should be on aspirin for primary prevention of CVD. However, only 9.3% of the patients used aspirin as primary prevention of CVD.

Conclusions: In this newly insured HIV/AIDS population, cardiovascular risk is consistently high estimated for various diseases in different time horizons which might reflect the high prevalence of risk factors. An effective intervention strategy to reduce CVD burden requires more active identification and more aggressive management of traditional and HIV-specific cardiovascular risks.

GW25-e5118
Outdoor air pollution and hospital emergency room visit for stroke in a Chinese southern city
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Objectives: We investigated the relationship between daily changes in atmospheric pollutants and hospital emergency room visit (ERV) for stroke.

Methods: Data of daily hospital ERV for stroke and atmospheric pollutants in Changsha city between 2008 and 2009 were collected. Using a time-stratified case-crossover design we built generalized linear Poisson models to analyze association between atmospheric pollutant and stroke incidence in cold season (December-April) and warm season (May-November).

Results: We found sulfur dioxide was significantly associated with TIA (P<0.05) in lags of 0, 1, 3 days in cold seasons. A 10µg/m3 increase of PM10 was significantly associated with ERV for cerebra hemorrhage (OR, 1.466; 95% CI, 1.139-1.887) in lag 1 day in cold season. Atmospheric pollutants were not associated with ERV for cerebral infarction (P>0.05).

Conclusion: This study demonstrates Changes of atmospheric sulfur dioxide levels in Changsha is significantly associated with stroke incidence in cold seasons.

Prevention of Cardiovascular Disease

GW25-e2337
Prevalence of risk factors and performance of evidence-based medicine among the 18-year-old patients with acute coronary syndromes (ACS) in Beijing from the Bridging the Gap on CHD Secondary Prevention in China (BRIG) project
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Objectives: To analyze the distribution of multiple risk factors for hospitalized pa-tients with acute coronary syndromes (ACS) and explore the status and determinants of evidence-based performance.

Methods: This was a multi-center cross-sectional study based on 34 hospitals from 22 provinces of China. From each hospital, more than 90 ACS patients were consecutively enrolled since April 15, 2012 according to a standard protocol. A total of 3257 patients with complete data were eligible for the final analysis in this study.

Results: (1) The mean age of male patients with ACS was lower than that of female patients (60.4 vs 66.2 years, P<0.01). Nearly 60% of ACS patients were under 65-years old. Early onset of ACS accounted for a quarter of male patients (<55 years of age) and two-thirds of female patients (<65 years old). (2) Of four ACS major risk factors including hypertension, hyperlipidemia, smoking and diabetes, more than 90% of ACS patients had one or more risk factors and of those about two-thirds of patients had two or more risk factors. The prevalence of hypertension was the highest (68.4%), followed by smoking rate in males (42.7%), or hyperlipidemia rate in females (44.5%). (3) The proportion of PCI treatment was higher in male patients than female patients (57.5% vs 42.0%, P<0.01). As for the application of evidence-based drugs, 95.3% of ACS patients took aspirin, which is the most commonly used drug. The second was statin (90.1%). The lowest was ACEI or ARB
GW25-e1116
Analysis of aspirin regimen of general practitioners for patients with Coronary Heart Disease or Ischemic Cerebrovascular Disease in Beijing
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Objectives: Aspirin can significantly decrease the risk of recurrence events for patients with cardiovascular disease (CVD), while PURE study indicated only few individuals with CVD took aspirin (15.5%) in communities of China. So a project initiated by Beijing Municipal Health Bureau to assess the key knowledge on aspirin use for GPs and the real state of antithrombotic therapy in communities in Beijing.

Methods: This cross-sectional study was conducted in 10 community health centers from 10 different districts in Beijing. A total of 207 GPs were recruited to collect the key knowledge about aspirin use. 459 patients aged 30 to 89 years who visited the GPs from the later August to the later September were identified as CHD and ICVD. A standardized regimen questionnaire and key knowledge questionnaire was finished by physicians.

Results: 312 patients (70%) were prescribed aspirin by GPs, it was high in patients with unstable angina (80.8%), and low in patients with TIA (60.4%). Patients with ISTH noted aspirin after hospitalization or PCI, both CHD and ICVD had the similar rate in 69.8%, 65.4%, 65.2% and 70.1%. 147 patients were not prescribed aspirin, among them, 60 patients (40.8%) had a rest of medicine, 43 patients (29.3%) were thought as no need to use aspirin by GPs, and 30(20.4%) patients were worried about its side-effects. Our reasons included gastrointestinal reaction, light bleeding, peptic ulcer and high level BP. The utilization rate of aspirin was 80.0% (372/459). It was 84.1% in patients with CHD, 86.2% in patients with Ischemic stroke, 77.9% in patients with both CHD and ICVD, and 60.4% in patients with TIA. It was lower in patients both with CHD and ICVD than patients with CHD only (11% vs 8.8%). Aspirin was prescribed for the patients who had a history of heart disease (59.6%) or cerebrovascular disease (58.3%). Patients with unstable angina (80.8%), and low in patients with TIA (60.4%). It was significantly greater in the study group than in the control group.

Conclusions: The rate of aspirin use was relative high in patients visiting the general practitioners normally. The dosage of aspirin was rational. GPs knowledge and adherence to the guideline played an important role on the utility rate of aspirin especially in patients with TIA and stable angina.

GW25-e1097
Investigation of coronary heart disease secondary prevention and standardized follow-up
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Objectives: To reveal the current status and effectiveness of follow-up on secondary prevention of coronary heart disease (CHD) at Peking University First Hospital.

Methods: The study population was from Peking University First Hospital, one of 19 hospitals in the elevated 5-year national key technologies R&D program for coronary heart disease (CHD) secondary prevention research. This study of CHD secondary prevention, conducted in China, aimed to standardize management of CHD secondary prevention and improve adherence to secondary prevention guidelines and regular follow-up. The study group comprised 496 patients diagnosed with CHD from January 1, 2007 to December 31, 2009 after a standardized follow-up protocol initiated. A group of 300 CHD patients diagnosed with CHD from January 1, 2004 to December 31, 2004 were evaluated as control group. Study group participants were followed-up every 3 months for at least 1 year in the outpatient department and interviewed by telephone from November 2012 to January 2013. Data on control of risk-factors, medical therapy, and clinical events were collected. Risk factors control and medications were compared between study group and control group.

Results: Of the 496 patients enrolled in study group, 360 were male (72.6%), and the age was 63.5±10.2 years (range, 24-85 years). The average duration of follow-up was 4.6 years (range, 3.5-6.0 years). At discharge, 75.4% of study group patients had ceased smoking, 51.4% exercised regularly, 42.4% were overweight, 56.7% had blood pressure <140/90 mmHg (<130/80 in those with diabetes mellitus), 51% had serum low-density-lipoprotein cholesterol <2.60 mmol/L and 64.2% had fasting plasma glucose <6.11 mmol/L. Antiplalet medication was used by 99.4% of study group patients, angiotensin-converting enzyme inhibitors/angiotensin-receptor blockers by 64.5% of patients by 93.8%. Major adverse cardiac events (MACES), the primary clinical outcome, occurred in 22.7% at the end of follow-up. The proportions of quitting smoking (82.2% vs 73.7%, P=0.014), control of serum lipids (84.4% vs 45.6%, P<0.000) and statin use (92.5% vs 54.3%, P<0.000) at the end of follow-up were significantly greater in the study group than in the control group.

Conclusions: Although a standardized follow-up program improved CHD secondary prevention, some CHD patients still did not achieve the goals of lifestyle change, risk factor control, and medication therapy.

GW25-e1471
Aquired Long QT Syndrome May Contribute to the All Cause Mortality in Hospitalized Patients-A Pilot Study
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Objectives: Though it is well-known that markedly prolonged QT interval (QTc≥500 ms) is an independent risk factor for sudden death and a predictor for all-cause cardiovascular mortality and all-cause QT syndrome (ALQTS) in the hospital setting has long been overlooked. This study is to determine the prevalence of QTc≥500 ms in hospitalized patients and their outcomes.

Methods: Electronic Medical Records of all hospitalized patients in one study center from January 1, 2007 to December 31, 2009 were monitored as endpoints, the major endpoints included all-caused death and cardiovascular mortality and stroke, acquired QT syndrome (ALQTS) in the hospital setting has long been overlooked. This study is to determine the prevalence of QTc≥500 ms in hospitalized patients and their outcomes.

Methods: Electronic Medical Records of all hospitalized patients in one study center from January 1, 2007 to December 31, 2009 were monitored as endpoints, the major endpoints included all-caused death and cardiovascular mortality and stroke, acquired QT syndrome (ALQTS) in the hospital setting has long been overlooked. This study is to determine the prevalence of QTc≥500 ms in hospitalized patients and their outcomes.

Results: QTc≥500 ms was found in 2.6% (106/4121) of hospitalized patients. Among them (age 66.6±14.4 years, female 58%), 71% were admitted to non-cardiovascular departments. The use of diuretics and QT prolonging drugs (≥1) were seen in 51% and 38%. Hypokalemia (serum K+<3.5 mmol/L) was present in 33% and hypocalcemia (serum Ca<2.1mmol/L) in 55%. In the ALQTS cohort, 7.5% were treated by s Unclephile/angiotensin-convertase inhibitors and the 3-month all-cause mortality was 13%. In latter, hypocalcemia was present 71% (10/14). ALQTS with markedly prolonged QT intervals is 52 times higher than that of congenital form (0.05%). In the hospital setting the majority of ALQTS cohort, 7.5% were treated by s Unclephile/angiotensin-convertase inhibitors and the 3-month all-cause mortality was 13%. In latter, hypocalcemia was present 71% (10/14).

Conclusions: ALQTS with markedly prolonged QT intervals is 52 times higher (26%) than that of congenital form (0.05%). In the hospital setting the majority of ALQTS cohort, 7.5% were treated by s Unclephile/angiotensin-convertase inhibitors and the 3-month all-cause mortality was 13%. In latter, hypocalcemia was present 71% (10/14).

GW25-e0444
Pentranxin-3 is associated with long-term adverse cardiovascular events in patients with chronic heart failure
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Objectives: Pentranxin-3 (PTX3) is a novel inflammatory marker and a member of pentranxin superfamily including C-reactive protein (CRP) and PTX3 is thought to be more specific to cardiovascular inflammation than CRP, but its long-term prognostic value in patients with chronic heart failure remains unclear. This study was designed to evaluate the long-term prognostic value of PTX3 in patients with chronic heart failure.

Methods: A total of 406 consecutive patients with chronic heart failure were prospectively enrolled in this study for clinical 2-year follow-up. Plasma levels of PTX3 were measured after hospitalization in all patients and adverse cardiovascular events were monitored as endpoints, the major endpoints included all-caused death and re-hospitalization for worsening heart failure, the secondary endpoints included acute myocardial infarction, stroke and peripheral arteriel embolism.

Results: 376 patients have been followed-up for 2-year, 171 patients experienced adverse cardiovascular events. The levels of PTX3 were significantly and positively associated with the severity of heart failure according to NYHA class (P<0.01). Plasma PTX3 levels in patients with adverse cardiovascular events were significantly higher than those without (3.911±0.83 ng/ml vs 3.088±0.98 ng/ml; P<0.001). And the cardiac event rate was higher in patients with increased PTX3 (≥median value 3.438 ng/ml) than patients below median value (63.5% vs 27.3%; P<0.01). A Kaplan-Meier analysis revealed that patients with increased PTX3 (≥3.438 ng/ml) had a higher risk for adverse cardiovascular events than those