

GW27-e0866**Thrombelastogram Monitoring as a guidance of the Antiplatelet Therapy in ACS Patients During Perioperative Period of PCI**Zheng Guo,¹ Zhuoming Wang,² Jian An²¹Shanxi Medical University; ²Shanxi Cardiovascular Disease Hospital

OBJECTIVES To evaluate the application of thromboelastography as a guidance for prescription and prognostic diagnosis on ACS patients at PCI perioperative period.

METHODS Patients diagnosed as acute coronary heart disease and received PCI treatment at cardiovascular hospital, Shanxi, from February 2014 to February 2015 were randomly selected and divided into 3 treatment groups. Conventional group: patients treat with conventional aspirin and clopidogrel antiplatelet drugs (n=31) without thrombelastogram monitoring; the other 2 groups were performed thrombelastogram prior to treatment. According to the results, patients who were highly sensitive to clopidogrel were treated with conventional clopidogrel aspirin and clopidogrel antiplatelet (high response group, n=30); and those who were not sensitive to clopidogrel were treated with ticagrelor and aspirin antiplatelet (low response/ticagrelor group, n=31). All 3 groups were subjected to long-term follow up after being discharged from the hospital and the incidence of major adverse cardiovascular events (MACE) within 1 year was compared among the three groups.

RESULTS 1, 1 year's follow-up shows that : the incidence of the major adverse cardiovascular events (MACE) in high response group and ticagrelor group which have been monitored with thrombelastogram was significantly lower than that of the conventional group (P < 0.05), which was not monitored by the thrombelastogram prior to treatment. The difference was statistically significant.

2, There were no statistical differences (P > 0.05) in the incidence of the major adverse cardiovascular events (MACE) between the high response group and ticagrelor group which have been monitored with thrombelastogram after 1 year's follow-up.

3, Smoking may be an independent risk factor for the low response to clopidogrel.

CONCLUSIONS 1, The long term prognosis of the patients whose antiplatelet treatment strategy was selected under the guidance of the thromboelastography (high response group and ticagrelor group) was significantly better than conventional group, whose treatment strategy was determined without the thromboelastography guidance.

2, The long-term prognosis had no significant difference between clopidogrel low-response group (ADP < 50%), whose treatment were replaced by ticagrelor and clopidogrel high response group (ADP ≥ 50%).

3, The application of thromboelastography provides significant clinical guidance in determining the antiplatelet therapy in ACS patients at perioperative period of PCI.

4, Smoking may be a risk factor for low response to clopidogrel after PCI operation.

GW27-e0928**Clinical follow-up study of patients with small coronary artery fistulas**

Li Huakang, Zhang Qing, Song Zhiyuan, Tao Jing

Southwest hospital of the third military medical university

OBJECTIVES To assess the clinical efficacy and safety of transcatheter coil embolization of small coronary artery fistula (sCAF).

METHODS In this prospective study, 90 patients were diagnosed with sCAF on cardiac angiography between November 1, 2011 and March 30, 2015. They were randomly divided into a treatment group (transcatheter coil embolization) and a control group (no transcatheter coil embolization). Clinical data, examination findings, and drug-use information were collected.

RESULTS Age, gender, clinical symptoms, complications, pathological coronary artery numbers, and sites of fistula origin/termination did not differ between the groups. The rate of symptomatic improvement was higher in the treatment group than in the control group. In each group, 41 patients completed the follow-up. In the treatment group, left atrial, left ventricular, and right ventricular sizes were significantly lower at 3 and 6 months postoperatively than at the baseline (P < 0.05); the left ventricular ejection fraction was higher at 1 and 6 months than at the baseline. In the control group, right ventricular and left atrial sizes markedly increased (P < 0.05); left ventricular and right atrial sizes did not significantly change (P > 0.05). 41 patients in treatment group underwent real-time 3D thoracic echocardiography and 1 year of follow-up. In these patients,

Tmsv16 - SD%, Tmsv12 SD%, and Tmsv6 SD% significantly decreased postoperatively (P < 0.05).

CONCLUSIONS Transcatheter coil embolization of sCAFs is safe and effective, and improves clinical symptoms, cardiac remodeling and cardiac function.

GW27-e0961**Long-term Outcomes of Patients receiving stage PCI, Culprit PCI or Coronary bypass grafting for Complex Coronary Artery Disease, High SYNTAX score, and Low Surgical Risk, 3 years followed up result.**

Kuan-chun Chen, Wei-Hsian Yin

Division of Cardiology, Heart Center, Cheng Hsin General Hospital, Taipei, Taiwan

OBJECTIVES The current guidelines on coronary revascularization for patients with left main or multi-vessel coronary artery disease (LM/MVCAD) recommended that a surgical option should be selected for those patients with low surgical risk (EuroSCORE < 5), and high SYNTAX score ≥ 32. Whether total revascularization with stage PCI provide similar efficacy as coronary artery bypass grafting (CABG) is less been studied.

METHODS We retrospectively analyzed all patients (n=280) with LM/MVCAD, low surgical risk, and high SYNTAX score referred to either CABG or PCI at our institution during 2010-2012. We compared 3 different strategies and outcomes at 3-year follow-up.

RESULTS No significant different of baseline characteristics between culprit PCI (n= 128), stage PCI (n=49) and CABG (n=103) groups. No difference of primary endpoints (death, recurrent myocardial infarction, stroke) between 3 groups (p= 0.14). However, CABG group had significantly less secondary composite endpoints (primary plus target vessel revascularization (TVR), p= 0.0003). However, which was insignificant for non-DM subgroup. As regard to left main disease patients, CABG and stage PCI had significant better event free for primary endpoints compare with culprit PCI group (93%, 90.5% vs. 84.4%, p= 0.0275).

CONCLUSIONS For LM/MVCAD patients with low surgical risk, CABG has less future TVR rate but had similar primary composite endpoints of death, MI and stroke. However, for left main disease patients, stage PCI may be an alternative of CABG regards to primary endpoints.

GW27-e0993**Angiographic Characteristics of Diabetes Mellitus(NIDDM) Combined with Coronary Heart Disease(CHD) in the Clinical Observation**Wang Jintai,¹ Jintai Wang,^{1,2} Jintai Wang¹¹The Hospital of Beijing Information Technology College; ²Beijing Anzhen Hospital, Capital Medical University

OBJECTIVES To observe coronary angiography clinical characteristics of the patients with type 2 diabetes mellitus complicated with coronary heart disease, explore the ways of decrease incidence of diabetes patients with coronary heart disease.

METHODS To take retrospective data analysis methods and choose 150 cases of type 2 diabetes mellitus complicated with coronary heart disease patients as observation group, take 150 cases of simple coronary heart disease patients as control group, after the related examinations all of patients have been check with the coronary angiography. According to the angiography results take the corresponding treatment, look for main risk factors of pathogenesis disease and coronary artery lesions.

RESULTS Pure three disease CHD group was obviously lower than coronary heart disease with diabetes mellitus group (P < 0.05). FBG(fasting blood-glucose), 2 h postprandial blood glucose, fasting glucose cholesterol levels of patients with coronary heart disease and diabetes mellitus group, were significantly higher than that of pure coronary heart disease group. Observation group of coronary artery lesion counts, the degree of coronary artery disease, extent disease coronary artery were significantly better than the control group.

CONCLUSIONS There is high incidence of multi vessel lesions, wide range of lesions, degree of pathological changes is relatively serious for coronary heart disease patients with diabetes mellitus. Diabetic patients with coronary heart disease have more segmental pathological changes more than coronary heart disease patients without diabetes, and can reduce the success rate of coronary angiography, even will increase the difficulty of the coronary artery bypass surgery, severe cases can affect the prognosis. In clinical diabetes mellitus