CONCLUSIONS With the widespread use of antibiotics and changes of pathogenic microorganisms, the clinical features of IE had a significant change, echocardiography and blood cultures contribute to the diagnosis of IE; the basis of heart disease is one of the IE common cause, and surgical treatment promptly may obtain better result.

GW26-e0212 Utility of C-reactive protein and Red Blood Cell Distribution Width in assessing the outcome of infective endocarditis
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OBJECTIVES To elucidate the merits of C-reactive protein (CRP) and Red Blood Cell Distribution Width (RDW) on the prognostic evaluation in patients with infective endocarditis (IE).

METHODS A retrospective study was performed, and the demographic and clinical characteristics of participants were collected with the use of electronic case report form. The association of CRP and RDW with in-hospital death was analyzed.

RESULTS Totally 307 participants diagnosed as IE were enrolled, in which 45 died during hospitalization period. When compared to survival patients, CRP and RDW level in mortality participants was significantly higher. In addition, increased level of WBC, vegetation size of >10mm and decreased hemoglobin, glomerular filtration rate, surgical treatment rate were found in dead patients. Multivariate analysis showed that CRP (OR = 4.260, P = 0.002),RDW (OR = 3.435, P = 0.002), glomerular filtration rate (OR = 0.296, P = 0.014), vegetation size of >10mm (OR = 2.111, P = 0.042) and surgical treatment (OR = 0.405, P = 0.023) were independent associated with in-hospital death. Moreover, CRP > 35.05 mg/L had a sensitivity of 82.2% and specificity of 74.3% for predicting in-hospital death. The sensitivity and specificity of RDW > 15.87% were 86.7% and 59.2%, respectively. Combining use of CRP and RDW showed better performance in predicting in-hospital death.

CONCLUSIONS Increased CRP and RDW were associated with in-hospital death in patients with IE.

GW26-e3557 The diagnostic value of Transsthoracic echocardiography in the assessment of anastomotic leakage after aortic replacement
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OBJECTIVES The patency of transplanting coronary artery and no anastomotic fistula are the determinant to the successful aortic replacement operation. Anastomotic leakage is the most serious postoperative complications. Accurate and early detection of the anastomotic leakage has the important clinical significance. The aim of this study is to discuss the diagnostic value of transsthoracic echocardiography (TEE).

METHODS Thirty cases of aortic aneurysm and aortic dissection which occurred postoperative complications were involved in this study from June, 2013 to September, 2014 (including 15 cases of Bentall; 5 cases of Bentall + Total aortic arch replacement; 8 cases of Bentall + Total aortic arch replacement + elephant trunk; 2 cases of abdominal aorta aneurysm stenting). Their TTE features were to be retrospective analyzed.

RESULTS ⑴Thirteen patients were diagnosed with ascending aortic dissection, 15 patients with ascending aortic aneurysm and 2 patients with abdominal aortic dissection before the surgery by TEE; ⑵Post-operative TTE showed that: The anastomotic leakages were located at coronary artery and the edge between the artificial and autologous aortic anastomotic leakage. Of these, simple right coronary artery anastomotic leakage occurred in 11 cases (36.7%); simple left coronary artery anastomotic leakage occurred in 6 cases (20.0%); left combined with right coronary artery anastomotic leakage were in 4 cases (13.3%); simple proximal anastomotic leakage between artificial and autologous aorta were in 4 cases(13.3%); right coronary artery anastomotic leakage combined with increased peak artificial aortic valve velocities was in 1 case(3.3%); left coronary artery anastomotic leakage combined with autologous ascending aortic aneurysm, causing the compression of the superior vena cava and right pulmonary artery and having thrombosis in the false lumen was in 1 case(3.3%). Paravalvular artificial aortic valve leakage combined with severe regurgitation was in 1 case(3.3%); coronary artery anastomotic leakage combined with paravalvular artificial aortic valve leakage and thrombosis in autologous ascending aorta was in 1 case(3.3%); the anastomotic leakage between artificial and autologous aorta combined with the compression of artificial aorta in ascending aorta was in 1 case(3.3%); The complications include the anastomotic leakage, paravalvular artificial aortic valve leakage and thrombosis.

CONCLUSIONS TTE can noninvasively and accurately detect the anastomotic leakage and other severe complications; it can be used to be the preferred imaging method in clinical settings.

CARDIOMYOPATHY

GW26-e0244 Predictors of long-term survival patients with cardiac amyloidosis: prognostic value of late gadolinium enhancement in cardiac magnetic resonance
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OBJECTIVES Cardiac amyloidosis is usually characterized by a poor outcome. We aimed to investigate the predictive value of late gadolinium enhancement (LGE) in cardiac magnetic resonance (CMR) for survival of cardiac amyloidosis patients.

METHODS We recruited a total of 162 consecutive patients with endomyocardial - biopsy proven cardiac amyloidosis. These patients undergoing CMR at enrollment were followed up for 5 years.

RESULTS 141 (87%) patients died during the 5-year follow-up, and 78 (48%) patients with poor short-term outcome (survival for less than one-year) were characterized by older (57.12 vs 51.15 years, p = 0.016), more present with heart failure (42.3% vs 21.4%, p = 0.006), pericardial effusion (57.7% vs 30.9%, p < 0.001), seven thick interventricular septum (IVS) (16.4 vs 14.4, p = 0.009) and LGE in CMR at enrollment (89.7% vs 51.2%, p < 0.001). At multivariable cox regression analysis, heart failure (HR 1.79, 95%CI: 1.12-2.94, p = 0.010), greater LVEF (HR: 1.46, 95%CI: 1.09-1.41, p = 0.021) and LGE in CMR (HR 5.16, CI: 1.60-9.25, p = 0.010) emerged as independent predictors of all-cause mortality.

CONCLUSIONS We have showed LGE in CMR is the strong predictor of all-cause mortality in patients with cardiac amyloidosis. Examination of CMR provides valuable prognostic information concerning short and long-term outcome.

GW26-e4784 Value of Echo Myocardial Mechanical Parameters in Diagnosis and Prognosis of Cardiac Amyloidosis
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OBJECTIVES To assess the value of a novel velocity vector imaging(VVI)echocardiographic measurement of myocardial strain in diagnosis and prognosis of Chinese patients with cardiac amyloidosis.

METHODS 35 patients with biopsy-proved AL-cardiac amyloidosis,30 patients with asymmetric hypertrophic cardiomyopathy and 30 age-matched healthy volunteers were included in the study. Three groups underwent clinical and standard echo evaluation at baseline and VVI. VVI was used for the evaluation of LV segments, myocardial regional parts and LV global endocardial (ENDO) longitudinal strain (LS). Then we followed these 35 AL-CA patients for 3 years and the primary end point was all-cause mortality. Clinical data, standard echocardiographic parameters and systolic ENDO LS for 16 LV segments were tested as potential independent predictors of survival.

RESULTS ENDO LS in LV 16 segments, 6 walls and global LV were obviously decreased in AL-CA. However, those changes in HCM were variable. LV Basal regional ENDO LS was sensitive (85%) and specific (85%) in differentiating AL-CA from HCM (ROC area under the curve was 0.916). During a median follow-up of 17.5 months (first to third interquartile: 7.28-5 months), 17 patients (50%) died. VVI classification (hazard ratio [HR], 11.86; p = 0.000), Logpro-BNP (HR, 5.54; p = 0.03) and basal sepal ENDO LS (HR, 1.35; p = 0.000) were independent predictors of AL-CA.

CONCLUSIONS VVI echocardiographic measurement demonstrated significant differences in AL-CA and HCM: AL-CA is characterized by a
Characteristics and Prognosis of Systemic Immunoglobulin Light Chain Amyloidosis with Cardiac Involvement: a Single Institutional Experience from China

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OBJECTIVES Cardiac amyloidosis (CA), an infiltrative restrictive cardiomyopathy, is usually delayed in diagnosis, leading to poor prognosis. The aim of the study is to evaluate characteristics and prognosis of CA to enable early diagnosis and optimal management for cardiologists.

METHODS We retrospectively analyzed 53 patients (62.2% men, mean age 60.3±9.8 years) with biopsy-proven diagnosis of systemic immunoglobulin light chain amyloidosis (AL) in our institution from January 1993 to December 2014. Clinical features, outcomes and possible prognostic factors on survival were evaluated.

RESULTS A total of 32 (60.4%) patients were diagnosed as CA with a median diagnostic duration of 8 months. Only 12 (37.5%) of CA patients referred to Cardiology Department before diagnosis including 11 (91.7%) with congestive heart failure (CHF) and 1 (8.3%) with advanced atrioventricular block. Nineteen (59.4%) CA patients presented with more than 3 organs involved. The cardiovascular symptoms of CA include dyspnea on exertion, lower limbs edema, nocturnal paroxysmal dyspnea, hypotension (28.1%), chest pain (6.3%), syncope (15.6%) and cardiac arrest (6.3%). Electrocardiographic manifestations include poor R wave progression (66.5%), low QRS voltage (46.7%), pseudo-infarct pattern (46.7%) and conduction disturbances (28.6%). The mean thickness of interventricular septum on echocardiography was 1.5±0.3 cm. CA patients with CHF had lower systolic blood pressure (102.3±14.5 vs. 124.6±21.9 mmHg, P=0.004) and diastolic blood pressure even after adjusting for age, sex, and body mass index (P=0.001). No significant difference in mortality was observed between the male and female patients (23.3% vs. 24.5%, log-rank χ²=0.707, P=0.400). Furthermore, no significant difference in mortality was observed between the elderly male patients experienced greater mortality than that of the non-elderly male patients (27.2% vs. 22.2%, log-rank χ²=2.604, P=0.107). However, a subgroup analysis revealed that the elderly male patients may exhibit a higher mortality rate than that of the non-elderly male patients (29.4% vs. 21.3%, log-rank χ²=5.898, P=0.015), while no difference was observed between the elderly female patients and the non-elderly female patients. In the Cox analysis, neither age nor sex was a significant independent predictor of all-cause mortality in patients with DCM.

CONCLUSIONS In conclusion, no significant difference in mortality between male and female patients or between the elderly and non-elderly patients was observed. Only among males was a difference in mortality observed; elderly male patients experienced greater mortality than that of non-elderly male patients. No effect of age or gender on all-cause mortality was observed in patients with DCM.

Clinical and cardiac magnetic resonance imaging characteristics of cardiac amyloidosis of cardiac amyloidosis

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OBJECTIVES To observe the clinical features and cardiac magnetic resonance imaging characteristics of patients with cardiac amyloidosis(CA).

METHODS Totally 79 patients with CA admitted to First Affiliated Hospital of Sun Yet-sen University from 2005 to 2014 were included. CA was confirmed by endocardial biopsy examination or had the manifestations of dilated cardiomyopathy or other cardiac magnetic resonance imaging characteristics when the patients did not have endocardial biopsy but had renal, tongue, or alimentary canal biopsy only. Clinical manifestations and cardiac magnetic resonance imaging were collected for the evaluation.

RESULTS 54 cases(68.4%) with heart failure, 39 cases(49.4%) with chest pain, 60 cases(75.9%) presented with dyspnea, 20 cases(25.3%) with syncope, 26 cases(32.9%) with hypotension and 57 cases(72.2%) with renal insufficiency and proteinuria. Echocardiogram showed all of the CA patients had concentric left ventricular hypertrophy, granular appearance of the myocardium, left atrial enlargement and 56 cases (70.8%) had moderate to severe left ventricular diastolic dysfunction. Cardiac magnetic resonance imaging revealed 75 cases (94.9%) increased thickness of the left ventricular wall, 70 cases (88.6%) had enlarged bilateral atricle, and 56 cases(70.8%) had restricted left ventricular filling with normal or mild to moderate reduced systolic function.

CONCLUSIONS For patients who were with unexplained cardiac failure, chest pain, renal insufficiency and echocardiogram