GW26-e3856
Danhong Injection (A Traditional Chinese Patent Medicine) for Acute Myocardial Infarction: A Systematic Review and Meta-analysis
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OBJECTIVES Acute myocardial infarction (AMI) is a critical global health problem. Therefore, new medicines and advanced treatments with less side-effect or complication are needed. Previous studies suggested that Danhong injection (DHI) might be an effective medicine in AMI treatment. However, its efficacy and safety have not yet been systematically evaluated. So we aimed to systematically assess the efficacy and safety of DHI for AMI patients.

METHODS We searched several electrical databases and hand-searched several Chinese medical journals. Randomized controlled trials (RCTs) comparing DHI plus conventional western medicine with conventional western medicine plus placebo and RCTs comparing DHI plus conventional western medicine with conventional western medicine were retrieved. Study screening, data extraction, quality assessment and data analysis were conducted in accordance with the Cochrane standards.

RESULTS 13 RCTs enrolling 979 patients were included. Danhong injection could significantly reduce the risk of mortality, recurrent angina, arrhythmia, and heart failure. In addition, Danhong injection was associated with improvement of left ventricular ejection fraction (LVEF) and reperfusion. However, the safety of DHI remained unknown for limited data.

CONCLUSIONS Danhong injection might be a potentially efficacious treatment for AMI patients. Nevertheless, the safety of Danhong injection remained uncertain for limited information. Due to the overall quality of all included studies is generally low, more high quality RCTs are expected to validate the efficacy and safety of DHI for AMI patients.

GW26-e3533
Comparison Long-term Outcomes of Conservative vs PCI Treatment in NSTE-ACS Patients with Intermediate Coronary Stenosis
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OBJECTIVES (1) To evaluate the clinical outcomes of patients with intermediate coronary lesions, comparing those who underwent PCI for the intermediate lesion to those who did not (MT); (2) To determine the predictive factors of major adverse clinical cardiac events (MACE) in follow-ups.

METHODS A total of 222 patients (mean age 63 ± 10 years), with non-ST segment elevation acute coronary syndrome (UA/NSTEMI) who had at least one intermediate coronary lesions (diameter stenosis rate 40-70%) were included in the study. PCI of an intermediate lesion was performed in a group of 110 patients (PCI group). And the other 112 patients were treated with medical treatment by guideline (MT group). In all patients serious coronary lesions (diameter stenosis rate ≥70%) were treated with PCI. MACE (cardiac death, nonfatal myocardial infarction, a need for target lesion revascularization) and the presence of angina were evaluated in follow-ups.

RESULTS There was no difference regarding the mean percent diameter stenosis (54.7±9.3% and 54.6±6.8%, P < 0.01) between the two groups. The clinical features between two groups are similar. Although With the similar secondary prevention of coronary heart disease, quitting smoking, regular exercise, having clopidogrel and statins using, and dyslipidemia controlling were higher in the PCI group compared with MT group (P < 0.05). At a mean follow - up of 30±11 months, the total occurrence of MACE and presence of angina were similar between groups. PCI group with moderate TIMI risk has more incidence of TLR than MT group. TIMI risk score is a predictive factor of MACE (hazard ratio 1.38, 95% CI 1.05-1.800, P < 0.05).

CONCLUSIONS (1) In patients with UA/NSTMI, PCI for intermediate coronary lesions did not reduce the occurrence of angina and MACE, especially in those with moderate TIMI risk. (2) TIMI score is a very powerful predictive factor for long prognosis in UA/NSTMI patients. (3) The secondary prevention of coronary heart disease and medical treatments should be emphasized.

GW26-e1376
The change of plasma B type natriuretic peptide level in patients with acute myocardial infarction and its meaning.
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OBJECTIVES To observe the change of plasma BNP level, and the relationship between it and reconstruction and prognosis in patients with acute myocardial infarction undergoing early intervention treatment.

METHODS Choose 114 cases of hospitalized patients with initial AMI, all underwent emergency percutaneous coronary intervention (PCI), infarction related artery (IRA) opened in 69 cases (opened group), did not open in 43 cases (not opened group). On admission to detect myocardial injury markers [CK, CK - MB, troponin I (cTnI)], to measure left ventricular ejection fraction (LVEF), left ventricular end-diastolic volume index (LVEDVI) on the seventh day of admission by using ultrasound. To measure the level of BNP in plasma on admission, 24 h after admission (the seventh day of admission (marked them as BNPI BNP2 BNP3 respectively); Postoperative follow-up of 2 years, recording the occurrence of major adverse cardiovascular events (MACE).

RESULTS Comparing serum level of CK, CK - MB, cTnI, TG, LDL - C in two groups on admission, they all have no significant differences (P > 0.05);7 days after admission, comparing opened group with not opened group, the level of LVEF increased significantly, but LVEDVI reduced (The former P < 0.05, the latter P > 0.05); BNPI has no statistical significant differences between the two groups, BNP2 increased significantly more than BNPI, BNP3 (P < 0.05), the level of BNP2, BNP3 increased significantly in opened group than not opened group(P < 0.05). Three time points detection of BNP level and LVEDVI and CK, CK - MB, cTnI there were positive correlation (P < 0.01). LVEF is negatively related (P < 0.01). the occurrence of MACE in opened group have 10 cases(14.5%), not opened group have 16 cases(37.2%),(P <0.05); BNP2 predicted MACE within 2 years (cardiac death, new or worsening heart failure, nonfatal myocardial infarction) in the area under the ROC curve was 0.791 (p < 0.05), the boundary value of 332 ng/l, sensitivity was 76.9%, specificity was 73.3%.

CONCLUSIONS Plasma BNP levels of AMI patients after 24 h can predict MACE, help to understand LVRM earlier, to prevent or slow down the occurrence and development of heart failure after AMI.

GW26-e1021
Study of serum ferritin levels in patients of Acute Coronary Syndrome
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OBJECTIVES To observe the level of SF in patients with Acute Coronary Syndrome(ACS), and its relation with the severity of coronary artery lesions, and explore the significance of SF in ACS.

METHODS Collect 126 patients with ACS, and 41 patients confirmed with cardiac neurosis as control group. The ACS group constituted with 52 cases of patients with UA, 31 cases of patients with NSTEMI and 43 cases of patients with STEMI. All patients took blood line for routine blood, cTnI, CK-MB, BNP and other indicators. SF, lipid, renal function, and biochemical examination undertook the next day on
stomach-empty. Acriflavine esterification luminescence has been used as the method to SF examination. All patients had coronary angiography examination, and according to the results of coronary angiography we calculate Gensini score as evaluation index of the severity of coronary artery lesions. SPSS 19.0 statistical software was used for analysis.

RESULTS 1. SF levels in patients with ACS (221.51± 86.73 ng/ml) is significantly higher than the control group (119.00 ±92.74 ng/ml), a significant difference (P < 0.05). In various clinical subgroups of ACS, SF in UA group, the NSTEMI group and STEMI group showed a trend of increasing and STEMI group (253.14 ± 93.89 ng/ml) the UA group (188.28 ±61.84 ng/ml) increases, the significant difference (P < 0.008). NSTEMI group with no statistical difference between UA and STEMI group (P > 0.008).2. Pearson correlation analysis showed that SF and Gensini score into positive correlation(r=0.331, P<0.05).4. Whether ACS as the dependent variable, in univariate Logistic regression analysis showed that hypertension, hs-CRP, LDL - C, HDL - C, TG, BNP, SF is a risk factor for ACS (P < 0.05). In multivariable Logistic regression analysis showed that hypertension (OR = 3.193), hs-CRP (OR = 1.432), BNP (OR = 1.026), SF(OR=1.013) are found to be independently associated with ACS(P < 0.05). 4. HS-CRP is not normal, it was performed after logarithmic conversion detection normally distributed. To SF as the dependent variable, the introduction of age, gender (male), hypertension, diabetes, smoking, TC, TG, HDL - C, LDL - C, In(hs-CRP) as the independent variables. In multiple linear stepwise regression analysis, according to the results In (hs-CRP) into the regression equation, ln (hs - CRP) (beta = 2.583), P < 0.05 associated with SF.

CONCLUSIONS 1. SF levels in AMI increased significantly. SF levels were positively correlated with Gensini, suggesting SF may reflect the severity of coronary artery lesions. 2. SF can be used as a risk factor for the prediction of ACS. 3. SF levels in ACS were positively related to the hs-CRP, suggesting that SF may be associated with the inflammatory reaction of ACS.

GW26-e4762
C-reactive protein level and Prognosis of patients with Acute Myocardial Infarction complicated with Cardiac Shock
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OBJECTIVES Inflammation plays an important role in the pathophysiology of acute ST-segment elevation myocardial infarction (STEMI). Intra-aortic balloon pump (IABP) plays a pivotal role in the treatment of cardiogenic shock (CS) complicating STEMI. However, the influence of inflammatory response on the patients with STEMI complicating CS has not been well evaluated. We sought to assess the effects of C-reactive protein (CRP) levels in patients with STEMI complicated by CS undergoing IABP and percutaneous coronary intervention (PCI).

METHODS This was a prospective study and a total of 51 patients with STEMI complicated CS receiving IABP support and emergency PCI were enrolled. All patients were divided into 2 groups by happened major adverse cardiovascular events (MACE) in-hospital: MACE group and NO-MACE group. To compare MACE group with NO-MACE group patients in aspects: clinical setting, left ventricular function biochemical indicator, CRP, BNP and duration of IABP support. Logistic multi-factors regression analysis was performed.

RESULTS The MACE group had higher CRP levels (31.94±16.54 mmol/L VS 16.90±12.67 mmol/L P=0.012); The MACE group had longer duration of IABP support (113.78±90.97hours VS 36.5±17.90hours P=0.003). The results of logistic regression analysis indicated CRP (OR 1.370 95% CI 0.937-2.004 P=0.017) was independent risk factor of patients with STEMI complicated CS.

CONCLUSIONS CRP is an independent risk factor of patients with acute myocardial infarction complicated cardiogenic shock. It prognosticated the raise risk of major adverse cardiovascular events in-hospital that the heighten CRP levels for patients with STEMI complicated CS.

GW26-e4815
Effect of homocysteine for old women with acute coronary syndrome
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OBJECTIVES To analyze the correlation between hyperhomocysteinemia and women with acute coronary syndrome(ACS).

METHODS 142 women with ACS were selected in this study. Among 125 women with non-coronary heart disease were considered control groups. Body mass index, glycosylated hemoglobin(HbA1C), Blood pressure, total cholesterol, triglyceride, low density lipoprotein cholesterol, high density lipoprotein cholesterol and homocysteine levels were measured.

RESULTS Homocysteinemial level in women patients with ACS (24.3±4.72umol/L) were significantly higher than that in control group (15.1±3.2 μmol/L) (P<0.05). Logistic analysis revealed LDL-C 5.395 (95%CI 1.849~13.484), HbA1C 3.617 (95%CI 1.321~11.060) and homocysteine 2.176 (95%CI 1.244~3.336) is closely related with women ACS.

CONCLUSIONS LDL-C, HbA1C and hyperhomocysteine is an independent risk factor of women ACS.

GW26-e5337
Comparison Long-term Outcomes of Conservative vs PCI Stratagy in Unstable Angina Patients with Severe Coronary Lesions
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OBJECTIVES To evaluate the clinical outcomes of patients with unstable angina and severe coronary lesions, comparing those who underwent interventional treatment for the severe lesion with those who did not (conservative treatment).

METHODS In this multicentre pseudo-randomized trial, a total of 159 patients with unstable angina who had at least one severe coronary lesions (diameter stenosis rate>75% showed by the coro-ary angiographic) were assigned to receive an intervention (n=80) or a conservative strategy (n=79) group. In each group, the standard and proper medical treatments were available. The primary end-points: MACCE (cardiac death, nonfatal myocardial infarction and hospital readmission rate) and the secondary endpoints (Presence of angina, revascularization and treatment costs) were evaluated in follow-ups.

RESULTS At 2-year follow-up, rates of death or non-fatal myocardial infarction (OR 1.54 95%CI 0.25-9.35) were similar. However, at a median of 24 months' follow-up, 15(8.75%) patients with intervention treatment and 29(36.71) with conservative treatment made the hospital readmission(OR 2.51,95%CI 1.23-5.13, P=0.01), with a more benefits for the hospital readmission in the interventional group, especially at the 3-months' follow-up (OR 1.34,95%CI 1.45-8.61, P=0.005). The difference disappear at the end of 24-months' follow-up, But the costs in the interventional group were far more the other.

CONCLUSIONS In patients with unstable angina and severe coronary lesions, a routine interventional strategy is preferable to a conserva-tive strategy, mainly because of the reduction of the hospital readmission rates and halving of the severe angina, but no reduction of the cardiac death and nonfatal myocardial infarction and increased treatments costs.