GW25-e5145
Effects of Inhaled iloprost on gas exchange and hemodynamics in patients with pulmonary hypertension due to lung diseases
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Objectives: To investigate the effects of inhaled iloprost on V/Q matching, and hemodynamics in patients with pulmonary hypertension (PH) due to chronic lung diseases.

Methods: Sixty-nine patients with chronic lung diseases and PH were diagnosed by right heart catheterization (RHC). All patients received a single dose of 20μg iloprost during the process of RHC. Cardiopulmonary data included hemodynamic parameters and PaO₂, PaCO₂, SaO₂, Pao₂/FiO₂, venous admixture/shunt fraction (Qs/Qt) were measured or calculated at baseline, and 20 minutes after inhalation iloprost respectively.

Results: Inhaled iloprost caused a decrease in mPAP from 45.2±10.5mmHg to 41.6±11.4mmHg, and PVR from 7.6±3.6 Wood Units to 6.6±3.9 Wood Units (mean±SD, P<0.001, respectively), cardiac index increase from 3.2±0.8 L/min/m² to 3.5±1.0L/min/m² (mean±SD, P<0.001). Arterial blood gas and calculated Qs/Qt were maintained after iloprost. No adverse effects on systemic blood pressure were seen.

Conclusions: Iloprost inhalation was safe in patients with PH due to lung diseases, and improved hemodynamics but didn't affect V/Q matching and gas change.

GW25-e1128
Comparison for the effect on cardiac output during loading time between dexmedetomidine and propofol in postoperative patients
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Objectives: To compare the change of cardiac output(CO) during loading dose were injecting between dexmedetomidine and propofol in patients after major abdominal surgery.

Methods: 74 patients after major abdominal surgery were enrolled. They were randomly divided into two groups: Dexmedetomidine group (DEX group) or Propofol group (PRO group). 37 cases in each group. Depth of sedation was monitored using the bispectral index (BIS). CO and other cardiodynamic date were recorded through "Vigileo" and cardiomgram monitor. When the patients could be roused, a loading dose of fentanyl was injected at 0.0007mg/kg, followed by continuous infusion at 0.3μg/kg/h. PRO group received 0.5mg/kg loading dose followed by continuous infusion at 0.5μg/kg/h. Dose were adjusted to accomplish BIS value 70-80. BIS value, HR (Heart rate), SV (stroke volume) and CO were recorded at 0min, 5min, 10min, 30min.

Results: Both groups were superior to the control group; in the comparison with control, the symptoms improved efficacy of the Wendan decoction in the treatment of arrhythmia has statistical significance, OR=2.65, 95% CI 1.24-5.67, which means that the symptoms improved efficacy of the treatment of arrhythmia mainly using Wendan decoction in the treatment of arrhythmia also has statistical significance, OR=2.65, 95% CI 1.24-5.67, which means that the electrocardiogram improved efficacy of the treatment of arrhythmia mainly using Wendan decoction was superior to the control group. The funnel plot point out that there may be publication bias. The results of sensitivity analysis are the same as the original. The results analyzed by Meta-analysis were stable and reliable.

Conclusions: Wendan decoction is effective to treat arrhythmia, improve the clinical symptoms and electrocardiogram of arrhythmia. But because the quality and quantity of the research are limited, further confirmation with clinical randomized controlled trials of high quality, large sample and long-term follow-up are needed.

GW25-e5145
Effect of different dose of Statins on the Antiplatelet Potency of Clopidogrel in Patients with Acute Myocardial Infarction
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Objectives: Comparison of the influence on the platelet aggregation of clopidogrel combined with different metabolic pathways statins in patients with acute myocardial infarction (AMI) during PCI.

Methods: From May 2013 to November 2013, there were 80 patients with acute myocardial infarction treated with emergency PCI enrolled into this study. They were randomly divided into the atorvastatin group (group A 40 cases); rosuvastatin group (group B 40 cases). All patients chewed Aspirin 300mg and received clopidogrel 300mg before emergency PCI. Patients in group A received atorvastatin 80mg, Group B received rosuvastatin 40mg before emergency PCI. Patients in group A received atorvastatin 40mg/dl and patients in group B received rosuvastatin 20mg/dl after PCI. All patients received dual antiplatelet therapy with aspirin 100mg/d and clopidogrel 75mg/dl.Statins and clopidogrel were given before breakfast. The platelet aggregation rate was measured with whole blood impedance aggreometry on the 7 days and 30 days. We observed the major adverse cardiovascular events (MACE): cardiac death, recurrent angina, recurrent myocardial infarction, target vessel revascularization and deterioration of cardiac function in patients after 30 days. We compared the difference of platelet aggregation and MACE rate between the two groups. Testing the alanine aminotransferase, creatinine, total cholesterol and low-density lipoprotein in the first 24 hours and 30 days after PCI and recording the quantity of patients who had muscle pain in the follow-up, and so on after 30 days to evaluate the effects of lipid-lowering and drug safety.

Results: (1).After PCI on the 7th day and 30th day, we compared the platelet aggregation of group A with group B. The result were (3.09±3.99 vs 3.79±4.20  P=0.127) and (2.65±3.48 vs 2.99±4.20  P=0.6). The platelet aggregation of group B was slightly higher than group A in the both time but no statistical difference. (2) After 30 days, there were 9 patients (22.5%) with recurrent angina, 3 patients (7.5%) with deterioration of heart function in group A and 5 patients (12.5%) with recurrent angina, 4 patients (10 %) with deterioration of heart function in group B. There was no significant difference between the two groups of patients in adverse events and overall MACE (P=0.05). (3) After 30 days of the level of patients’ TC and LDL-C was decreased significantly (P=0.05). According to the level of LDL-C ≤1.8mmol/L or LDL-C decreased by 50% compared to the admission, we compared the percentage of patients who’s level of LDL-C reached the goal in the two groups (55% vs 62.5% P=0.49). (4) The level of patients’ ALT and Cr were no significant difference compared to the admission (P=0.05). There was one patients (2.5%) with ALT ≥5 ULN in group A and 0 in group B. Therefore, we conducted a meta-analysis with the addition of new RCTs to produce a more reliable conclusion about the benefits received from the short- and long-term Nesiritide therapy in adults with ADHF. Additionally, a cumulative meta-analysis on how evidence for Nesiritide has evolved in the treatment of ADHF was performed.

GW25-e2356
Nesiritide fails to reduce the mortality of patients with acute decompensate heart failure: an updated systematic review and cumulative meta-analysis
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Objectives: Nesiritide is prescribed to the patients with acute decompensate heart failure (ADHF) with dyspnea according to 2012 European Society of Cardiology (ESC) guidelines. However, a few randomized, controlled trials (RCTs) were carried out in recent years and there has been conflicting reports on the effects of Nesiritide to improve the rate of mortality and rehospitalization. Therefore, we conducted a meta-analysis with the addition of new RCTs to produce a more reliable conclusion about the benefits received from the short- and long-term Nesiritide therapy in adults with ADHF. Additionally, a cumulative meta-analysis on how evidence for Nesiritide has evolved in the treatment of ADHF was performed.

Methods: To identify RCTs that evaluated the safety and adverse events on adults with ADHD after Nesiritide therapy, extensive searches were carried out within MEDLINE, EMBASE, CINAHL, SIGLE, Web of Science and the Cochrane Central Register of Controlled Trials (through August 10, 2013). When necessary, searches of reference lists of articles using Medical Subject Heading terms and a standardized protocol were also performed. Two independent reviewers identified trials, extracted data, and assessed risk of bias.

Results: A total of 10213 patients with ADHD in fifteen trials were included and divided into the Nesiritide group (Nesiritide plus conventional treatment) and the