

Methods This study was conducted with 66 coronary heart disease (CHD) patients and 22 healthy adults. The blood specimens were collected before using Low molecular weight heparin (LMWH) in ACS patients; and the blood specimens of Stable angina pectoris (SAP) patients and healthy adults were collected on the second morning with a fasting status. After centrifugal treatment, the plasma was saved in a Ultra-low temperature refrigerator. Coronary angiography was carried out on each one of the selected objects, and the quantity levels of total cholesterol (TC), triglyceride (TG), high density lipoprotein -cholesterol (HDL-C) and low density lipoprotein -cholesterol (LDL-C) was detected. The plasma TF and TFPI quantity was measured by ELISA.

Results The plasma TF antigen levels were higher in the Acute myocardial infarction (AMI) and Unstable angina pectoris (UAP) groups than in Stable angina pectoris (SAP) and control groups (161.08 ± 20.90 and 152.76 ± 20.66 pg/ml vs 99.72 ± 16.75 and 94.32 ± 12.93 pg/ml, $p < 0.05$), there was no significant difference between the AMI group and UAP group, SAP group and control group ($p > 0.05$). The plasma TFPI-1 antigen levels were higher in the AMI and UAP groups than in the SAP and control groups (32.05 ± 8.52 and 31.49 ± 10.61 ng/ml vs 19.93 ± 9.22 and 19.21 ± 9.60 ng/ml, $p < 0.05$). The plasma TFPI-2 antigen levels were higher in the AMI and UAP groups than in the SAP and control groups (4.56 ± 0.96 and 4.73 ± 1.04 ng/ml vs 2.43 ± 1.07 and 2.06 ± 0.64 ng/ml, $p < 0.05$).

Conclusions The plasma TF, TFPI-1, TFPI-2 antigen levels of ACS patients are higher than those of SAP patients and healthy adults, the result indicates ACS patients have an abnormally activity of coagulation system, the tissue factor pathway plays an important role in ACS patients, during our clinical work, we can reduce the incidence of coronary event through actively controlling plasma levels of tissue factor pathway in CHD patients; There were positive relationships between plasma TF, TFPI-1, TFPI-2 quantities and serum TC, LDL-C quantities, we can reduce the activity of tissue factor pathway through controlling the quantities of TC and LDL-C.

e0449 EFFECTS OF CHOLESTEROL-LOWERING THERAPY WITH ROSUVASTATIN CALCIUM TABLET ON CORONARY FLOW RESERVE IN PATIENTS WITH UNSTABLE ANGINA PECTORIS

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Objective To investigate the effects of cholesterol-lowering therapy with rosuvastatin calcium tablet on coronary flow reserve (CFR) patients with unstable angina pectoris (UAP) and hypercholesterolaemia.

Method 40 patients with UAP were randomly divided into rosuvastatin calcium tablet therapeutic group ($n=20$) and conventional therapeutic group ($n=20$). By using colour Doppler ultrasound the coronary flow reserve was measured in patients with UAP before and after 3 months cholesterol-lowering therapy.

Result After cholesterol-lowering therapy for 3 months the serum total cholesterol (TC), low density lipoprotein cholesterol (LDL-C), triglyceride (TG) decreased significantly $p < 0.01$. The coronary flow reserve was increased from 1.92 ± 0.41 to 2.97 ± 0.62 ($p < 0.01$). An inverse correlation was found not only between TC and CFR ($r = -0.44$, $p < 0.05$) but also between LDL-C and CFR ($r = 0.47$, $p < 0.05$).

Conclusion Cholesterol-lowering therapy with rosuvastatin calcium tablet may improve coronary flow reserve in patients with UAP and hypercholesterolaemia.

e0450 USEFULNESS OF THE NEUTROPHIL TO LYMPHOCYTE RATIO IN PREDICTING COMPLICATIONS IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

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Objective To investigate the relationship between the neutrophil to lymphocyte ratio and the morbidity of AMI complications.

Methods A total of 218 patients with ST segment elevated myocardial infarction whose blood routines were obtained at the admission were studied. All cases were divided into two groups according to the neutrophil to lymphocyte ratio of small to large size. Then we analysed the morbidity of AMI complications between the two groups.

Results The peak value of cardiac troponin I was higher in group B (32.5 ± 21.7 ng/ml and 56.8 ± 39.4 ng/ml respectively, $p < 0.01$). The incidences of arrhythmia (17.43% and 39.45%, $p < 0.01$), heart failure (22.94% and 51.38%, $p < 0.01$) and death (2.75% and 11.01%, $p < 0.05$) were also higher in group B. The multivariate stepwise regression analysis showed that the neutrophil to lymphocyte ratio and the morbidity of AMI complications had certain correlation.

Conclusions The neutrophil to lymphocyte ratio is a reliable indicator that can predict morbidity of AMI complications.

e0451 COMBINED USE OF OXIDISED LOW DENSITY LIPOPROTEIN AND C-REACTIVE PROTEIN FOR THE PREDICTION OF THE ACUTE CORONARY SYNDROME

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Background Serum CRP levels can predict future risks among patients with stable and unstable angina, but CRP was easily infected by many factors. Increased blood levels of ox-LDL could play a role in these circumstances. However, Combined detection of ox-LDL and CRP for the prediction of the acute coronary syndrome are not known.

Methods All of the patients received a coronary angiography owing to complaining of chest pain. The coronary artery disease diagnosis and stenosis severity was judged by two independent experts and the patients were accounting Gensini Score. The serum oxLDL and high sensitivity C-reactive protein (hs-CRP) levels were measured using a sandwich ELISA method. The MACEs of documented CAD patients were recorded in the one year follow-up period. SPSS software was chosen to analyse the influence of Oxidised Low Density Lipoprotein and C-reactive protein on the incidence of MACE.

Results (1) In acute myocardial infarction patients, ox-LDL and hs-CRP levels were significantly higher than in patients with unstable angina pectoris ($p < 0.01$) or stable angina pectoris patients ($p < 0.01$) or in controls ($p < 0.01$) (acute myocardial infarction, oxLDL 177.5 mmol/l, hs-CRP 21.4 mg/l; unstable angina pectoris, oxLDL 97.5 mmol/l, hs-CRP 6.7 mg/l; stable angina pectoris, oxLDL 62.3 mmol/l, hs-CRP 3.7 mg/l; Control, oxLDL 41.7 mmol/l, hs-CRP 2.7 mg/l). (2) A positive correlation between the serum levels of oxLDL and CRP with the severity in patients with coronary artery disease. (3) Combined use of Oxidised Low Density Lipoprotein and C-reactive protein can predict the severity in patients with acute coronary syndrome and the risk for major adverse cardiac event (MACE) in patients with acute coronary syndrome ($p < 0.005$).

Conclusions This study demonstrates that ox-LDL and hs-CRP levels show a significant positive correlation with the severity of

acute coronary syndromes. These findings support the hypothesis that ox-LDL and CRP may play a direct role in promoting the inflammatory component of atherosclerosis. The results suggested that combined use of Oxidised Low Density Lipoprotein and C-reactive protein can predict the acute coronary syndrome. The patient with higher level of ox-LDL and CRP suffer from the higher risk of MACE.

e0452 THE CORONARY ANOMALY: A BRIEF REPORTS OF FIVE CASES ANOMALOUS RIGHT CORONARY ARTERIES

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The most common an anomalous right coronary artery (RCA) is that originates from the aortic trunk of ascending artery or left sinus of Valsalva. Herein, we presented five extremely rare cases of anomalous RCA detected incidentally during routine coronary angiography. The first two cases are the anomalous RCA arising separately from the left main stem and proximal of left anterior descending artery (LAD), the third case is the anomalous artery originating from the distal of left circumflex coronary (LCX) artery, and the last two cases are the anomalous RCA deriving from the left sinus of Valsalva.

e0453 EFFECT OF BLOOD PRESSURE LEVELS ON PROGNOSIS IN PATIENTS OF NON ST SEGMENT ELEVATED ACUTE CORONARY SYNDROME WITHOUT PRIOR HISTORY OF HYPERTENSION

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Background Hypertension was an independent risk factor for affecting the prognosis of patients with ACS. But the effect of blood pressure levels at admission on prognosis in ACS patients without history of hypertension was not clear.

Methods The DESIRE-2(Drug-Eluting Stent Impact on Revascularization-2) was a single-center registry of coronary revascularization in our institution between July 1st 2003 and Sep 30th 2005. The study excluded the patients with prior history of hypertension and myocardial infarction, the patients admitted to hospital with ST-segment elevated myocardial infarction and stable coronary artery disease, and the patients without detailed document record. Major adverse cardiac and cerebral events (MACCE) were the combination endpoint of all-cause death, non-fatal myocardial infarction, non-fatal stroke and revascularization.

Results The study enrolled 982 patients and divided into three groups according to the first measurement of blood pressure levels at admission. The 207 patients with blood pressure less than 120/80 mm Hg defined as normal blood pressure group, 209 patients with blood pressure more than 140/90 mm Hg as hypertension group, other patients as prehypertension group. Among three groups, there was no difference in age, gender, prior history of diabetes mellitus, coronary revascularization and smoking, body mass index, left ventricular ejection fraction, the levels of glomerular filtration rate, haemoglobin, total cholesterol, low density lipoprotein cholesterol, fasting glucose, glycolated haemoglobin. Severity of coronary artery and utilisation ratio of aspirin, β blocker, calcium channel blocker were similar in three groups. More patients taken statins (67.7%, 55.3%, 58.3%, $p=0.013$) and ACEI (41.1%, 27.6%,

27.8%, $p=0.002$) during the hospitalisation in hypertension group. Duration of follow-up in the normal, prehypertension and hypertension group was 522 days, 539 days and 523 days respectively. The in-hospital MACCE rates was similar in three groups, but higher follow-up MACCE rates (11.0%, 5.7%, 9.5%, $p=0.035$) and follow-up mortality rates (2.6%, 0.8%, 0%, $p=0.026$) in hypertension group.

Conclusion The higher blood pressure levels at admission in non ST-segment elevated ACS patients without prior history of hypertension had poorer prognosis, but the history and clinical features were similar to patients with normal blood pressure.

e0454 THE IMPACT OF THERAPY ON 6-MONTHS HEALTH-RELATED QUALITY OF LIFE FOLLOWING ACUTE CORONARY SYNDROME

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Background Few studies have focused on the change of health-related quality of life following acute coronary syndrome, to compare of oral medical therapy, percutaneous coronary intervention and coronary artery bypass grafting. The objective of this study was to identify the changes in Health Related Quality of Life 6 months after discharge from hospital in patients with acute coronary syndrome, and to determine next therapy strategy.

Methods Health Related Quality of Life was assessed in 389 consecutive patients with acute coronary syndrome at the admission and 6 months after discharge which used the Seattle angina questionnaire. To identify the variables associated with the changes, logistic regression models were constructed for five summary dimensions of the Seattle angina questionnaire taking the changes in the score of the dimension as dependent variable.

Results Used the Seattle angina questionnaire scores, all three treatment groups experienced relief of angina at the 6-month visit compared with baseline. At 6 months, in physical limitation, angina stability, angina frequency, percutaneous coronary intervention group and coronary artery bypass grafting group had more significant improvements than Oral medical therapy group ($p<0.001$). When compared the firstly two group, Coronary artery bypass grafting group had more significant improvements than percutaneous coronary intervention group in angina frequency ($p=0.002$), treatment satisfaction ($p=0.001$) and quality life ($p=0.002$).

Conclusions In patients with acute coronary syndrome, percutaneous coronary intervention group and coronary artery bypass grafting group can provide greater gain in quality life than oral medical therapy, CABG can improve more quality life.

e0455 EFFECT ON LEFT VENTRICULAR FUNCTION AND SAFETY OF HIGH MAINTENANCE DOSE OF CLOPIDOGREL IN PATIENTS WITH ACUTE ANTERIOR MYOCARDIAL INFARCTION UNDERGOING SELECTIVE PCI

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Objective To assess the beneficial efficacy and safety of the high maintenance dose of clopidogrel in acute anterior myocardial infarction (AMI) patients undergoing selective percutaneous coronary intervention (PCI).

Methods 25 patients were enrolled into this study. These cases were randomly divided into the high maintenance dose group ($n=26$,