survival rate. Logistic regression analysis was conducted to analyze the independent risk factors for MACEs.

RESULTS Compared with the MACEs-free group, the serum levels of ST2, IL-33 and BNP were significantly higher in the MACEs group. Serum levels of ST2, IL-33 and BNP were positively correlated with each other and positively correlated with Gensini score. The area under curves of ST2, IL-33 and BNP, respectively, were 0.872, 0.675 and 0.902. The relative sensitivity and specificity were, respectively, 76.27% and 85.92%, 69.49% and 58.68%, as well as, 96.61% and 77.69%. Serum levels of ST2, IL-33 and BNP were independent risk factors for MACEs. The 1-year overall survival rate was higher in AMI patients with lower serum levels of ST2, IL-33 and BNP.

CONCLUSIONS In conclusion, serum levels of ST2,IL-33 and BNP have potential value in predicting MACEs in AMI patients undergoing PCI.

GW28-e0666

THE RELATIONSHIP BETWEEN THE JAGGED1 LEVELS OF HUMAN BLOOD MONONUCLEAR CELL SURFACE AND PLAQUE VULNERABILITY

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OBJECTIVES Jagged 1 on the surface of the endothelial cells has been reported that it can promote neovascularization. Previous studies have shown that neovascularization was associated with plaque vulnerability. However, there was no studies on the relationship between function of Jagged 1 and plaque vulnerability. This study aims to explore the relationship between the content of Jagged-1 in human blood mononuclear cells and plaque vulnerability.

METHODS We collected blood samples from 60 patients with acute coronary syndrome, who had OCT with three vessels. Then We extracted mononuclear cells from blood samples of these patients, and detecting the levels of Jagged1, as determined by western blot and RT-PCR. Samples can be divided into high level group and low level group, according to the levels of Jagged1. Then measure the indicators relating to plaque ulnerability of each sample, including TCFA, quantity of microchannel,lipid pool and macrophages, applying OCT measuring tool.

RESULTS Patients clinical characteristics were comparable between the two groups. Compared with the low level of Jagged1 group, there was more lipid rich plaques in the high level of Jagged1 group (60.1% vs. 37.9%, P=0.003). Incidence of microchannels (80.1% vs. 20.9%, P=0.002), TCFA (76.3% vs. 30.2%, P=0.014) and macrophages (83.6% vs. 60.6%, P=0.037) was significantly higher in the high level group.

CONCLUSIONS The present study reveals that the level of Jagged1 content was associated with plaque vulnerability in ACS patients.

GW28-e0688

Platelet reactivity monitoring adjusted antiplatelet therapy in patients with percutaneous coronary intervention (PCI): a meta-analysis of randomized controlled trials

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OBJECTIVES Numerous number of evidences show that high on-treatment platelet reactivity (HTPR) is a well-known risk factor for adverse events in patients after PCI. Controversial situations still exist regarding the effectiveness of tailoring antiplatelet therapy according to platelet function monitoring.

METHODS The PubMed, Embase, and Cochrane Central databases were searched for randomized trials comparing platelet reactivity adjusted antiplatelet therapy with conventional antiplatelet therapy in patients who underwent PCI. The primary end point was all-cause mortality, major adverse cardiac events (MACE) including cardiovascular death, nonfatal MI, definite/probable stent thrombosis (ST), revascularization, and stroke or transient ischemic attack(TIA). The safety end point was defined as major bleeding event. We derived pooled risk ratios (RRs) with fixed-effects models.

RESULTS Six studies enrolling 6347 patients were included. Compared with conventional treatment, tailoring antiplatelet fails to reduce all-cause mortality (RR: 0.89, 95% CI: 0.63-1.24, P=0.48), MACE (RR: 1.02, 95% CI:0.92-1.14, P=0.69),myocardial infarction(RR: 1.07, 95%CI: 0.95-1.21, P=0.24), cardiac death (RR: 0.69, 95% CI:0.40-1.19, P=0.09), ST(RR: 0.83, 95% CI: 0.50-1.38, P=0.23), stroke or TIA (RR: 1.08, 95% CI:0.55-2.12, P=0.83),revascularization (RR: 0.96, 95%CI:0.69-1.33,P=0.79) and major bleeding events (RR: 0.79, 95% CI: 0.53-1.17, P=0.24).

CONCLUSIONS compared with medical treatment, tailoring anti-platelet therapy according to platelet reactivity testing fails to reduce all-cause mortality, MACE, and major bleeding events in patients with stenting implantation.

GW28-e0763

The selection of anti-platelet drug in elderly nonrevascularized patients with acute coronary syndrome

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OBJECTIVES To investigate the efficacy and safety of ticagrelor versus clopidogrel in nonrevascularized elderly patients with ACS.

METHODS There were 109 nonrevascularized patients with ACS (≥75 years old) admitted from January 1, 2013 to December 1, 2016 in the General Hospital of Jinan Military Region Cadre Ward hospitalized. 60 patients were treated with aspirin and clopidogrel, 49 patients were assigned to use aspirin and Ticagrelor. The platelet inhibition rates induced by arachidonic acid (AA) pathway and adenosine diphosphate (ADP) pathway were detected by thrombelastography in all participants after one week of dual anti-platelet therapy. 12 patients in clopidogrel group were changed to Ticagrelor group for low reaction to clopidogrel (ADP<50%). The primary endpoints were the incidence of cardiovascular and cerebrovascular events (including angina pectoris, remyocardial infarction, sudden cardiac death, stroke) and all-cause mortality over 1 month, 6 months, and 12 months follow-up; the secondary end points were general adverse events (including bleeding, allergies, dyspnea) and the changes of platelet count, liver and kidney function.

RESULTS There was no significant difference in the incidence of cardiovascular and cerebrovascular events between ticagrelor and clopidogrel group at 1 month, 6 months and 12 months follow-up (P> 0.05). There was no significant difference in the incidence of all-cause mortality between the two groups (P> 0.05). There were no significant differences in platelet count, liver and kidney function between the two groups before and after treatment (P> 0.05). There were 2 cases (4%) with dyspnea in the Ticagrelor group, and there was no significant difference in major bleeding complication between the two groups (P> 0.05).

CONCLUSIONS Aspirin combined with Ticagrelor in the elderly non-revascularized patients with ACS is safe and effective, which can be used as a substitute for low reaction to clopidogrel.

GW28-e0776

Three Year Follow-Up of Patients with Left Ventricular Dysfunction Causing Ischemia and Patent Coronary Arteries

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OBJECTIVES New onset of heart failure (HF) is an indication for investigation for coronary artery disease (CAD) In many cases, the angiogram results showed mild CAD with normal left ventricular (LV) function or mild to moderate LV dysfunction. Management was to continue medical treatment without percutaneous or surgical interventions. Whether CAD causes HF or HF causes ischemic changes on the EKG as well as the chest pain is not clear. Theoretically an elevation of the left ventricular (LV) end diastolic pressure (representing the systolic and diastolic dysfunction) might cause EKG changes suggestive of ischemia. The aim of this study was to clarify the mechanistic causes of new onset HF associated with ischemic EKG changes, chest pain in patients with patent or minimally diseased coronary arteries.

METHODS In group A, 20 patients were consecutively selected using the following criteria: (1) history of new onset of HF on presentation to the emergency room, (2) having chest pain on the index admission, (3) EKG changes indicating ischemia (ST depression or T wave inversion and no ST segment elevation), AND (4) negative coronary angiogram.