

**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, 239 had an MI, and 206 underwent target vessel revascularization. In multi-variable 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.

#### e0407 RESULTS OF SKELETONISED BIMA IN COMBINATION WITH GEA IN CABG

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Biao Yuan, Mingkui Zhang, Yongqiang Jin, Shen Zhao, Qingyu Wu. *First Hospital of Tsinghua University*

**Objective** To summarise and analyse the clinical experience in the use of skeletonised bilateral internal mammary artery in combination with right gastroepiploic artery in coronary artery bypass grafting.

**Methods** A retrospective review was made to 112 patients underwent Off-Pump Coronary Artery Bypass Grafting since January 2007 to May 2009. The patients were 79 men and 33 women, with a mean age of 67 years (range 42–81 years).

**Result** Used 112 skeletonised LIMA, with or without sequential grafting, in-situ BIMA, GEA and RA were used in 81(72%), 104 (93%) and 59(53%) patients respectively. The mean number of distal anastomoses per patient was 3.43(range 2–5), Compssite Y or T graft was constructed in 41 patients, Sequential anatomoses was performed in 34 patients, Aortic no touch technique was used in 53 patients. There was no hospital mortality, no the perioperative myocardial infarction and sternal wound complication.

**Conclusion** Skeletonized BIMA in combination with the GEA is a very versatile situ conduit to achieve complete arterial revascularization. The only contraindications for the use of BIMA and GEA grafts were emergency operations with haemodynamic instability.

#### e0408 A CLINICAL ANALYSIS OF ACUTE MYOCARDIAL INFARCTION IN YOUNG PATIENTS

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Fu Xianghua, Wu Weili, Zhang Wenjing, Wang Xuechao, Wang Yanbo, Jiang Yunfa, Hao Guozhen. *The 2nd Hospital of Hebei Medical University, Shijiazhuang, Hebei, China*

**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.

#### e0409 INFLUENCE ON THE PLATELET FUNCTION OF DIFFERENT STATINS COMBINED WITH LOADING DOSE CLOPIDOGREL IN PATIENTS WITH ACUTE CORONARY SYNDROME

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Fu Xianghua, Wang Qian, Wang Yanbo, Wang Xuechao, Hao Guozhen, Jiang Yunfa, Gu Fan WeizeXinshun. *The 2nd Hospital of Hebei Medical University, Shijiazhuang, China*

**Objective** 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  $61.46\pm12.84$  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.

#### e0410 ADVERSE EFFECTS OF GLIBENCLAMIDE ON MYOCARDIAL PERFUSION IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION AND TYPE 2 DIABETES MELLITUS

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F u Xianghua, W u Weili, Yan Yangmei, Wang Xuechao, Wang Yanbo, Fan Weize, Jiang Yunfa, Hao Guozhen. *The 2nd Hospital of Hebei Medical University, Shijiazhuang, Hebei, China*

**Objective** To assess the adverse effects of glibenclamide on the myocardium, for investigating more effective and rational therapy.

**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 basal 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 differences 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.

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

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Fu Xianghua, Pang Jiangna, Wang Xuechao, Wang Yanbo, Jiang Yunfa, Wu Weili, Hao Guozhen, Gu Xinshun. *The 2nd Hospital of Hebei Medical University, Shijiazhuang, Hebei, China*

**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: 00–4:00. 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 high than Simple CHD group. 3. The levels of CRP and haemoglobin are higher in CHD patients with SAS.

#### 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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Fu Xianghua, Li Shiqiang, Wang Qian, Gu Xinshun, Wang Yanbo, Wang Xuechao, Wu Weili, Xue Ling. *The 2nd Hospital of Hebei Medical University, Shijiazhuang, Hebei, China*

**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 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup> 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 quartiles, healed ( $p = 0.0038$ ) compared with other quartiles. At day 2 PAR were inhibited to 63.91% of baseline ( $p < 0.01$ ) and 88.38% ( $p > 0.05$ ) 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 the severity 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 concentration first group (60.7%), the more of serum adrenaline and norepinephrine were higher in the first quartile than others ( $p < 0.05$ ).

**Conclusion** OSAS is a factor of low clopidogrel response in unstable angina patients, and higher concentration of epinephrine and norepinephrine in OSAS patients indicates platelet reactivity a more important role in this situation.

#### e0413 THE ADVERSE EFFECTS OF GLIBENCLAMIDE ON MYOCARDIAL PERFUSION IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION AND TYPE 2 DIABETES MELLITUS

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Fu Xianghua, Wu Weili, Yan Yangmei, Wang Xuechao, Wang Yanbo, Fan Weize, Jiang Yunfa, Hao Guozhen. *The Second Hospital of Hebei Medical University*

**Objective** To assess the adverse effects of glibenclamide on the myocardium, for investigating more effective and rational therapy.

**Methods** 115 consecutive patients were enrolled into the study. All patients had clinical histories of acute myocardial infarction and lost the chance of thrombolysis and emergency PCI; Each patient was assigned to either insulin or glibenclamide group according to which treatment he accepted outside hospital regularly. The patients who took glibenclamide for group A, insulin for group B and diet for group C. Collected the basal 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 in the three groups were statistically significant difference. The incidence of