failure clinical severity, and echocardiographic evaluation of the relationship between the severity of diastolic dysfunction, and get plasma NT-proBNP in the diagnosis of diastolic heart failure most good community values.

METHODS The study is outpatient or inpatient treatment of non- systolic heart failure in patients with hypertension 61 cases were divided into three groups: no clinical signs and symptoms of heart failure, heart failure with diastolic dysfunction without diastolic dysfunction group I; clinical None signs and symptoms of heart failure, echocardiographic diastolic dysfunction group II; clinical signs and symptoms of heart failure, echocardiographic diastolic dysfunction group III. In 20 heart failure control group. All patients enrolled in clinical data are collected to determine the presence or absence of heart failure, and cardiac function NYHA classification. 24 hours of admission or treatment echocardiography expert to determine whether the diastolic dysfunction and diastolic function of the extent of becoming divided into four weight: I level (normal diastolic function), grade II (impaired relaxation), III grade (pseudo- normalization filling), grade IV (restrictive filling). Admission or treatment plasma NT-proBNP concentrations within 24 hours. Comparison between different experimental groups, between different classification of diastolic function, plasma NT-proBNP levels between different NYHA class; evaluate the relationship between echocardiographic indices of diastolic function and plasma NT-proBNP for; were constructed NT-proBNP diagnostic diastolic dysfunction and diastolic ROC curve of heart failure, and were the best diagnostic cutoff value.

RESULTS The area under the ROC curve of plasma NT-proBNP diagnosis of diastolic heart failure (AUC) was 0.886 (95% CI 0.818-0.954, P < 0.000). Plasma NT-proBNP when 112.45pg/mL, diastolic heart failure diagnostic sensitivity 94.0%, specificity 81.8%, positive predictive value of 72.7%, negative predictive value of 94.6%.

CONCLUSIONS The plasma NT-proBNP for diagnosis of diastolic heart failure is valuable.

GW26-e3591 Predicting Value of Biomarkers for Short-Term Outcomes in Acute Heart Failure
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OBJECTIVES B-type natriuretic peptide (BNP) and N-terminal pro-B-type natriuretic peptide (NT-proBNP) are increasingly being used to guide the management of acute heart failure (AHF) patients. This study aims to explore some new biomarkers providing predicting values for short term prognosis in patients with AHF.

METHODS A total of 206 patients with AHF were enrolled and followed for 3 months. Baseline level of complete blood count, complete biochemistry, D-dimer and NT-proBNP were measured at admission or the following morning. Primary endpoints of the study were cardiovascular (CV) events, defined as cardiac death and/or readmission for AHF.

RESULTS During the 90-day follow-up period, 15 patients died and 10 patients were re-hospitalized due to worsening of heart failure (12.14%). Red cell distribution width (RDW), D-dimer and NT-proBNP were significantly higher in the patients who had a CV events at the 90-day (p < 0.001). The area under receiver operating characteristic (ROC) curve (AUC) of NT-proBNP, D-dimer and RDW for predicting CV events by 90- day was 0.806, 0.887 and 0.754. Kaplan-Meier survival curve for 90-day CV events showed that patients with a D-dimer level > 1.1mg/dL and NT-proBNP > 2262.09ng/mL were at high risk (p < 0.001) for short-term outcomes of AHF.

CONCLUSIONS D-dimer could be as a new biomarker combined with NT-proBNP for predicting early prognostic value to cardiovascular events of AHF.

GW26-e4381 Resveratrol protects the heart from sepsis without systemically anti-inflammatory effect
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OBJECTIVES Resveratrol can protect the heart from sepsis, but the detailed mechanism remains unknown; therefore, we try to explore the mechanism.

METHODS FVB and C57BL/6J male mice (age: 8 weeks; body weight: 20-25g) were subjected to lipopolysaccharide (LPS) injection at 6 mg/kg to set up a sepsis model. One study included 5 groups: Group 1 (control mice); Group 2 (intraperitoneal injection with LPS); Group 3 (treated with resveratrol only for 3 days); Group 4 (treated with resveratrol for 3 days before LPS); Group 5 (treated with LPS and resveratrol at same time). These mice were sacrificed at 48 h after LPS treatment. The dose of resveratrol was 20 mg/kg/d. Serial echocardiograms were performed to assess cardiac function.

RESULTS In both strains of mice, LPS injection could significantly decrease the left ventricular EF% from 6 to 48 hour. For resveratrol prevention study, we found that tumor necrosis factor alpha (TNF-α) levels in plasma and heart tissue were significantly increased at 6 h after LPS injection in groups 2, 4, and 5, compared to the groups 1 and 3. Among the groups 2, 4 and 5 there was no significant difference. CD45 is a pan-leukocyte marker, heart wax section immunohistochemistry staining for CD 45 shows no difference in all groups. Using immune blot and ELISA to assess the ratio of cleaved caspase 3 to caspase 3 and plasma level of tropinin I, markers for cardiac cell apoptosis and injury, respectively, showed no difference in all groups, which indicates that cardiac dysfunction in sepsis is not due to cardiac cell loss. Time-course comparison between FVB and C57BL/6J mice, we found that C57BL/6J mice was more susceptible to FVB mice since the former showed a significant decrease (more than 50%) in EF% while FVB mice showed about 40% decrease in EF%. However, cardiac dysfunction of C57BL/6J mice showed a faster recovery from 6 to 24 hour compared to FVB that recovered from 6 to 48 hours.

CONCLUSIONS Resveratrol protection of the heart from sepsis is not due to its prevention of LPS-induced inflammation. Since resveratrol is a multiple bioactive natural compound, we should focus other mechanisms to explore how resveratrol protect heart from sepsis in the future studies.

GW26-e4571 The Correlation between Cardiac function in patients with different classification levels of serum NT-proBNP and cardiac function
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OBJECTIVES To observe correlation between the standard of N-terminal pro-B-type natriuretic peptide (NT-proBNP) and cardiac function in different NYHA classification, LVEF and LVED.

METHODS For the 83 patients of heart failure in hospital, to assay their NT-proBNP of blood serum by enzyme-linked immunosorbent assay (ELISA) and determined their LVEF and LVED by UCG. To analyse the correlation of patients’ NT-proBNP, the different cardiac functional grading and the indexes above-mentioned.

RESULTS (1) Different NYHA cardiac function classification levels of serum NT-proBNP levels was significantly. Its level is positively correlated with cardiac function. (2) NT-proBNP is negatively correlated with LVEF and positively correlated with the LVED.

CONCLUSIONS NT-proBNP measurement is one of the methods of effective assistance in clinical diagnosis of heart failure, on the whole reflect the severity of heart failure.

GW26-e0191 Altitude difference of HMGB1, Fetuin-A in the patients with congestive heart failure and effects on ventricular remodeling
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OBJECTIVES Inflammation and dystrophic calcification have been associated with cardiovascular disease (CVD) and chronic heart failure (CHF), changes in pathophysiological functions are reported during sea level altitude; however, Few study have explored altitude difference (2260m, 3300m) of change levels of serum high mobility group box 1 protein (HMGB1), Fetuin-A in patients with congestive heart failure and effects on ventricular remodeling. The aim of the present study was to evaluate the effect the altitude difference explore on HMGB1, Fetuin-A, and to study the relationship between changes of HMGB1, Fetuin-A and left ventricular mass index (LVMI), mean wall stress (MWS) and cardiac function.

METHODS A total of 129 consecutive patients with CHF with matched age and sex were enrolled, and CHF patients were divided into high altitude group (3300m) (n = 62) and moderate altitude group (2260m)