

(53.6%). Multivariable analysis suggested that PCI treatment was the important influential factors of usage rates of evidence-based drugs in secondary prevention. The results showed that the nonuse rates of evidence-based drugs were 30% higher for ACEI or ARB and β receptor blockers, 60% higher for statins, and 5-7 times higher for antiplatelet agents in ACS patients without PCI treatment than those with PCI treatment.

Conclusions: In China, more than 90% of hospitalized patients with ACS had one or more major risk factors. There is still scope for improvement in the application of drugs recommended by guidelines, especially for ACS patients without PCI treatment.

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 status 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 Ischemic stroke, stable angina, after bypass surgery 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. Other reasons included gastrointestinal reaction, light bleeding, peptic ulcer and high level BP. The utility 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, so advanced analysis was conducted in total of 17 patients with CHD and ICVD no use aspirin; there were 6 (35.2%) patients because of worrying about side-effects or being thought as no need to take aspirin by GPs. We also analyzed the reasons why patients with TIA didn't take aspirin, 10 (47.6%) patients were thought as no need to take aspirin by GPs and 11 (52.4%) patients were worried about side-effects. Most of GPs knew patients with ACS, CHD and Ischemic stroke should use aspirin with the percentage of 94.2%, 89.4% and 97.1%, but only 65.7% of GPs knew patients with TIA should use aspirin also. Dosage regimen: The dosage of aspirin was 100 mg daily for all patients on the prescription. About half of doctors suggested their patients taking medicine after meal, 5.8% of doctors did not give any suggestion, and 2.9% of doctors did not know how to give suggestion. About half (52.7%) of doctors suggested their patients taking medicine on evening.

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 eleventh 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 program began. 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. Antiplatelet medication was used by 99.4% of study group patients, angiotensin-converting enzyme inhibitors/angiotensin-receptor blockers by 64.5%, beta-blockers by 79.1%, and statins by 94.3%. 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

Acquired 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 \geq 500 ms) is an independent risk factor for sudden death and a predictor for all-cause 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 \geq 500 ms in hospitalized patients and their outcomes.

Methods: Electronic Medical Records of all hospitalized patients in one study center were retrieved from January 1-21, 2014 with the inclusion criterion of QTc \geq 500 ms and QRS duration \leq 120 ms. Clinical evaluation included the diagnosis, presence of electrolyte imbalance, renal dysfunction, the use of QT prolonging drugs and outcomes.

Results: QTc \geq 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-cardiology departments. The use of diuretics and QT prolonging drugs (\geq 1) were seen in 51% and 38%. Hypocalcemia (serum K⁺<3.5 mmol/L) was present in 33% and hypocalcemia (serum Ca²⁺<2.1mmol/L) in 55%, respectively. In the ALQTS cohort, 7.5% developed syncope/life-threatening arrhythmias 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 (2.6%) than that of congenital form (0.05%). In the hospital setting the majority of ALQTS is seen in non-cardiology serves. The 3-month all-cause mortality is up to 13% in the ALQTS cohort. Hypocalcemia is the most common electrolyte imbalance in patients with the worst outcome. Further investigation is underway to determine whether a hospital-wide QTc \geq 500 ms alert system could prevent life-threatening arrhythmia and sudden death in in-hospital patients.

GW25-e0444

Pentraxin-3 is associated with long-term adverse cardiovascular events in patients with chronic heart failure.

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Objectives: Pentraxin-3 (PTX3) is a novel inflammatory marker and a member of pentraxin 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 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 determined in the second morning after hospitalized. 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 arterial 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±0.99 ng/ml; P<0.01), and the cardiac event rate was higher in patients with increased PTX3 (\geq 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 (\geq 3.438 ng/ml) had a higher risk for adverse cardiovascular events than those