Background: The right ventricle (RV) has received less attention than the left in heart failure patients probably because morbidity and mortality associated with left ventricular disease is clinically more apparent.
In our study, we tried to prove the importance to characterize the prevalence and clinical significance of right ventricular (RV) systolic dysfunction (RVD) in patients with heart failure.
Methods and Results: We studied 1613 patients with chronic heart failure at the HF Registry of the university hospital Ibn Rochd Casablanca, during a follow up of 6 years. RVF (RV function) was determined by echocardiography, RV dysfunction defined by (S'VD <10 cm / s and TAPSE <16 mm). The primary endpoint was the occurrence of acute heart failure decompensation (AHFD).
Results: RVD was present in 117 patient (7.17%), this group had an average age of 64 years, they were more likely to be men (sex ratio: 2,1), to have atrial fibrillation, and chronic diuretic therapy. At echo, patients with RVD had slightly lower LVEF (75% lower LVEF and 25% preserved LVEF), worse diastolic dysfunction, lower blood pressure and cardiac output, higher pulmonary artery systolic pressure (PASP) 23%, and more severe RV enlargement and tricuspid valve regurgitation. Patients with RV dysfunction had 11.54% of AHFD occurrence. The association of both RVD and pulmonary hypertension increased the risk of AHFD (14.28%), while patients with normal RVF had only 1.48% to develop AHFD. Adjusting for age, sex, PASP and comorbidities, RVD defined by TAPSE and echo Doppler tissue imaging, was associated with higher risk of HF decompensation.
Conclusions: In our community, RVD is common in HF patients, associated with clinical and echocardiographic evidence of more advanced HF and predictive of poorer outcomes so it had independent prognostic utility.
We should give more attention to the RVF in our systematic assessment of HF patients.

P1405

Early outcome of a dedicated heart failure clinic in Malaysia

SK Seng Kiong Lau[1]; NG SH Ng Sh[1]; NOEL R Ross[1]; YYNGAU Ngau[1]; MR Mr Yusoff[1]
[1]*Hospital Kuala Lumpur, General Medicine, Kuala Lumpur, Malaysia*

Heart failure is common cause a of admission and has a high rate of mortality in Malaysia. Our hospital has initiated a dedicated heart failure clinic since 2013. Recently we undertook an audit to look at the readmission rate and the survival rate of the patients recruited in our clinic.
Method- We have enrolled 95 consecutive patients from our heart failure clinic. Symptom were reviewed and medication were up titredwith adherence to the treatment per international guildlines. In the audit we look at the patients survival rate at 3, 6, 9, 12 and 18 months respectively. We also monitor the readmission rates.
Demography- Median age is 57. Sixty-six percent (n=63) patients are male. Fifty-nine precent (n=53) weremalays, 24% (n=23) were indian, 17% (n=16) were Chinese and 3% (n=3) were of other races. Seventy-nine precent(n=75) has undelying hypertension, 79% (n=75) has ischaemic heart disease and 52% (n=49) has DM. 84% (n=80) has HF rEF. 79% (n=75) are on Ace/Arb, 84% (n=80) are on a beta blocker, 61% (n=58) on spironolactone and 10% (n=8) are on ivabradine.
Result - survival rates at 3,6,9,12,18 months were 100%, 98.9%,98.9%, 96 % and 86%. 14% (n=13) were readmit during this 18 months duration, in which (10/13) 77% were admission due to worsening heart failure symptoms. Improvement of >1 NYHA status at 3,6,12,18 months were 21%, 34 %, 31% and 44%.
Conclusions- With strict adherence to the international guildlines for heart failure we found that in an Asian cohort early survival rate at 18 months was high and readmissions rate for worsening symptoms was keptlow. There was also a gradual improvement of NYHA status with time.

P1406

RAAS genetic polymorghism analysis in chronic heart failure patients

S U Volkova[1]; KA Tomashevich[2]; MY Soloboeva[3]
[1]*Tyumen State Medical Academy, Tyumen, Russian Federation*; [2]*"Neftyanic" hospital, Tyumen, Russian Federation*; [3]*Tyumen Regional Hospital, Tyumen, Russian Federation*

51 patients with heart failure (27 women, 24 men, mean age - 73.1 ±11.3 years old), who had 3-4 functional classes (NYHA).
Having analyzed genomic DNA with PCR - analysis (PCR-express) followed by electrophoresis detection we estimated type I angiotensin II (AGTR1) A1166C receptor polymorphism, polymorphism of T174M and M235T AGT gen of ACE.
Results are presented as genotype (homosygot in allel 1, allel 2 or heterosygot) detection for AGTR1 genes and AGT and in detection allel D-deletion or allel I - insertion Alu - consequences in intron ACE gen. Data were statistically processed with standard methods.
Results: homozygote 1166A was found in 45.1%, homozygote 1166C - in 9.2%, heterozygote - 45.1% of patients with CHF.Allel 174MM was found in 27.5%, 174TT - in 43.1% and heterozygote variant T174M - in 27.4% of patients. Genotype TT M235T was found in 19.6%, MM - in 19.6%, heterozygote variant - in 60.8%. Allel D ACE was found in 51%.
Conclusion: In our research we found relatively low RAS polymorphism frequency, which is responsible for IHD and AH association. ACE Allel D, associated with high ACE inhibitors efficacy, and was found in about 50% of cases. Assuming vague results of genetic polymorphism investigation in different racial groups and investigations that were performed on rather small population give controversial results, further functional significance of RAS gens polymorphism researches in CHF patients are required.

P1407

The influence of heart failure on heart rate variability in patients with newly diagnosed arterial hypertension

OM Bilovol[1]; IA Ilchenko[1]; LR Bobronnikova[1]
[1]*L.T.Malaya Institute of Therapy, Clinical Pharmacology, Kharkiv, Ukraine*

Purpose: To compare the rates of frequency analysis of heart rate variability (HRV) in patients with newly diagnosed arterial hypertension (AH), depending on the degree of heart failure (HF) in order to determine the risk of cardiovascular events (CVE).
Methods: A total of 79 patients with newly diagnosed AH were examined (mean systolic and diastolic blood pressure: 154,4 ± 6,8 mm Hg and 95,6 ± 4.7 mm Hg, respectively), mean age - 42,4 ± 2,1 years, 32 women; HF stage I (36 patients - group 1) and HF stage II-A (43 patients - group 2). All patients underwent an electrocardiogram (ECG) in the morning on an empty stomach 08.00-09.00 with a 5-minute interval recording. The following data of the spectral analysis of HRV were analyzed: high-frequency component (HF), low frequency component (LF), their ratio (L / H) and the total power spectrum (TP). The control group consisted of 14 healthy individuals.
Results: The average heart rate (HR) per day didn't differ in all groups. The average heart rate of patients of group 2 at rest was significantly higher than the one in the control group (70,4 ± 1,2 and 64,4 ± 1,5 per 1 min, respectively ($p < 0,05$)). The analysis of HRV showed reduction of spectral analysis indexes, which was more pronounced in patients of group 2. Patients of groups 1 and 2 demonstrated a decrease of TP (1359,4 ± 72,7 ms^2 ($p > 0,05$); 943,8 ± 49,6 ms^2 ($p < 0,05$), respectively; control group 1682,8 ± 83,2ms^2); significant reduction of HF (325,7 ± 44,9 ms^2 ($p < 0,05$); 271,5 ± 34,7 ms^2 ($p < 0.05$), respectively; control group 486,2 ± 41,4 ms^2) and decrease of LF (204,3 ± 21,5 ms^2 ($p < 0,05$); 175,3 ± 19,4 ms^2 ($p < 0.05$), respectively; control group 295,5 ± 18,2 ms^2).
Conclusions: Patients with newly diagnosed hypertension demonstrate a decrease of HRV spectral characteristics at an early stage of HF formation, thus reflecting the adverse prognostic significance in relation to the development of the CVE and stipulating the necessity for active treatment.

P1408

Effect of ivabradine on functional exercise capacity in patients with systolic heart failure

A Ayhan Gurcagan[1]; S Altay[1]
[1]*edirne devlet hastanesi, cardiology, edirne, Turkey*

Selective sinus-node inhibitor ivabradine has been proved effective in patients with systolic heart failure improving survival and hospitalization rate. Functional exercise capacity provides strong independent insight into the prognosis of patients with heart failure. Evaluation of functional capacity in patients with heart failure by 6-minute walk test is simple, safe and inexpensive alternative to cardiopulmonary exercise testing. We aim to evaluate prospectively the additional effect of ivabradine to optimal medical therapy on functional capacity of patients with heart failure by 6-minute walk test.
We enrolled 25 stable outpatients who were recieving optimal medical treatment for systolic heart failure (mean age 65 +- 11). They had sinus rhyhtm and their resting heart rate was more than 70 bpm despite optimal beta-blocker therapy. They had left ventricular systolic dysfunction (ejection fraction < 40%) with NYHA functional classes II heart failure. Before the initiation of ivabradine (5-7.5 mg b.i.d) and six months later, the patients underwent clinical evaluation, 6-minute walk test to evaluate functional exercise capacity and echocardiographic evaluation. After six months of additional ivabradine treatment, the maximum distance walked by 6-minute walk test was significantly increased by 25% (from 310 +- 21 m at baseline to 387 +- 20m ; $p < 0.001$). Their mean resting heart rate was decreased by 30% (from 79+- 5 bpm to 61 +- 5 bpm ; $p < 0.001$). All patients remained at NYHA functional classes II and there was no death or new hospitalization of patients during six months. There was no significant difference between echocardiographic parameters.
High resting heart rate is an independent prognostic value in patients with heart failure. Many patients maintain a resting heart rate > 70 bpm despite optimal beta-blocker therapy. In clinical practise only 30-35% of patients achieve the therapeutic target dose of beta-blocker therapy as established in randomized clinical trials. Target resting heart rate can be achieved by additional ivabradine treatment.