Study Name	N		Confidence Interval
Sekiguchi Y (2005)	38		2.0 (-0.8 , 4.8)
Takemoto M (2005)	14		6.0 (5.1 , 6.9)
Lelakowski J (2009)	22		9.8 (7.5 , 12.1)
Sarrazin (2009)	15		11.9 (6.5 , 17.3)
Kim YH-Subgroup (2010)	16		5.5 (3.2 , 7.8)
Wijnmaalen AP (2010)	34		2.0 (-0.1 , 4.1)
Del Carpio Munoz F (2011)	30		5.0 (2.3 , 7.7)
Mountantonakis SE (2011)	69		14.0 (11.6 ,16.4)
Ban JE (2012)	28		10.0 (7.8 , 12.2)
Kuroki K (2012)	31		10.9 (8.0 , 13.8)
Lakkireddy D (2012)	65		6.4 (5.1 , 7.7)
Lu F (2012)	24		11.2 (6.7 , 15.7)
Yokokawa M (2012)	249		5.0 (3.8 , 6.2)
Penela D (2013)	53		12.6 (9.3 , 15.9)
Overall		P<0.05	7.7 (6.1 , 9.4)
Change in LVEF post ablation			%

Conclusions: Ablation of frequent PVCs improves cardiac function, especially for patients with LV dysfunction.

GW25-e1585

Association of nicotinamide phosphoribosyltransferase (NAMPT) gene polymorphisms and of NAMPT expression with Dilated cardiomyopathy in a Chinese population

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Objectives: Nicotinamide phosphoribosyltransferase (NAMPT) is a rate-limiting enzyme in regenerating nicotinamide adenine dinucleotide (NAD^+) from nicotinamide. NAMPT has crucial roles for myocardial development, cardiomyocyte energy metabolism and cell death/survival by regulating NAD^+-dependent sirtuin-1 deacetylase. Serum NAMPT also functions as a potential inflammatory cytokine in diverse biological contexts. The purpose of this study was to clarify the hypothesis that SNPs of the *NAMPT* gene may affect the susceptibility and prognosis for DCM patients and to describe the association of NAMPT expression with clinical features of DCM.
Methods: Three SNPs of *NAMPT*, including rs61330082 in the promoter region, rs2505568 and rs9034 in the 3′untranslated region were genotyped by polymerase chain reaction-restriction fragment length polymorphism method in 394 patients with DCM and 395 controls. Plasma NAMPT levels of 113 DCM patients and 137 controls were measured using commercial ELISA kits.
Results: Statistically significant decreased DCM risk was found to be associated with the A allele and AT genotype of rs2505568 (OR 0.48, 95% CI 0.35-0.67, $P<0.0001$ and OR 0.44, 95% CI =0.31-0.62, $P<0.0001$ respectively). Rs9034 C allele and CC genotype were also associated with decreased DCM risk (OR 0.61, 95% CI 0.44-0.86, $P=0.005$ and OR 0.58, 95% CI 0.40-0.83, $P=0.0027$ respectively). There was no difference of the allele and genotype frequencies of rs61330082 polymorphism between DCM and control groups. The rs9034 CT genotype presented longer overall survival than CC genotype in both univariable (HR: 0.59, 95% CI 0.39-0.89, $P=0.01$) and multivariable survival analysis after adjusting for age and sex (HR: 0.56, 95% CI 0.37-0.86, $P=0.007$). NAMPT expression was significantly higher in the DCM group compared with controls (6.69 ± 4.97 and 3.71 ± 1.21 ng/ml, $P<0.0001$) but not associated with 3 SNPs. There were significant increases of NAMPT levels in NYHA IV class group than NYHA II/III class group and the controls (10.67 ± 6.23, 4.59 ± 2.17 and 3.71 ± 1.21 ng/ml, all $P<0.0001$). The NAMPT levels in NYHA II/III class group were significantly increased compared to controls (4.59 ± 2.17 and 3.71 ± 1.21 ng/ml, $P=0.005$).

A significant correlation between NAMPT levels and N-terminal pro brain natriuretic hormone ($r = 0.726$, $P<0.0001$) was found. We also observed a significant correlation between NMAPT levels and left ventricular end-diastolic diameter ($r = 0.296$, $P=0.01$) and left ventricular end-diastolic volume ($r = 0.294$, $P=0.011$). There were no correlations between NAMPT levels and left ventricular stroke volume, ejection fraction and fractional shortening ($r = 0.10$, $P=0.39$; $r = -0.107$, $P=0.362$; $r = 0.027$, $P=0.85$).
Conclusions: SNPs of *NAMPT* might be a novel genetic biomarker for the risk and prognosis of DCM. NAMPT expression was associated with the degree of heart failure and the features of echocardiography in DCM patients. Our Results suggested an important role for NAMPT in the pathogenesis of DCM.

GW25-e3420

Plasma NT pro-BNP, hs-CRP and big-ET levels at admission as prognostic markers of survival in hospitalized patients with dilated cardiomyopathy: a single-center cohort study

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Objectives: Circulating N-terminal pro-B-type natriuretic peptide (NT pro-BNP), high-sensitivity C-reactive protein (hs-CRP) and big endothelin (big-ET) have been shown to be increased in heart failure and to contribute to both hemodynamic deterioration and cardiovascular remodeling. Here, we examined the prognostic value of the three neurohormones at admission in a population of hospitalized patients with dilated cardiomyopathy (DCM).
Methods: This cohort study was undertaken in 622 hospitalized patients with DCM in Fuwai Hospital from January 2005 to September 2011 (female 26.5%, 51.4 ± 14.6 years old). Standard demographics, echocardiography and routine blood samples were obtained shortly after admission. NT pro-BNP, hs-CRP and big-ET were measured, and their concentrations in relation to all-cause mortality were assessed through a mean follow-up of 2.6 ± 1.6 years.
Results: Kaplan-Meier curves showed that the all-cause mortality rates were higher in patients with NT pro-BNP>2247 pmol/L compared to patients with NT pro-BNP<2247 pmol/L (11.9% vs 34.8%, log-rank $\chi^2=35.588$, P<0.001), in patients with hs-CRP>3.90 mg/L compared to patients with hs-CRP<3.90 mg/L (12.8% vs 33.6%, log-rank $\chi^2=39.662$, P<0.001) and in patients with big-ET>0.95 pmol/L compared to patients with big-ET <0.95 pmol/L (12.5% vs 31.0%, log-rank $\chi^2=17.890$, P<0.001) . High circulating concentrations of NT pro-BNP (HR 2.217, 95% CI 1.015-4.846, P=0.046) and hs-CRP (HR 1.922, 95% CI 1.236-2.988, P=0.004), but not big-ET, in addition to left atrial diameter and fasting blood glucose, were independent predictors of the outcome defined as all-cause mortality.
Conclusions: In a large population of patients with DCM, the circulating concentrations of NT pro-BNP and hs-CRP, but not big-ET, were independent markers of all-cause mortality.

GW25-e5221

The Characters of Myocardial Mechanics in Chinese Patients with Primary Cardiac Amyloidosis and Hypertrophic Cardiomyopathy

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Objectives: To analyze and summarise the characters of echocardiographic myocardial mechanics in Chinese patients with cardiac involvement due to primary amyloidosis (AL-CA) and hypertrophic cardiomyopathy (HCM) using transthoracic echocardiography (TTE) with 2-dimensional velocity vector imaging (VVI) .
Methods: 30 patients with biopsy-proved confirmed AL-cardiac amyloidosis, 30 patients with asymmetric hypertrophic cardiomyopathy and 30 age-matched healthy volunteers were included in the study. The clinical characteristics were collected and three groups underwent conventional TTE and VVI. TTE was used for the evaluation of LV wall thickness, left atrial and ventricle size, systolic and diastolic function. VVI was used for the evaluation of LV segments and walls endocardial (ENDO), myocardial (MYO) and epicardial (EPI) longitudinal, circumferential and radial strain (LS, CS and RS). AL-CA and HCM patients also underwent cardiac magnetic resonance (CMR) to evaluate the late gadolinium enhancement (LGE) features.
Results: There were no statistic differences in clinical symptoms and physical signs between AL-CA and HCM groups. LV wall thickness, LA diameter, E/A ratio, Septal E/e′ ratio and the prevalence of granular sparkling were higher in both AL-CA and HCM in comparison with controls (P<0.001), but ejection fraction (EF) was lower in patients with AL-CA in comparison with HCM and controls (40.4±7.8%, 56.6±5.5%, 60±4.0%, respectively). LV ENDO LS, ENDO CS and RS in 16 segments were significantly lower in AL-CA when compared with HCM and controls, however, LV EPI LS, EPI CS in apical and mid segments were similar among patients with AL-CA, HCM and controls. The difference between ENDO and EPI LS (ENDO-EPI LS) in all left ventricle walls were significantly lower in AL-CA in comparison with controls, however, those changes in HCM were variable. The LGE of CMR also showed the different features in AL-CA and HCM: AL-CA group showed subendocardial LGE almost in all LV walls, but HCM group showed patchy LGE in a regional, multifocal distribution.
Conclusions: AL-CA is characterised by a remarkable reduction of ENDO LS, CS and RS in LV segments and an uniform decrease of ENDO-EPI LS in all LV walls, but the changes in HCM is variable.

GW25-e0300

Prevalence and spectrum of NKX2-5 mutations associated with idiopathic dilated cardiomyopathy

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