

group (n=1520), durable polymer group (n=1430). Gender data was matched for correction by using propensity score matching method. The incidence of main adverse cardiac event (MACE) (including cardiac death, myocardial infarction and target vessel revascularization) and stent thrombosis (ST) were followed up within one year.

RESULTS Two groups were similar in main baseline clinical information and major angiography characteristics after matching. The results showed that the two groups of patients with cardiogenic death (1.75% VS 1.75%, P=1.0), myocardial infarction (3.63% VS 3.9%, P=0.7), target vessel revascularization (2.22% VS 2.62%, P=0.47) and MACE (6.72% VS 7.26%, P = 0.57); stent thrombosis (1.2% VS 1.01%, P=0.18) were all no significant difference.

CONCLUSIONS The recent efficacy and safety of domestic biodegradable polymer sirolimus-eluting stents and durable polymer sirolimus-eluting stents in the treatment of coronary artery disease are similar, its long-term effect needs further study.

GW28-e1177

Analysis of Effectiveness of Endovascular Repair of Complicated Stanford B Acute Aortic Dissection: A Single-Center Experience



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OBJECTIVES To evaluate the security and effectiveness of endovascular repair (EVAR) of complicated Stanford B acute aortic dissection (AAD).

METHODS Retrospectively analysis clinical characteristics, perioperative characteristics and effectiveness of complicated Stanford B AAD patients treated with EVAR from April 2002 to February 2016.

RESULTS 1.Perioperative: 99 patients underwent EVAR treatment, 99.0% (98/99) operations were successful, 104 stents were implanted, the proximal average diameter was (38.9±3.3) mm, the mean length was (145.8±26.5) mm. 7 patients (7.1%) were combined coronary intervention. 7 patients died in hospital (7.1%), including 1 patient died from aortic dissection ruptured during surgery, 5 patients died from aortic dissection ruptured after surgery and 1 patients died from multiple organ failure. 2.Follow-up: The median follow-up time was 24 months. 9 patients (11.7%) died, including 4 cases cardiac death (5.2%). 1 cases recurrent dissection treated with EVAR (1.3%).

CONCLUSIONS Perioperative and follow-up results showed that EVAR treatment is safe and effective for complicated Stanford B AAD.

GW28-e1178

Ticagrelor Versus High-Dose (150-mg) Clopidogrel in stable coronary heart disease With High On-Clopidogrel Platelet Reactivity Following Percutaneous Coronary Intervention — A prospective, randomized, single-center, crossover Study



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OBJECTIVES Patients with stable coronary heart disease (CAD) undergoing percutaneous coronary intervention (PCI) frequently exhibit high platelet reactivity (HPR) while on clopidogrel. We aimed to test the hypothesis that HPR after standard treatment with clopidogrel, ticagrelor-standard dose (90 mg, twice one day) could be more effective than high-dose (150 mg/d) clopidogrel.

METHODS Consecutive patients with stable CAD undergoing PCI and loaded with clopidogrel were considered for platelet reactivity (PR) assessment at 24 hours after PCI with the 20μmol/L ADP-induced light transmittance aggregometry (LTA, Helena Laboratories, Beaumont City, USA) and VerifyNow assay (Accumetrics Inc, San Diego, CA), measured in maximum platelet agglutination (MPA) and P2Y12 reaction units (PRU). Of 655 screened patients, 40 (6.1%) were found with HPR (defined as MPA>=60% and PRU>=246, meanwhile) and participated in a prospective, randomized, single-center, crossover

study of platelet inhibition by ticagrelor 90 mg twice a day vs clopidogrel 150 mg/d, with a 14-day treatment period.

RESULTS The primary end point of MPA and PR at the end of the 2 study periods was lower in patients receiving standard-dose ticagrelor than those receiving high-dose clopidogrel (MPA: 26.59±10.79 vs 47.39±15.57, 25.15±11.75 vs 48.26±19.12; PRU: 76.20±52.51 vs 175.65±20.82, 86.55±44.38 vs 126.50±68.09, all p value were <0.001, respectively).

CONCLUSIONS In patients with stable CAD undergoing PCI and exhibiting HPR after standard clopidogrel treatment, standard-dose ticagrelor 90 mg twice a day is significantly more efficacious than clopidogrel 150 mg/d in reducing MPA and PR.

GW28-e1179

CYP2C19 gene polymorphism in 950 patients with acute myocardial infarction : A single-center retrospective study



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OBJECTIVES CYP2C19 gene polymorphism is associated with clopidogrel metabolism in human body. Clopidogrel is often used in patients of acute myocardial infarction as one of dual antiplatelet therapy. The objective was to investigate the distribution of CYP2C19 gene polymorphism and the correlation with platelet function in patients with acute myocardial infarction.

METHODS The retrospective study included the 950 patients with acute myocardial infarction enrolled in the Department of Cardiology of General Hospital of Shenyang Military Region between December 2012 to January 2012 who received CYP2C19 gene detection. All patients received standard dual antiplatelet therapy (Aspirin 100mg, qd+clopidogrel 75mg, qd). CYP2C19 gene chip detector was produced by Beijing BAIAXIN technology company. The genetic polymorphisms of CYP2C19*2 and *3 were evaluated by 3ml venous blood sample. The study analyzed the distribution of CYP2C19 gene polymorphism the correlation with common clinical characteristics in patients with acute myocardial infarction.

RESULTS In 950 patients with acute myocardial infarction, 643 patients with acute ST segment elevation myocardial infarction, 307 patients with acute non ST segment elevation myocardial infarction. 388 Cases (40.8%) were CYP2C19 gene wild type (*1/*1), 483 cases (50.8%) were heterozygous type (*1/*2 or *1/3), 79 case (8.4%) were the homozygous mutation type (*2/*2 or *2/*3 or *3/*3). In clinical data, there were no significant differences in sex, hypertension, diabetes, previous myocardial infarction, the type of myocardial infarction. During the hospitalization period, the proportion of high platelet reactivity (ADP>60%) was 57% (45 cases) in the CYP2C19 gene homozygous mutation type, 41% (198 cases) in the CYP2C19 gene heterozygous type and 34% (132 cases) in the CYP2C19 gene wild type. There was no significant difference in the incidence of high platelet reactivity between heterozygous and wild type (p=0.783) and there was statistically different in homozygous mutation type respectively compared with heterozygous type and wild type (p=0.013, 95% CI:1.78-5.17; P<0.001,95%CI:2.32-5.88).

CONCLUSIONS CYP2C19 gene homozygous mutation (*2/*2 or *2/*3 or *3/*3) may be associated with high platelet reactivity, while the CYP2C19 wild type (*1/*1) and mutant heterozygous (*1/*2 or *1/3) were not found to be associated with high platelet reactivity in the observed 950 patients with acute myocardial infarction treated with dual antiplatelet therapy.

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Comparison of one-year outcomes in myocardial infarction patients with or without ST-segment elevation caused by unprotected left main coronary artery occlusion treated by emergency PCI: data from two centers registry



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