

and epinephrine used together versus epinephrine alone in out-of-hospital cardiac arrest (CA).

Methods We searched MEDLINE for randomised trials comparing the efficacy of vasopressin and epinephrine versus epinephrine alone in adults who experienced out-of-hospital CA. The primary outcome was the return of spontaneous circulation (ROSC) and the survival rate on admission and discharge. We also analysed ROSC in subgroups of patients presenting with different arrest rhythms.

Results In total, 206 articles were enrolled and five studies were included. No differences were found between these groups (vasopressin and epinephrine group vs. epinephrine alone group), except for the survival rate at 24 h (OR 2.99, 95% CI 1.43, 6.28). No evidence supports the conclusion that vasopressin combined with epinephrine is better than epinephrine alone for ROSC, even amongst subgroups of patients.

Conclusion This systematic review of the efficacy of vasopressin and epinephrine found that its combined use is better for 24 h survival rate but only in one study which included 122 patients. Further investigation will be needed to support the use of this combination for out-of-hospital CA management.

e0667 THE ROLE OF RANTES FACTOR IN THE STUDY OF HYPERGLYCEMIA AND CORONARY HEART DISEASE

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Objective To study the correlative relationship of activated T cell chemokine (RANTES) and high blood glucose and coronary heart disease, and investigate the role of RANTES factor in hyperglycemia and coronary heart disease.

Methods The 360 patients were divided into Coronary Heart Disease (CHD) group (n=300) and control group (n=60) according to the Coronary Angiography (CAG), and CHD group were divided into acute coronary syndrome (ACS) group (n=180) and stable angina pectoris (SAP) group (n=120). The severity and extent of coronary lesions was analysed by CAG and typified by means of Gensini coronary score system. Blood samples of ACS patients were taken immediately on admission, and the 12 h fasting blood samples of other patients were taken in the day after admission, all patients were taken 3 ml blood from elbow vein and put into anticoagulant tube. Then all samples were centrifuged for 10 min with the speed of 3000 r/min, and the separated serum was frozen at -80°C refrigerator waiting for test. Linked immunosorbent assay was used to measure the RANTES concentration. We expressed the level of RANTES and other biochemical indicators in all groups with, and compare the differences between the three groups using AVONA (analysis of variance). And then, q test was used for pairwise comparison; multiple regression equation was used for analysing the relationships of RANTES chemokine, blood glucose and coronary artery disease; Spearman's correlation coefficient was used for analysing the correlation of RANTES chemokine and blood glucose.

Results Significantly increasing of RANTES concentration was observed in ACS group (222.57 ± 28.55 pg/ml) compared to the SAP group (199.77 ± 22.20 pg/ml) and the control group (162.06 ± 13.15 pg/ml) ($p < 0.05$). Positive correlation were seen between RANTE chemokines, fasting glucose, LDL-C and the Gensini score of coronary artery lesions ($p < 0.05$). Hyperglycemia was positively correlated with RANTES concentration ($r = 0.69$, $p < 0.05$).

Conclusions Hyperglycemia plays an important role in occurrence and prognosis of acute coronary syndrome (ACS), and blood glucose was positively correlated with RANTES concentration. The increasing of RANTES levels consistent with the increasing of the risk of type 2 diabetes, it plays an important role in various

complications of diabetes, and blood sugar, RANTES associated with coronary artery disease. RANTES factor may play an important role in high blood sugar and coronary artery inflammation complications, especially for the stability of ACS vulnerable plaque. The mechanism is that high glucose and its metabolites end products (AGE) may play an important role in the incidence of coronary heart disease, especially in ACS by the NF- κ B/RANTES/MMP-9 ways.

e0668 STUDY ON THE ANTI-OXIDATIVE FUNCTION OF KOREAN MONKSHOOD ROOT POLYSACCHARIDE

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Objective Exploring the anti-oxidative function of traditional Chinese herbal-Korean Monkshood Root polysaccharide.

Methods Using GE Corporation's KTA explore FPLC purification system, we separate and purify the Korean Monkshood Root polysaccharide. After establishing the anti-oxidation experimental model, experimental study of elimination of the ultra oxygen anion and DPPH free radical are carried out.

Results As the active ingredient, Korean Monkshood Root polysaccharides can remove O_2^- and DPPH free radical, which shows that Korean Monkshood Root polysaccharide can eliminate free radical and has the function of anti-oxidation.

Conclusions Korean Monkshood Root polysaccharides can be used as a natural anti-oxidation for human cardiovascular disease treatment and preventive health care.

Related Subjects: Kidney and Cardiovascular Disease

e0669 ERYTHROPOIETIN COMBINED WITH L-CARNITINE TREATMENT OF RENAL ANAEMIA ON ENDOTHELIN AND LEFT VENTRICULAR REMODELLING

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Objective To observe the effects of Xuezhikang on blood lipids and the levels of plasma endothelins, thromboxane B_2 , 6-keto-PGF $_{1\alpha}$ in patients with primary hyperlipidaemia.

Methods 120 patients with primary hyperlipidaemia were enrolled in this study, 82 males and 38 females, age 36–74 years old, average ages (55 ± 9) years old. 12 weeks after taking Xuezhikang, the clinical effect and the effect on the level of plasma endothelins, thromboxane B_2 , 6-Keto-PGF $_{1\alpha}$ were compared before and after the treatment, and the relation between blood lipids and ratio of plasma endothelins, thromboxane B_2 to 6-Keto-PGF $_{1\alpha}$ were analysed.

Results 12 weeks after treatment, the level of TG, cholesterol (TC), low density lipoprotein cholesterol (LDL-C) and apoB $_{100}$ decreased sharply ($p < 0.05 - 0.001$); the level of serum high density lipoprotein cholesterol (HDL-C) elevated ($p < 0.05$); ratio of plasma endothelins decreased sharply ($p < 0.001$); rate value of thromboxane B_2 to 6-Keto-PGF $_{1\alpha}$ before treatment was higher than health people but lower after treatment ($p < 0.01$). There were positive correlations between the decreased TC, TG, LDL-C and decreased ET-1, the ratio TXB $_2$ /6-keto-PGF $_{1\alpha}$ ($r = 0.832 - 0.963$, $p < 0.01 - 0.001$). The same positive correlation was found between the decreased ET-1 and the ratio of TXB $_2$ /6-keto-PGF $_{1\alpha}$ ($r = 0.987$, $p < 0.001$).

Conclusions Plasma endothelins level and ratio of thromboxane B₂ to 6-Keto-PGF_{1a} increased in the patients with primary hyperlipidaemia. Xuezhikang not only effectively adjusted blood lipids level but also reduced plasma endothelins level and ratio of thromboxane B₂ to 6-Keto-PGF_{1a}.

e0670 THE POTENTIAL ROLE OF SERUM CYSTATIN C FOR RENAL FUNCTION EVALUATION OF VERY OLD PATIENTS WITH CHRONIC KIDNEY DISEASE

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Objective To evaluate the potential role of Serum Cystatin C (Scys) for glomerular filtration rate (GFR) of very old patients with chronic kidney disease (CKD).

Methods 50 male CKD patients who were above 75 years old in our hospital were selected for detecting GFR by nephrogram using ^{99m}Tc-DTPA. Meanwhile, the concentrations of serum creatinine (Scr) and Scys were tested. eGFR were calculated by the equations of Cockcroft-Gault (CG), simplified Chinese Modification of Diet in Renal Disease equations for Scr, and the equations of Hoek, Le Bricon for Scys respectively. The results were analysed statistically.

Results All patients were diagnosed to CKD stage 3 to stage 5 according to the results of GFR by nephrogram. The concentration of Scys was not effected by age, weight and height ($p>0.05$), and the average concentration of Scys had significant difference among stage 3, 4, and 5 of CKD patients ($p<0.05$). For Scys and the equations of Hoek and Le Bricon, their correlation coefficients to GFR were higher than those of Scr and the equations of CG, Chinese simplified Modification of Diet in Renal Disease in stage 5 CKD patients, but lower in stage 3 and 4 CKD patients ($p<0.05$).

Conclusions The evaluation accuracy of GFR using Scys were not concordant in different stage of very old CKD patients. Whether Scys was the better marker for evaluating GFR of very old CKD patients needed future researching.

e0671 THE THERAPEUTIC EFFECTS OF COMPLEX DANSHEN ZHUSHEYE TO THE RENAL DYSFUNCTION AFTER NEONATAL ASPHYXIA

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Objective To explore the therapeutic effects of complex Danshen Zhushuye to the renal dysfunction after neonatal asphyxia.

Methods To collect the clinical data of 80 cases of neonatal renal dysfunction after asphyxia and divide them into Danshen group and control group randomly. The complex Danshen Zhushuye was used in the Danshen group with the dose of 4 ml in term infants and 2 ml in preterm infants, intravenous drip, once per day, from day 3 after birth till day 10 after birth. The other treatments in two groups were similar. The urine outputs were recorded from the first day after birth till the day when urine outputs were normal. Blood urea nitrogen (BUN) and serum creatinine (SCr) were detected at day 3 and day 10.

Results The differences of urine outputs, BUN and SCr in two groups at day 3 were not significant. At day 10, compared with day 3, the urine outputs were increased and the BUN and SCr were decreased in both groups. The urine outputs were (2.61±1.05) ml/kg·h⁻¹ and (2.50±1.12) ml/kg·h⁻¹, BUN were (3.35±1.12) mmol/l and (6.55±2.21) mmol/l and SCr were (66.51±8.11) μmol/l and (100.31±8.98) μmol/l in Danshen group and control group respectively

at day 10. Compared with the control group, the BUN and SCr were decreased in Danshen group with $p<0.01$ at day 10. The day that the urine outputs were normal was 5.02±1.00 (3~7) days in Danshen group and 7.12±2.11 (5~10) days in control group. The difference was highly significant with $p<0.01$.

Conclusion The recover time was earlier with Danshen treatment in neonatal renal dysfunction after asphyxia, which can hint that the complex Danshen Zhushuye is effective to protect the renal function after neonatal asphyxia.

e0672 TREATMENT OF ATHEROSCLEROTIC RENAL ARTERY STENOSIS INVOLVING RENAL ARTERY BIFURCATIONS

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Objective To investigate the efficacy of kissing stent or kissing balloon technique for renal artery bifurcation with atherosclerotic renal artery stenosis.

Methods There were five patients included, who were with atherosclerotic renal artery stenosis involving renal artery bifurcation.

Results The reference vascular diameter of main renal artery was 5.6±0.4 mm. The reference vascular diameter of renal artery distal to bifurcation were 3.4±0.4 mm and 3.6±0.5 mm. Kissing balloon technique was used in three patients with obvious residual stenosis, and kissing stent technique was used in two patients without obvious residual stenosis. Blood pressure was lowered in two patients, unchanged in three patients. Serum creatine was lowered in one patient.

Conclusion As for angiographic residual stenosis, it seems that kissing stent technique is more efficacious than kissing balloon technique.

e0673 STENT IMPLANTATION BEFORE CARDIAC SURGERY WITH CARDIOPULMONARY BYPASS HAS NO EFFECT ON IMPAIRED RENAL FUNCTION IN PATIENTS WITH RENAL ARTERY STENOSIS

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Objective To investigate whether stent implantation before cardiac surgery with cardiopulmonary bypass (CPB) have any effect on the development of impaired renal function in patients with renal artery stenosis (RAS).

Methods In this retrospective study, 69 patients with RAS were included, among whom there were 38 patient receiving renal artery stent implantations just before CPB. To assess acute kidney injury (AKI) after CPB, serum urea nitrogen (SUN), serum creatinine (SCr), creatinine clearance (CrCl) were recorded at baseline, at the end of operation, during the 1st and 2nd postoperative 24 h. Patients with abnormal SCr (>106 μmol/l) before cardiac surgery were not included in this study.

Results Baseline characteristics were similar between groups. Changes of SUN, SCr and CrCl were similar between groups. The incidences of AKI (22.6%, 26.3%) in patients without or with stent implantation were not significantly deferent from each other. In patients without stent implantation, AKI defined by RIFLE occurred in 7 (22.6%) patients: 5 (16.1%) with class R, 2 (6.5%) with I, and no patients with F. In patients with stent implantation, 10 patients (26.3%) had an episode of AKI during hospitalisation: 6 (15.8%) had RIFLE-R, 4 (10.5%) had RIFLE-I, and no patients had RIFLE-F.

Conclusion There is no data suggesting that stent implantation can improve the renal dysfunction after CPB. However, it cannot be concluded that RAS is not associated with AKI after CPB.