Methods and results We evaluated 3691 patients treated with drug-eluting stents who had a baseline CRP measurement. The primary outcome was stent thrombosis; secondary outcomes were death, myocardial infarction (MI), death or MI, and target vessel revascularization. During follow-up (median, 2 years), 26 patients had definite or probable stent thrombosis, 146 patients died, 259 had an MI, and 206 underwent target vessel revascularization. In multivariable Cox proportional-hazards models, elevated levels of hs-CRP were significantly associated with increased risk of stent thrombosis. Elevated hs-CRP levels also significantly predicted the risks of death, MI, and death or MI, but not target vessel revascularization.

Conclusions Elevated hs-CRP levels were significantly associated with increased risks of stent thrombosis, death, and MI in patients receiving drug-eluting stents, suggesting the usefulness of inflammatory risk assessment with CRP.

Results Young AMI patients were often male, and had the typical clinical manifestations. The smoking rate hyperamyloty risk assessment with CRP.

Conclusions The complications in the young people group are less than those in the old people group, and the prognosis was better than old cases.

Objectives To investigate clinical effects of clopidogrel combined with simvastatin or fluvastatin on the platelet aggregation rate (PAR), platelet activation marker CD62P and the incidence of major adverse cardiovascular events (MACE) in patients with ACS.

Methods From April 2008 to December 2009, one hundred patients (79 male and 21 female, average age 61.46 ± 12.84 years) who had been diagnosed as ACS were enrolled into this study. These cases were randomly divided into two groups, the Group A (n=50, treated with simvastatin 20 mg per night); the Group B (n=50, treated with fluvastatin 40 mg per night). Detailed clinical information was collected. PAR, CD62P, alanine aminotransferase (ALT), and aspartate aminotransferase (AST) of the two groups were measured. All cases received clopidogrel (a loading dose of 300 mg and then 75 mg daily), aspirin and Low molecular weight heparin. The MACE within 14 days were recorded.

Result there was no significant differences in baseline between the Group A and Group B. There was no significant differences in the PAR and expression rate of CD62P after 300 mg clopidogrel (p>0.05). 1h after treated with statins the expression rate of CD62P and PAR in the two groups were lower than that before treated with statins (p<0.05). After 14d treated with statins the expression rate of CD62P and PAR were still lower than that before treated with statins (p<0.05). There were no significant increase of ALT and AST in the both groups (p>0.05). After the above-mentioned medical treatment, the expression rate of CD62P and PAR in the two groups were similar (p>0.05). There were no significant differences in the incidence of MACE between two groups.

Conclusion ACS patients with loading dose clopidogrel combined with simvastatin or fluvastatin could decrease the MACE, the results in two groups are similar. Neither simvastatin with clopidogrel nor fluvastatin with clopidogrel decreases the platelet activity of clopidogrel.

A CLINICAL ANALYSIS OF ACUTE MYOCARDIAL INFARCTION IN YOUNG PATIENTS

A126

Objective To investigate the clinical characteristics of acute myocardial infarction (AMI) in young patients.

Methods We carried out the contrasting analysis in the clinical data between 45 young patients (age≤45 years old) and 52 old patients (age≥60 years old).

Results Young AMI patients were often male, and had the typical clinical manifestations. The smoking rate hyperfibrinogenemia rate and positive family history rate of the young people group were markedly higher than those of the old people group (p<0.05). The morbidity rate of patients with single coronary artery atherosclerosis was high in the young people group. The morbidity rate of patients with multiple coronary artery atherosclerosis was high in the old people group. The patients in the old people group who complicated with cardiac aneurysm, arrhythmia, heart failure, cardiac shock were much more than those in the young people group (p<0.05).

Conclusion Smoking, hyperfibrinogenemia and positive family history are main causes of AMI in young patients. Young AMI patients had the typical clinical manifestations with simple coronary lesion. The complications in the young people group are less than those in the old people group, and the prognosis was better than old cases.
**Methods** 105 consecutive patients were enrolled into the study. Each patient was assigned to either insulin or glibenclamide group according to which treatment he accepted outside hospital regularly. Collected the basic clinical informations of all patients. One month after PCI all patients took SPECT to evaluate the condition of myocardial perfusion, and ERNA for LVEF.

**Results** The ratio of the patients with TIMI III grade and the incidence of arrhythmia in the three groups were statistically significant difference. In the rest state, the ratio of abnormal myocardial perfusion segments in the three groups were statistically significant difference. The ischaemic myocardial area score group A was significantly higher than group B and group C, group B and group C were no significant difference. ERNA showed that LVEF in the three groups were statistically significant difference. Group A was significantly lower than group B, there were no significant difference between group B and group C, group A, group C difference were statistically significant illustrated the LVEF of group A was significantly lower than group B and group C.

**Conclusion** Glibenclamide would increase myocardial ischaemic area in patients with AMI and type 2 diabetes mellitus. Glibenclamide increases the possibility of malignant arrhythmias in the patients with acute myocardial infarction and type 2 diabetes mellitus.

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**e0411 EFFECTS OF SLEEP APNEA SYNDROME ON MYOCARDIAL ISCHAEMIA IN PATIENTS WITH CORONARY HEART DISEASE DURING NIGHT**

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**Objective** 1. To investigate the relationship between sleep apnea syndrome (SAS) and myocardial ischaemic events in patients with coronary heart disease (CHD). 2. To compare the differences of age, gender distribution, coronary angiography results in CHD patients with and without SAS. 3. To compare the differences of C-reactive protein (CRP) and haemoglobin levels in CHD patients with and without SAS.

**Methods** 25 CHD patients with typical symptoms of angina and ECG changes were enrolled in this study. After overnight polysomnography (PSG), all the cases were monitored by portable device at night for 7 days in order to exclude the conditions that the cases did not sleep or had waked, apnea and hypopnoea events were recorded during 24:00–06:00. Blood samples were collected 5–10 min after monitoring, and the levels of haemoglobin and C-reactive protein were examined.

**Results** 1. The incidence of myocardial ischaemia caused by apnea and low ventilation was significantly higher in CHD patients with SAS. 2. There were significant differences between the two groups in the decrease of oxygen desaturation and the increase of heart rate. 3. BMI in CHD patients was significantly higher in those with SAS. There were more multi-vessel lesions and long lesions in CHD patients with SAS (p<0.05). The level of haemoglobin and C-reactive protein were much higher in CHD patients with SAS.

**Conclusion** 1. The incidence of SAS is much higher in patients with CHD, and the incidence of myocardial ischaemic events is higher in CHD patients with SAS. and the more serious respiratory disorders, the more easily myocardial ischaemia happens. With apnea related to myocardial ischaemia and oxygen reduction, has nothing to do with the heart rate. 2. Lesions of SAS in patients with coronary heart disease are heavier than Simple CHD group in coronary angiography. BMI of SAS in patients with coronary heart disease are higher than Simple CHD group. 3. The levels of CRP and haemoglobin are higher in CHD patients with SAS.

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**e0412 OBSTRUCTIVE SLEEP APNEA SYNDROME IS ASSOCIATED WITH INCREASED RISK OF LOW-ANTIPLATELET RESPONSE OF CLOPIDOGREL IN PATIENTS WITH UNSTABLE ANGINA**

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**Objective** To address the relationship between low antiplatelet response of clopidogrel and Obstructive Sleep Apnea Syndrome (OSAS) in patients with unstable angina pectoris.

**Methods** Total of 112 patients hospitalised with unstable angina pectoris from February 2008 to December 2009 were enrolled in this randomised consecutive study. All patients accepted routine treatment including clopidogrel, aspirin, low molecular weight heparin daily. Platelet aggregation (PAR) parameters were measured on samples obtained at baseline and 2nd, 4th, 6th day. All patients were examined for the presence of sleep-disordered breath into 4 quartiles by ApneaLink. The concentration serum adrenaline and norepinephrine were measured in the morning at 6 a.m. after the sleep study.

**Result** There were no significant differences in the baseline data in all 4 quartiles. However, there was a significant differences in the number of diabetes patients in the first quartile, heale (p<0.038) compared with other quartiles. At day 2 PAR was inhibited to 69.91% of baseline (p<0.01) and 82.53% (p>0.05) of baselinctively, in the first quartile. At each of these time points, platelet activity was significantly higher than in patients in other quartiles. At day 6 platelet aggregation were reduced to 32.37%, and 29.75% of baseline respectively in group 2 through 4 (p<0.01 for all). PAR was reduced significantly in patients in the second through fourth quartiles at day 6, but, it showed a lower reduction in the first quartile (p<0.05). Compared with that in thebidity of OSAS in the second and third were 25.0% and 14.3% (p<0.05), only 3.6% in the fourth group (p<0.01). Meanwhile, the concentrafirst group (60.7%), the mor n of serum adrenaline and norepinephrine in OSAS pa reliable ind tients plaorepinephry a more important role in this situation.

**Conclusion** OSAS is acator of low clopidogrel response in unstable angina patients, and higher concentration of epinephrine and norepinephrine in OSAS pa reliable ind tients plaorepinephry a more important role in this situation.