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 ($n=26$,

14 males, 150 mg clopidogrel per day) and the control group (n=26, 15 males, 75 mg clopidogrel per day). OCA and TIMI Myocardial perfusion grading (TMPG) were used to analyse the lesion and reperfusion of the culprit vessel and myocardium. Record the information of patients in-hospital, in the 1 month and 6 months including the level of BNP, left ventricular ejection fraction (LVEF), the left ventricular peak ejection rate (LPER), the left ventricular peak filling rate (LPFR), the left ventricular time to peak ejection rate (LTPER) and left ventricular time to peak filling rate (LTPFR).

Result 1. The CTFC of the high maintenance dose group after PCI was smaller than the standard dose group. The percentage of TMPG 3 grade was higher in the high maintenance dose group. 2. The left ventricular peak ejection rate (LPER), the left peak filling rate (LPFR) 6 months after PCI in the high maintenance dose group was higher than the control group. The left ventricular time to peak ejection rate (LTPER), left ventricular time to peak filling rate (LTPFR) 1 month after PCI in the high maintenance were lower than the control group. 3. There were less acute and subacute thrombosis cases in the high maintenance dose group than the standard dose group. There was no significant difference in haemorrhage events between two groups.

Conclusion The high maintenance dose clopidogrel can improve cardiac function. There is potential benefit in increasing coronary blood flow and improving myocardium perfusion. High maintenance dose clopidogrel decreases the acute and subacute thrombosis but do not increase the haemorrhage events.

e0456 RELATIONSHIP BETWEEN HYPOKALAEMIA AT THE EARLY STAGE OF ACUTE MYOCARDIAL INFARCTION AND MALIGNANT VENTRICULAR ARRHYTHMIA

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Objective To investigate the relationship between hypokalaemia at the early stage of acute myocardial infarction (AMI) and malignant ventricular arrhythmia (MVA) as well as the features of hypokalaemia.

Methods Total of 302 patients were involved in this study and conformed to the following conditions: getting AMI primarily, onset was within 24 h, accepted serum potassium test and Holter monitoring on admission, didn't use diuretics before, hyperthyroidism, diabetes, vomiting or diarrhoea resulted from gastrointestinal diseases. Relevant data including types of AMI, namely STEMI or NSTEMI; infarct sites of STEMI; time interval from onset of AMI to admission; whether or not hypokalaemia (serum potassium ≤ 3.5 mmol/l) and MVA were recorded. The relationships between hypokalaemia and MVA, the time interval and hypokalaemia, types of AMI and hypokalaemia, infarct sites and hypokalaemia were analysed. SPSS13.0 was used for statistical analysis. The categorical data was processed with chi-square test and p values below 0.05 were considered significant.

Results The incidence of hypokalaemia for 24 patients within 3h from onset of AMI to admission was 37.5%. The incidence of MVA between the group with and without hypokalaemia had significant difference (10.47% vs 3.36%, $p < 0.05$). The incidence of hypokalaemia between the group within 3h and group within 3h to 24h of time interval from onset of AMI to admission had significant difference (37.5% vs 15.47%, $p < 0.05$). There was no significant difference in incidence of hypokalaemia between the group of STEMI and NSTEMI (20.35% vs 12.68%, $p > 0.05$). There was no significant difference in incidence of hypokalaemia between groups with anterior wall AMI and non-anterior wall AMI (25.88% vs 18.81%, $p > 0.05$).

Conclusion At the early stage of AMI, hypokalaemia is often present. MVA was close associated with hypokalaemia at the early stage of AMI, which indicated that hypokalaemia was a cause of death.

e0457 ESTABLISHMENT OF CONTRAST INDUCED NEPHROPATHY MODEL IN RATS INTERVENTION

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Objectives The purpose of this study was to establish a rat model of CIN and to evaluate its efficacy.

Methods Totally 24 SD rats were randomly allocated into experimental group (group A, n=12) and control group (group B, n=12). After dehydration for three days, rats in group A were given intravenous MDDS, while rats in group B were given intravenous normal saline (NS). Then, all rats got normal water-drinking to the end of study. Renal ultrasonic examination was performed to observe the morphologic changes, diameters of renal artery and blood flow in renal artery. Blood samples were taken to measure the level of serum creatinine. The tissue of kidney were incised for microscope and electron microscope study.

Results The dimensions of the two groups before and after dehydration were not different. It gradually enlarged after CM injection. These changes were the most obvious at 6 and 12 h, which did not recover at 24 h. The PSV, EDV, S/D and VTI were lowest at 6 h and then recover to normal level at 24 h. RI was increased after CM injection, the lowest occurred at 6 h, and recovered to normal level at 24 h. Serum creatinine was significantly elevated after dehydration, the highest level occurred at 12 h and then began to recover at 24 h. Microscope examination to renal sample at 12 h found patch disappearance of tubular structure, widely congestion at medullary area. No pathological glomerular changes were found under microscope. Electron microscope examination found desquamation, sparseness of microvillous of tubular endothelium, membrane confusion, disappearance, swelling, fragmentation of the MIT, with obstructed tubular lumen and basal membrane swelling.

Conclusion Combined with dehydration, intravenous injection of contrast lead to obvious acute kidney injury, with the changes of kidney tissue pathology, haemodynamics and kidney functions which are similar to the characteristics of CIN in human beings.

e0458 COMPARATIVE STUDY OF ASPIRIN AND CLOPIDOGREL IN HIGH RISK ACS

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Background It is not reasonable to administrate the same dosage of antiplatelet medicine to all patients with ACS regardless of patients' height, weight, metabolism and effectiveness of those medicines. And thromboelastography (TEG) has provided a relatively stable, convenient, duplicable method for testing activity of platelet in recent years.

Objective To investigate the inhibition levels and characteristics of frequency distributions of platelet aggregation after antiplatelet therapy with aspirin and clopidogrel in Chinese patients with ACS undergoing PCI.

Methods High risk Patients with ACS received PCI after administration of loading dosage of clopidogrel (600 mg) and aspirin (300 mg) subsequence with maintenance dose of clopidogrel (75 mg per day) and aspirin (100 mg per day) for one year. Blood sample was gotten 24–48 h after PCI for the test of TEG-mapping in order to