The subgroup 6 was patient with diabetes plus hypertension. The expression of mRNA level were identified by Real-time RT-PCR.
Results The ratios of VDUP1/β-Actin of two groups were skewed distribution. In CAD group, the maximum was 630.346, the minimum was 1.000, the median was 5.205. In control group, the maximum was 837.532, the minimum was 2.395, the median was 80.449. By logarithmic transformation, the results indicated the expression of VDUP1 in PBMCs from patients with CAD were markedly down-regulated than that from control group ($p<0.05$). The expression of VDUP1 in PBMCs from patients with single risk factor were down-regulated than that from patients with multiple risk factors in CAD group ($P_2=0.044$, $P_4=0.033$).
Conclusion These findings shed new light onto the mechanisms of CAD, demonstrate that the expression of VDUP1 in PBMCs from treated patients with CAD has a negative correlation to CAD, and sugguest that modulating the function of VDUP1 may open a new era of the therapy for CAD.

e0403 THE DIAGNOSIS OF CORONARY ARTERY ORIGIN ANOMALIES WITH DUAL-SOURCE CT AND ITS CLINICAL SIGNIFICANCE

doi:10.1136/hrt.2010.208967.403

Li Dongye, Zhang Yonggeng, Xu Kai, Long Bin, Xie Lixiang, Xia Yong, Zhang Yanbin. *The Affiliated Hospital of Xuzhou Medical College*

Purpose To investigate the clinical value of dual-source computer tomography (DSCT) in detecting anomalous origin of coronary artery for adult patients.
Materials and methods A retrospective evaluation to identify 3903 patients who underwent DSCT coronary angiography from Jan 2009 to Jan 2010.
Results All images were considered to be suitable for evaluation. Forty-two of 3903 patients were detected to have coronary atrery origin anomaly. The incidence is 1.08%. They include 26 cases with an anomalous origin of right coronary artery (0.67%), 13 cases with an anomalous origin of left coronary artery (0.33%), 3 cases with single coronary artrey (0.08%).
Conclusion DSCT coronary angiography that provide accurate depiction of anomalous coronary origin and course along with the complex anatomical relation with the adjacent structures can be considered as a first-line imaging method for delineating coronary arterial anomalies.

e0404 RELATIONSHIP BETWEEN INSULIN RESISTANCE AND

doi:10.1136/hrt.2010.208967.404

[1]Wei Ren-long, [1]Hasimu Buaijiaer, [1]Yuan Bin-bin, [2]Yang Zhi-jian. *[1]Department of Cardiology, Nanjing Benq Hospital, The Affiliated Hospital of Nanjing Medical University; [2]2department of Cardiology, The First Affiliated Hospital of Nanjing Medical University*

Objective To determine insulin resistance in patients with coronary heart disease and explore the relationship between insulin resistance and coronary atherosclerosis, cardiovascular risk factors.
Methods The study population consisted of 506 consecutive patients (376 male and 130 female) who underwent coronary angiography and laboratory measurements for suspected or known coronary heart disease. The severity of coronary atherosclerosis was defined by using Gensini's score system. High specific BA-ELISA assays for true insulin was used. Insulin resistance was assessed by HOMA index. 506 cases were allocated into four groups according to HOMA index. Analysis of variance, kruskal-wallis test and χ^2 test was employed to investigate the distribution of the clinical data in four groups according to HOMA index. Spearman's correlation analysis and multivariate stepwise linear regression analysis were employed to explore the relationship between HOMA index and Gensini's score, the cardiovascular risk factors.
Result One-way ANOVA and kruskal-wallis test indicated that age, triglyceride, apolipoprotein A, high density lipoprotein cholesterol, uric acid, BMI and Gensini's score differed among four groups according to HOMA index ($p<0.05$). Spearman's correlation analysis suggested that HOMA index was positively correlated with triglyceride, apolipoprotein B, uric acid, BMI and Gensini score but HOMA index was negatively correlated with apolipoprotein A and high density lipoprotein cholesterol. Multivariate stepwise linear regression analysis showed that BMI had the independent association with HOMA index ($r=0.090$, $p=0.05$).
Conclusion Insulin resistance existed in the patients with coronary heart disease. Insulin resistance was positively correlated with coronary atherosclerosis and was independently correlated with BMI in the patients with coronary heart disease.

e0405 EFFECT OF TELMISARTAN ON CARDIAC FUNCTION AND BRAIN NATRIURETIC PEPTIDE IN PATIENTS WITH CHRONIC HEART FAILURE

doi:10.1136/hrt.2010.208967.405

Bin Hu, Yujie Zhou, Dongmei Shi, Yingxin Zhao. *Beijing Anzhen Hospital*

Objective To evaluate telmasartan on cardiac function and brain natriuretic peptide (BNP) patients with chronic heart failure (CHF).
Methods We enrolled 120 patients with CHF, NYHAI–III, age 30—79 (61.25±10.18) years. All the patients were randomly assigned to 2 groups: standard therapy group (n=60, receiving ACEI, digoxin, diuretic, β-blcoks), telmasartan treatment group (n=60 receiving telmasartan in addition to the standard therapy). These patients were treated for 1 years, and plasma levels of BNP and left ventiricular ejection fraction (LVEF) were measured before and after treartments.
Results No significant differences in baseline characteristics were observed between the two groups. After treatment, BNP plasma levels both decreased and LVEF increased significantly in two groups. BNP plasma levels in telmasartan treatment group were lower than that in standard group and LVEF higher at 1 year follow-up.
Conclusion Telmasartan in addition to the standard therapy can improve the cardiac function and desease BNP plasma levels.

e0406 HIGH SENSITIVITY C-REACTIVE PROTEIN AND THE RISK OF STENT THROMBOSIS AND CARDIOVASCULAR EVENTS

doi:10.1136/hrt.2010.208967.406

Bin Hu, Yujie Zhou, Yuyang Liu, Dongmei Shi, Yingxin Zhao. *Department of Cardiology, Beijing Anzhen Hospital, Capital Medical University, Beijing, China*

Background C-reactive protein (CRP) is one of the acute phase proteins that increase during systemic inflammation. It's been suggested that testing CRP levels in the blood may be an additional way to assess cardiovascular disease risk. A more sensitive CRP test, called a highly sensitive C-reactive protein (hs-CRP) assay, is available to determine heart disease risk. However, and the association between CRP and stent thrombosis after drug-eluting stent implantation has not been defined.
Objective To investigate in a follow-up study whether high-sensitivity C-reactive protein (hs-CRP) predicts coronary heart disease (CHD) events and stent thrombosis in subjects undergone drug-eluting stent implantation.

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 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.

e0407 RESULTS OF SKELETONISED BIMA IN COMBINATION WITH GEA IN CABG

doi:10.1136/hrt.2010.208967.407

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 constraindications 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

doi:10.1136/hrt.2010.208967.408

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

doi:10.1136/hrt.2010.208967.409

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±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.

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

doi:10.1136/hrt.2010.208967.410

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.