positively (r=0.234, P<0.001). Though the regression analysis, for the coronary artery, the hypertension was the risk factor (OR 3.011, P=0.001).

CONCLUSIONS The severity of coronary artery lesion was more serious and the progression of CAD was faster in patients with metabolic syndrome. As the major risk factor in our study, hypertension would promote the progression of CAD.

GW27-e0975

Alteration of extra- and intra-cellular neutrophil myeloperoxidase levels in coronary artery ectasia

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OBJECTIVES Coronary artery ectasia (CAE) is defined as the abnormal dilation of coronary arteries. Neutrophil activation may contribute to the development of CAE. After activation, neutrophil granules are mobilized and secrete various products, including proteases, myeloperoxidase (MPO) and other proteins. Plasma levels of neutrophil serine proteases are elevated in CAE patients, which may destruct vascular walls and cause ectasia. Decreased intracellular MPO level as well as increased extracellular MPO level are recognized as markers of neutrophil activation. The aim of this study was to determine the activation status of circulating neutrophils in CAE patients.

METHODS Peripheral blood samples of 158 subjects were collected after angiography, 36 patients of which were with coronary artery ectasia (CAE), 81 patients were with coronary artery disease (CAD) and 41 subjects were with normal coronary arteries (CON). We measured the intra-neutrophil mean MPO index (MPXI) using the flow cytochemistry complete blood analyzer (ADVIA2120). The plasma MPO concentration was measured using enzyme-linked immunosorbent assay.

RESULTS MPXI was comparatively decreased in CAE patients (CAE: 1.82±3.21, CAD: 5.81±3.63, CON: 5.65±3.08; P<0.01). CAE group had significant higher plasma MPO level, compared to CAD and CON groups (CAE: 10.82±8.33ng/ml, CAD: 2.86±1.65ng/ml, CON: 2.51±1.19ng/ml; P<0.01). MPXI was inversely correlated with plasma MPO level (Pearson correlation coefficient: -0.364, P<0.01). CAD and CON groups showed no significant differences in MPXI and MPO level (P=0.626; P=0.137, respectively). Neither MPXI nor plasma MPO level correlated with Markis Class (the topological extent of ectasia) among the CAE patients.

CONCLUSIONS This study is the first to measure intracellular and extracellular levels of MPO to confirm the activation status of neutrophils in CAE patients. Peripheral neutrophils are activated and then various contents are released into plasma, which may exacerbate vascular wall degeneration. The underlying causative factors of neutrophil activation require further investigation.

GW27-e1086

"Real world" implementation of novel oral antiplatelets in ST-elevation acute myocardial infarction acute coronary syndrome undergoing to primary percutaneous coronary intervention: CHUS registry

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OBJECTIVES Prasugrel and Ticagrelor have an IA indication in Acute Myocardial Infarction in patients presenting with ST-segment elevation (STEMI) ESC clinical guidelines. First Prasugrel and then Ticagrelor became recently funded our National Health System.

Our aim was to describe how the implementation of these novel antiplatelets therapies was in a real world cohort of patients discharged alive after an STEMI who underwent to primary percutaneous coronary intervention.

METHODS We included 369 consecutive STEMI patients referred for primary percutaneous coronary intervention (PCI) in our center, since April 2014 (when ticagrelor became avaliable) until December 2015, discharged alive with the primary diagnosis of STEMI.

RESULTS 142 patients were discharged with Clopidogrel (38,5%), 150 with ticagrelor (40,7%) and 77 with prasugrel (20,9%). Patients

discharged with clopidogrel were older, with lower weight, and with lower estimated glomerular glomerular filtration rate (eGFR) compared to the other groups. Also GRACE and the CRUSADE risks scores were significantly higher in patients discharged with clopidogrel. It's remarkable, that patients who recieved new oral antiplatelets at discharge were more usually smokers and in patients treated with prasugrel diabetes mellitus (DM) was more prevalent.

We analyzed in each subgroup if the prescription of drugs was done acording to current guidelines, therefore we consider that ticagrelor or prasugrel were mandatory if no contraindication. Contraindications were: taking oral anticoagulation, CRUSADE >50, major bleeding during hospitalization, GFR < 15 mL/min/1.73 m2, Hb < 10 g/dL and taking oral anticoagulation at discharge; for prasugrel history of stroke, weigh < 60 Kg and age >= 75 were also considered contraindications.

Using this criteria up to 8,8% (20 of 227) of patients discharged with novel antiplatelets had at least one contraindication. 18,2% (14 of 77) of patients on prasugrel and a 4,0% (6 of150) of patients on ticagrelor had one or more contraindications.

In the total cohort 83,7% (309 of 369) of the population had no contraindication and could had been discharged with novel oral antiplatelets. 64,2% (95 of 142) of patients discharged with clopidogrel could had benefit of new antiplatelets.

CONCLUSIONS In our registry most of the patients discharged alive after a STEMI who undego primary PCI were treated with new oral antiplatelets. Clinical criteria for prescription should improve, 8,8% of patients with new oral antiplatelets had contraindications and in the other hand 64,2% of patients dicharged with clopidogrel could have received new antiplatelets.

GW27-e1103

An Updated Systematic Review and Meta-analysis of the Short- and Long-term Outcomes of Percutaneous Coronary Intervention for Patients with Severe Left Ventricular Systolic Dysfunction

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OBJECTIVES To ascertain the in-hospital and long-term (≥1 year) outcomes of CAD patients with LV systolic dysfunction (ejection fraction ≤40%) after PCI according to a meta-analysis.

METHODS A systematic literature search and a series of random-effect meta-analyses were conducted to evaluate the short- and long-term outcomes of PCI of the selected studies. Single-center studies and those that did not report evidence on long-term mortality were excluded in the analysis. All statistical tests were performed with 95% confidence intervals. A p-value of less than 0.05 was considered statistically significant.

RESULTS A total of 25 studies involving 5,471 patients (78% males, average age 65.1 years) were identified. The average follow-up duration was approximately 27 months. The majority of patients had multi-vessel disease (68%), hypertension (66%), hypercholesterolemia (59%), and prior myocardial infarction (MI) (58%). The meta-analysis showed that the in-hospital occurrence of major adverse cardiac events (MACE), deaths, MI, and repeat revascularization (RR) after PCI were controlled at 4%, 2%, 2%, and 1%, respectively. The pooled estimates for long-term outcome were 40% MACE, 20% deaths, 4% MI, and 21% RR. There was no significant difference in mortality risk when PCI was compared with CABG (p=0.71).

CONCLUSIONS PCI carries acceptable short- and long-term outcomes for CAD patients with LV systolic dysfunction.

GW27-e1240

The relation between apoA and the severity of coronary artery lesions in Chinese Type 2 diabetics with coronary heart disease: An assessment based on Gensini scores

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OBJECTIVES To investigate the relationship between apolipoprotein (apo) A and the extent of coronary artery lesions in Chinese type 2 diabetics with coronary heart disease.

METHODS Totally 184 type 2 diabetic patients diagnosed with coronary heart disease by coronary angiography were enrolled. The level of apoA was measured by ELISA. Gensini score was used to assess the severity of coronary artery lesions by coronary angiography results. Association between Gensini score, branches of coronary artery lesions, diffuse lesions, complete occlusive lesions and apoA were evaluated by Spearman's rank correlation analysis. All statistical tests were operated with the program SPSS 13.0 and P < 0.05 was considered as statistical significance.

RESULTS With the increase of apoA, Gensini score decreased significantly (r = -0.151, P = 0.043). There were no statistical significances between branches of coronary artery lesions (r = -0.1, P = 0.182), diffuse lesions (r = 0.045, P = 0.569), complete occlusive lesions (r = -0.102, P = 0.173) and apoA.

CONCLUSIONS Among Chinese type 2 diabetics with coronary heart disease, apoA is significantly correlated with the extent of coronary artery lesions.

GW27-e1253
Associations between Common Genetic Variants of the ABCA1 Gene and Coronary Heart Disease in the Chinese Han Population

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OBJECTIVES The promoter -565C/T variant variant and the R219K variant in exon 7 of the ATP binding cassette transporter A1 (ABCA1) were found to be associated with the risk of coronary heart disease (CHD) in western populations. Our study was designed to illustrate the association of these two SNPs with CHD in the Chinese Han people.

METHODS A cohort of 519 patients with documented CHD and 541 normal controls were genotyped by the highly sensitive ligase detection reaction.

RESULTS The frequencies of the TT genotype at the -565C/T locus revealed no difference between CHD patients and controls. In the subgroup analysis, the frequency of the AA genotype of R219K in CHD patients with type 2 diabetes mellitus (DM) was lower than in the controls.

CONCLUSIONS Our results suggested that the AA genotype at the R219K locus protect against CHD in patients with type 2 DM in the Chinese Han population.

GW27-e1260
The DNAH11 rs12670798 single nucleotide polymorphism is associated with the risk of coronary artery disease and ischemic stroke

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OBJECTIVES Cardiovascular and cerebrovascular diseases have become the first cause of death in the world. Both coronary artery disease (CAD) and ischemic stroke (IS) may share some common pathophysiological basis and risk factors. Previous studies have showed that the rs12670798 single nucleotide polymorphism (SNP) in the DNAH11 gene (DNAH11) is associated with serum lipid levels in the general populations. The present study was undertaken to detect the associations between the DNAH11 rs12670798 SNP and the risk of CAD and IS in the Guangxi Han population.

METHODS This study recruited 1,108 unrelated patients (CAD, 568 and IS, 540) and 540 healthy controls from the First Affiliated Hospital, Guangxi Medical University. The diagnosis of CAD was based on typical clinical symptoms, electrocardiographic changes, increased serum markers including creatinine kinase-MB and troponin T, and coronary angiographic findings (coronary stenosis $\geq$ 50% in at least either one of the three main coronary arteries or their major branches such as diameter $\geq$ 2 mm). The classification of IS was made according to the TOAST (Trial of Org 10172 in Acute Stroke Treatment) criteria. Genotypes of the rs12670798 SNP were determined by the Snapshot technology platform.

RESULTS Serum total cholesterol (TC) levels in healthy controls were different among the three genotypes of rs12670798 SNP (P < 0.05), the rs12670798C allele carriers had higher TC than the C allele non-carriers; respectively. The rs12670798C allele carriers were associated with an increased risk of CAD (rs12670798CT genotype: OR = 1.345, 95%CI = 0.975-1.855, P = 0.071; CC genotype: OR = 1.590, 95%CI = 1.109-2.278, P = 0.012). The rs12670798C allele carriers were also associated with an increased risk of IS (CT genotype: OR = 1.597, 95% CI = 1.153-2.213, P = 0.05; CC genotype: OR = 1.722, 95%CI = 1.192-2.488, P= 0.04). After adjustment for age, gender, body mass index (BMI), smoking, drinking and hypertension, the rs12670798 SNP was still associated with an increased risk of CAD and IS in different genetic models (P < 0.05). Stratified analysis showed that the SNP may interact with the gender, age, BMI, smoking, drinking and hypertension to affect (increase or decrease) the risks of CAD and IS.

CONCLUSIONS DNAH11 rs12670798 SNP is associated with elevated serum TC levels, and increased risk of CAD and IS in the Guangxi Han population. The rs12670798C allele carriers have higher serum TC levels and higher risk of CAD than the rs12670798TT homozygotes. DNAH11 rs12670798 SNP is also associated with the susceptibility of IS, the rs12670798CC homozygote is associated with an increased risk of IS. There may be an interaction between the rs12670798 SNP and gender, age, BMI, smoking, drinking and hypertension to influence the risk of CAD and IS.

ACUTE CORONARY SYNDROME

GW27-e0046
Effects of sex and age on prehospital system delay in patients with ST-segment elevation myocardial infarction

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OBJECTIVES To investigate the effects sex and age on prehospital delay time (PHDT) in patients with ST-segment elevation myocardial infarction.

METHODS Between January 2014 and December 2014, 465 consecutive patients with ST-segment elevation myocardial infarction who were referred to Beijing Anzhen Hospital were analyzed. According to prehospital system delay the patients were categorized into 5 groups <1h group;<2h group;<4h group;<6h group and <12h group. Linear regression models were used to examine median PHDT and individual PHDT over time. Fisher test and chi-square test were applied to analyze data for different sex and the same different respectively.

RESULTS Of 380 patients with ST-segment elevation myocardial infarction, 125 received EMS and were analyzed. A minority of 27.2% of patients reached hospital within 1 h of patients with ST-segment elevation myocardial infarction. PHDT of female was longer than that of male (322 (72-887 quartiles) min vs. 245 (6-3155) min; p < 0.002). PHDT of younger male (25-54years) was 240 (6-2730) min and mounted to 303 (72-848) min in the oldest female subgroup (65-74 years).

CONCLUSIONS Older female sex was associated with prolonger PHDT. Room for improvement especially in older women was evidenced.

GW27-e0058
Comparisons of loading doses of ticagrelor versus clopidogrel in preventing periprocedural myocardial infarction

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OBJECTIVES Periprocedural myocardial infarction (PMI) is a common complication following percutaneous coronary intervention (PCI). The present study was aimed to evaluate the safety and efficacy of loading dose of ticagrelor versus clopidogrel in preventing PMI in patients with acute coronary syndrome (ACS) undergoing selective PCI.

METHODS The present study enrolled a total of 114 patients with ACS who underwent selective PCI from Jun 2014 to November 2015 in Cardiology Department of the Second Hospital of Tianjin Medical University. All patients were randomly assigned to clopidogrel group (n=57, the loading and maintenance doses were 300mg and 75mg Qd for clopidogrel, and 300mg and 100mg Qd for aspirin), or ticagrelor group (n=57, the loading and maintenance doses were 180mg and 90mg Bid for ticagrelor, and 300mg and 100mg Qd for aspirin). In the