Methods A total of 2158 EH patients were divided into EH without ischaemic stroke group and EH with ischaemic stroke group. Four BMI quartiles were defined based on BMI level (The first quartile: BMI ≤ 22.68 kg/m^2, n=540; The second quartile: BMI 22.69–24.82 kg/m^2, n=538; The third quartile: BMI 24.83–26.84 kg/m^2, n=541; The fourth quartile: BMI ≥ 26.85 kg/m^2, n=539). The incidence of ischaemic stroke in four BMI levels was evaluated by multivariable logistic regression analyses.

Results (1) The average BMI in EH with ischaemic stroke group is lower than that in EH without ischaemic stroke group (24.36±3.21 vs 25.15±3.31kg/m^2, p<0.001). (2) Form the first quartile to fourth quartile of BMI, the incidence of ischaemic stroke were decreasing (37.6%, 34.8%, 30.9%, 23.0%, p<0.001). With 6.2% (95% CI 3.3% to 9.0%) decreased risk of incidence ischaemic stroke per 1 kg/m^2 increase of BMI. (3) Compared with the lowest BMI group, the adjusted OR (aOR) for ischaemic stroke in the highest BMI group was significantly lower (aOR: 0.800, 95% CI: 0.730 to 0.875, p<0.001). (4) In male group, comparing with the lowest BMI group, the aOR for ischaemic stroke in the highest BMI group was significantly lower (aOR: 0.811, 95% CI: 0.717 to 0.918, p=0.001); Similar trend was found in female group (aOR: 0.776, 95% CI: 0.678 to 0.889, p<0.001).

Conclusion Lower BMI was associated with increased incidence of ischaemic stroke in EH patients.

Clinical and Research Medicine: Organic Cardiovascular Disease (Myocarditis, CardioMyopathy, Congenital Heart Disease, Rheumatic Heart Disease, Valve

e0602 THE PROGNOSIS INVESTIGATION IN PATIENTS WITH CHRONIC HEART FAILURE AND PERICARDIAL EFFUSION

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Background Researchers still do not reach the consensus on the incidence, characters and the prognostic value of pericardial effusion (PE) in patients with chronic heart failure (CHF).

Methods 1189 patients, with a diagnosis of CHF consecutively admitted to three centers, were enrolled. M-mode echocardiography was used to determine the presence or absence of PE and to semi-quantify it. 118 patients with PE and 472 without were followed up. The relationship between the PE and other parameters and the prognostic value of PE for CHF were analysed by univariate and multivariate analyses.

Results After follow up, 550 patients were analysed of which 226 were death. The incidence of PE was 9.92%. Moderate PE was the most common which account 90.68% (107/118). 6.78% (8/118) had small while only 2.54% (3/118) had large one. The systolic blood pressure [OR=1.04, 95% CI (1.01, 1.07), p=0.08], LVEF [OR=1.09, 95% CI (1.02, 1.15), p=0.06], and MPAD [OR=1.51, 95% CI (1.24, 1.85), p<0.001] were the independent predictors of PE. The GFR [OR=1.013, 95% CI (1.005, 1.026), p=0.02], systolic blood pressure [OR=1.02, 95% CI (1.00, 1.03), p=0.015], LVEF [OR=1.08, 95% CI (1.04, 1.12), p<0.001] and diabetes mellitus [OR=2.53, 95% CI (0.99, 6.44), p<0.001] were determined as the independent predictors of CHF prognosis.

Conclusion The PE is not uncommon in CHF patients and most PE are small to moderate. PE is not related to the aetiology of CHF while is strongly connected with higher systolic blood pressure, lower LVEF and larger MPAD. PE dose not add the death risk of CHF patients.

e0603 THE INHOSPITAL MORTALITY AND ITS DETERMINANTS FOR ELDERLY PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

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Objective To explore the inhospital mortality and its determinants for elderly patients with acute myocardial infarction.

Method Totally four hundreds and ninety nine patients with acute myocardial infarction, hospitalised in our hospital from January 1, 2002 through February 22, 2010, who were equal or above 80 years older, were retrospectively analysed.

Results Among these 499 cases, 97 patients died during hospitalisation, with total inhospital mortality being 19.4%. Of these patients, there were 297 cases with acute ST segment elevated myocardial infarction (STEAMI) and 202 cases with non -ST segment elevated myocardial infarction (NSTEAMI), and their inhospital mortality were 23.2% and 13.9%, respectively (p=0.009). Univariable analysis showed the proportions of infection, digest tract bleeding, history of hypertension, complete atrial-ventricular (A-V) block, cardiac rupture, three or four killip grade of cardiac function, and STEAMI in death group were higher than that in alive group (p<0.05), and the mortality of those who did not undergo urgent PCI was higher (p<0.05). Multivariable logistic regression analysis showed the independent determinants for mortality of elderly AMI patients were cardiac killip grades, complete A-V block, renal dysfunction, stent implant, and the type of AMI.

Conclusions The independent determinants for mortality of elderly AMI patients are as following, cardiac killip grade, complete A-V block, renal dysfunction, stent implant, and the type of MAI. Urgent PCI is safe and effective for elderly with AMI.

e0604 MRI CHARACTERISTICS : COMPARISON OF ARRHYTHMOGENIC RIGHT VENTRICULAR CARDIOMYOPATHY PATIENTS WITH AND WITHOUT SYNCOPE

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Objective This study was designed to review MRI characteristics and assessed its risk factors for life-threatening ventricular arrhythmia in arrhythmogenic right ventricular cardiomyopathy (ARVC).

Methods We collected a consecutive series of 63 patients with clinical diagnosis of ARVC at a single institution. In all cases the diagnosis was performed according to ESC/ISFC diagnostic criteria. MRI characteristics were compared between patients with syncope and concomitantly sustained ventricular tachycardia or ventricular fibrillation (group 1) and remaining patients (group 2). Morphological and functional parameters and tissue differentiation were assessed.

Results Univariate analysis showed significantly differences between both groups in terms of familial history of ARVC or sudden death (14% vs 41%, p=0.015), the accordion sign (58% vs 81%, p=0.031), left ventricular (LV) involvement (47% vs 74%, p=0.032), number of regions with intramyocardial fat infiltration (2.4±1.4 vs 3.1±1.5, p=0.047), number of regions with myocardial fibrosis (1.0±0.9 vs 1.6±0.9, p=0.013). No differences were noted when comparing baseline characteristics of the patient population. A binary logistic regression model showed that familial history of