

times per week at least 3 months. The exercise intensity was based on the heart rate corresponding to anaerobic threshold. A symptom limited cardiopulmonary exercise testing (CPET) was performed pre- and post-exercise to compare the efficacy of different modes.

RESULTS Comparing with pre-exercise, all patients had significantly higher of VO₂ peak/kg and MVV% (maximal voluntary ventilation) post-exercise (14.98±3.29 vs 19.42±7.37, 93.85±22.56 vs 112.79±27.24, both P<0.05, respectively). Among the patients supervised, the VO₂ peak/kg and MVV% had a significant improvement between pre- and post-exercise (14.41±3.29 vs 21.33±8.88, 94.87±25.44 vs 114.87±24.97, both P<0.05, respectively). Nevertheless, there was no significant difference in unsupervised exercise group. No adverse cardiovascular events were observed during the exercise both groups.

CONCLUSIONS The present study demonstrated that exercise rehabilitation could increase exercise tolerance in patient with ACS undergoing PCI. Supervised Exercise rehabilitation might improve the prognosis of patients more significantly and should be recommended.

GW28-e1139

Clinical research of treatment with Tirofiban for high-risk non-ST-segment elevation acute coronary syndrome during peri-operative intervention operation period

Nannan Liu,¹ Zhou Weiwei,¹ Li Yang,¹ Wang Shuang¹

¹Department of Cardiology, Institute of Cardiovascular Research of People's Liberation Army



OBJECTIVES This research is to explore the clinical effects of treatment with Tirofiban for high-risk non-ST-segment elevation acute coronary syndrome (NSTEMI ACS) during peri-operative intervention operation period, and to improve the level of clinical treatment.

METHODS 90 cases of high-risk NSTEMI ACS patients were randomly selected from January, 2013 to April, 2016 as the research objects, which were divided into the control group and the observation group. The control group received clopidogrel anti-coagulation, coronary angiography and percutaneous coronary interventional (PCI) treatment, while the observation group took tirofiban treatment in addition to the treatment of control group. The differences on major adverse cardiovascular events, TIMI flow grading and complications of the two groups were observed after treatment.

RESULTS There was significant difference (P < 0.05) on the distal vascular blockage of major adverse cardiovascular events, intra-operative no-reflow, reoccurrence of acute myocardial infarction and stenocardia and post-PCI TIMI flow grade 2 and 3. But in terms of bleeding complications, TIMI flow grade 0 and 1 before PCI and after PCI, there was no significant difference (p > 0.05).

CONCLUSIONS Application of tirofiban treatment for high-risk NSTEMI ACS during the peri-intervention period is safe and effective, which can improve TIMI flow, increase tissue perfusion and reduce post-operative complications.

GW28-e1167

Impact of Gender differences on Dietary salt intake and Coronary Atherosclerosis in Patients with Prehypertension

Xin Zhao,¹ Junyin Peng,¹ Yaling Han,¹ Xiaolin Zhang,¹ Xiaoxu Yang,¹ Xiaozeng Wang,¹ Wang Shuang¹

¹Liberation Army, Shenyang Northern Hospital, Shenyang, Liaoning, China



OBJECTIVES To investigate Impact of gender differences on Dietary salt intake and Coronary Atherosclerosis in patients with prehypertension.

METHODS A retrospective review was performed on 243 prehypertension patients who underwent coronary angiography without percutaneous coronary intervention, which appears the degree of coronary artery stenosis was 30%-70%, in our department from Jan 2003 to Dec 2009 in this study. Based on gender difference, all patients were sorted into male (n=140) and female group (n=103). Compared the baseline clinical features, lab data, the information on

drug using during hospitalization and follow up period, related risk factors and incidence of hypertension and cardiovascular disease (including Acute myocardial infarction and Stroke) between the two groups. Adopting Cox regression analysis the related risk factors of hypertension and cardiovascular disease.

RESULTS Female group had a higher average age(61.30±7.446 vs 58.61±7.335, p=0.005), as well as the blood lipids such as total cholesterol, low density lipoprotein HDL cholesterol were higher than male patient (p<0.05). However, the male patient's average serum creatinine values and Left ventricular diastolic diameter was higher as well as the rate of smoking and drinking history compared to the female patients. After a median follow-up of 4.53years(range,3.1-8.7year),71(50.71%) male patients with progress for hypertension, but women groups have 52(50.49%)patients progress for high blood pressure, there was no statistical difference in the two groups (50.71% vs 50.49%, p>0.05) In terms of cardiovascular diseases, 72 patients experienced acute myocardial infarction, including 52 male patients and 20 female patients, among them the occurring rate of myocardial infarction, male group is higher than female group (37.14%vs 19.42%, p=0.003), while women group the incidence of ischemic stroke than men (11.65% vs 4.28%, p=0.03). In the subgroup of high salt intake dietary, 35 patients in men group happened acute myocardial infarction, only 13 patients in female group occurred it. The incidence of acute myocardial infarction, male group was higher than female (50.72% vs 25.49%, p=0.005). To further explore the risk factors of hypertension and cardiovascular diseases, Cox multiple factors regression analysis found that the diet of high salt intake was independent risk factors for hypertension and cardiovascular diseases, especially in male prehypertension (p<0.05).

CONCLUSIONS In prehypertension patients, the diet of high salt intake would increase the incidence of hypertension and cardiovascular disease, especially in which the occurring rate of myocardial infarction in male group is higher than female group, but the incidence of ischemic stroke in women group is larger.

GW28-e1168

Timing of complete revascularization for patients with Acute coronary syndrome complicated with Chronic total occlusion

Xin Zhao,¹ Chonghuai Gu,¹ Yaling Han,¹ Quanmin Jing,¹ Xiaozeng Wang,¹ Ge Wang,¹ Haiwei Liu,¹ Wang Shuang¹

¹Department of Cardiology, Institute of Cardiovascular Research of People's Liberation Army, Shenyang Northern Hospital, Shenyang, Liaoning, China



OBJECTIVES This study is to evaluate the timing choice between Contrast-Induced acute kidney injury (CI-AKI) and long-term of prognosis for patients who have Chronic Total Occlusion (CTO) complicated with acute coronary syndrome (ACS) who reached two times of percutaneous coronary interventions (PCI) to reach complete revascularization (CR) within 30 days.

METHODS In our study, we enrolled 101 CTO complicated with ACS patients who have got CR by two times of PCI strategy in The General Hospital of Shenyang Military Region between 2010.8 and 2014.2. These patients aged from 38 to 86. We divided patients into three groups based on interval times between PCI-operations by tertiles, which are group A (1-3 days), group B (4 to 6 days) and group C (more than 7 days). The study observational indexes are contrast-induced acute kidney injury (CI-AKI) during perioperative period and all-cause mortality and Major advanced cardiovascular events (MACE) during 1 year follow-up.

RESULTS The baseline data such as gender, age, weight, BMI, disease history (including chronic kidney disease, hypertension, diabetes and peripheral vascular disease, etc.), in-hospital basic vital signs are not in statistical differences (P>0.05) between three groups. The mean height of Group C (>7 days) is higher than group A (1-3 days) (172.82±6.36 vs. 167.00±5.28, P=0.022). Logistic regression model shows the interval time of 1-3 days is the independent risk factor of CI-AKI (OR=3.299, 95%CI: 1.16-18.814; P=0.045), while the diabetes is the independent risk factor of CI-AKI in both first operation and overall.

CONCLUSIONS We should generate interval time of two-time-PCI strategy for CTO complicated with ACS patients beyond 3 days within 30 days. This could reduce the CI-AKI incidence after second operation. In addition, for patients who have diabetes, we need take more focus on the risk of CI-AKI incidence and the repeat revascularization forward.