Results There was no difference between the two groups in clinical characteristic, while the interval time of onset to reperfusion in LVA group was longer and the incidence of Killip ≥3 grade was higher than those in the non-LVA group (<p<0.05, respectively). The peak value of plasma IL-8 in LVA was significant higher and the peak time of plasma cTnI was much earlier than those in the non-LVA group (<p<0.05, respectively). The peak values of plasma IL-8 in LVA group with LVEDP≥18 mm Hg were significant higher than those in non-LVA with LVEDP (p<0.05). At 6th month post-AMI, the value of LVEF, LVESVI, LVEDVI, WM5 and LVEDP in non-LVA group were much better than those in LVA group. The values of LVEF, LVESVI, LVEDVI, WM5 and LVEDP in non-LVA group at 6th month post-AMI were significantly improved as compared with those at the first time after PCI but the values of LVEDV, WM5, LVEDP were improved in the LVA group. Within the 6th month follow-up, the incidences of angina post-AMI, heart failure of NYHA =3 grade and mortality in LVA group were significantly higher than those in the non-LVA group (<p<0.05, respectively).

Conclusions The value of plasma IL-8 is significantly increased and correlated closely with left ventricular remodelling status and haemodynamic change in patients with LVA after AMI. It is indicated that the over activity of immune inflammatory medium IL-8 involves in the process of LVA formation and has an important clinic significance in early diagnosis and appreciation of LVA post AMI.

Objective To investigate the change of brain natriuretic peptide (BNP) in plasma and the relationships with the left ventricular remodelling status and homodynamic change in patients with LVA after AMI. It is indicated that the over activity of immune inflammatory medium IL-8 involves in the process of LVA formation and has an important clinic significance in early diagnosis and appreciation of LVA post AMI.

Conclusions The value of plasma BNP in the AMI patients with LVA was higher than that with non-LVA, and significantly correlated with left ventricular remodelling status and homodynamic change. It is indicated that the over secretion of BNP is involved in the left ventricular remodelling and the process of LVA formation.

Objective Anisodamine is a M-cholinergic receptor inhibitor that plays improvement effectiveness on the microcirculative perfusion. Our previous study had ever shown reversing effect on no-reflow phenomenon (NRP) in the miniswine models with AMI. The purpose of this study was continually to explore the effect of preventive intracoronary administration of anisodamine on myocardial microcirculation in York swines models with AMI by TIMI frame count, TIMI myocardial perfusion grade and haemodynamic parameters.

Methods 18 York swines (25–35 kg, 3–4 months old) were divided into saline group (n=9) and Anisodamine group (n=9). Immediately after 2 ml saline and 2 mg anisodamine were injected into LAD in the two groups respectively, PMBS were injected into the coronary artery by three times with 5 min interval, then incidence of NRP was recognised by TIMI frame count and TIMI myocardial perfusion grade. TnI and CK-MB were measured before PMBS injection and at 5, 60, 120, 180 min after PMBS injection. MFP and PCWP were measured by Swan-Ganz catheter. ECG was recorded before and immediately after PMBS injection and ST segment changes were calculated. The changes of FR, QRS and QT duration were also compared.

Results 16 of 18 York swines survived in the whole procedure. NRP was found in all of the eight swines in saline group while four of eight swines in anisodamine group. MFP (mean perfusion pressure) was slightly increased by 4.76% only in anisodamine group (>p<0.05), while MFP were significantly decreased by 25.23%, 23.63%, 19.66 % immediately, 3 min and 1 h after NRP in saline group (118.5±16.2 vs 88.6±12.5, 118.5±16.2 vs 90.5±14.3, 118.5±16.2 vs 95.2±16.3 mm Hg, p<0.05), respectively, and PCWP, values of ST segment and myocardial Infarct size in anisodamine group were much lower than that in saline group significantly (>p<0.05).

Conclusion Preventive intracoronary administration of anisodamine could improve AMI survival rate with NFR by maintaining effective myocardial microcirculation status and raising coronary perfusion pressure as well decreasing the size of myocardial infarction.
group (CG, n=52). Tirofiban was only administrated in the tirofiban group. Before the CAG, enough clopidogrel, aspirin and heparin be used in both groups. The MACE and the haemorrhage events were collected in each group during in-hospital. The lesion and repercussion of the IRA and myocardial were analyses by QCA and TIMP. The platelet aggregation rate were recorded All patients received UCG 1 week and 24 weeks after PCI to evaluate the heart function.

Methods

14 York pigs were included in this study. After the AMI-ADHF models were established, pigs were randmized into saline group and rhBNP group. Coronary pressure (Pc), the average peak rate of renal artery (APVra) was recorded, determination of CFR and slow-reflow phenomenon was fewer (p<0.05) in TG after PCI. The percentage of TMPG beyond 2 grade was higher in TG, p<0.05. The value of LVEF 1 week after PCI in TG was higher than that in CG (p<0.01). The platelet aggregation rate in TG was lower after tirofiban administration for 0.25, 0.5, 2, 6 and 12 h. There was no significant difference in haemorrhage events between the two groups. There was a lower incidence of MACE in TG compared with that in CG during in-hospital and follow up.

Conclusion Intrasavenous administration of tirofiban can inhibit the platelet aggregation, improve the coronary flow of IRA, decrease the incidence of NRP in AMI patients performed PCI, which in turn will improve the heart function and decrease the incidence of MACE. Tirofiban can make more IRA patent before PCI, but do not increase the haemorrhage events.

**e0656** THE EFFECT OF RECOMBINANT HUMAN B-TYPE NATRIURETIC PEPTIDE ON CORONARY CIRCULATION AND RENAL HAEMODYNAMICS IN YORK PIGS MODEL OF ACUTE MYOCARDIAL INFARCTION WITH HEART FAILURE

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Objective To evaluate the impact of intravenous administration of rhBNP on coronary and renal artery haemodynamics in York pigs model of AMI-ADHE

Methods 14 York pigs were included in this study. After the AMI-ADHF models were established, pigs were randmized into saline group and rhBNP group. Coronary pressure (Pc), the average peak velocity (APV), coronary vascular resistance (CR), coronary flow reserve (CFR) and coronary diameter were recorded simultaneously at baseline, instantly after the model established, 60 min after continuous infusion of 0.01 μg·kg⁻¹·min⁻¹ rhBNP and the time point of LVEDP<12 mm Hg. The blood flow of the coronary were measured at rest and maximal hyperaemia. Renal angiography was performed by 4F catheter and quantitative measurement of diameter was recorded by the computer assisting system. The average peak rate of renal artery (APVₐ) was recorded, determination of quantitative angiography of renal artery diameter, renal vascular resistance. LVEDP and LVEF was measured.

Results 1. Coronary artery diameter increased after rhBNP administration. APV and CBF were significantly increased and CR decreased after rhBNP administration. CFR was significant rebound after continuous infusion of 0.01 μg·kg⁻¹·min⁻¹ rhBNP for 30 min. APV and CBF significantly increased and CR significantly decreased at the stage of infusion 0.010 μg·kg⁻¹·min⁻¹ rhBNP in rhBNP Group. 2. Renal artery pressure was significantly lower after rhBNP administration. RhBNP exerts renal vasodilator effects in a dose related relationship. RBF increased gradually after administration of rhBNP and was significantly higher than control group. RVR decreased after administration of rhBNP. LVEF was lower than baseline after the models established and tended to increase after administration of rhBNP.

Conclusion It could increase blood flow of injury coronary artery, improve CFR and improve the coronary and renal haemodynamics after intravenous administration of rhBNP in pigs with AMI-ADHE.

**e0657** THE PERIOPERATION EFFECTS OF RECOMBINANT HUMAN B-TYPE NATRIURETIC PEPTIDE FOR HEART FAILURE PATIENTS WITH PRIMARY PERCUTANEOUS CORONARY INTERVENTION

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Objective To study the efficacy and safety of recombinant human B-type natriuretic peptide (rhBNP) in AMI-ADHF patients undergoing PCI, especially changes in renal function and the impact of short-term outcome during BNP treatment.

Methods 87 consecutive patients with AMI-ADHF enrolled in the study. All patients were randomly assigned to the rhBNP group and control group. rhBNP was given at 1.5 μg·kg⁻¹·min⁻¹ intravenously and then infused intravenously (0.0075–0.030 μg·kg⁻¹·min⁻¹). 0.9% Saline was used intravenously in control group as control. Clinical symptoms and killip grade were recorded. Plasma BNP levels were measured before and after stopping the drug 6 h, 14 days, 30 days. LVEFD and LVEF was measured. Serum creatinine (Scr) level was measured before and after administered the medication 24 h, 48 h, 72 h, 7 days and 14 days using simplified MDRD equation to calculate estimated glomerular filtration rate. Recording the major adverse cardiac events occurrence within 30 days.

Results rhBNP group has a lower platelet aggregation rate in the control group. The plasma BNP levels significantly lower than before treatment at different time point in the two groups. The LVEF was significantly higher in treatment group compared with baseline levels after treatment 24 h, while LVEDD significantly decreased even after discontinuation the treatments, which remain so when the 30 days. The LVEF and LVEDD improvements in rhBNP group were significantly better than in the control group after treatment 24 h, 14 days. At day 7 after PCI, the SCR had lowered to the baseline level in the rhBNP group. The estimated glomerular filtration rate after PCI was higher in the rhBNP group than in the control group. The occurrence of CIN was significantly lower in the rhBNP group than in the control group. The MACE event of 30d in rhBNP group was significantly lower than the control group.

Conclusion rhBNP can promptly and effectively improve the heart function, reduce the incidence of major adverse cardiac events rate in acute myocardial infarction with heart failure patients, which also had a renal function protective effect in patients with and decreased incidence on CIN.

**e0658** ESTABLISHMENT OF YORK PIG MODEL OF ACUTE MYOCARDIAL INFARCTION WITH ACUTE DECOMPENSATED HEART FAILURE BY CORONARY OCCLUSION WITH BALLOON AND INJECTING OF MICROEMBOLUS

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Objective To evaluate the method of yorkpig model of AMI-ADHE by coronary occlusion with balloon and injecting of microembolus.