Results: We studied 134 patients (age: 61±11 years, 19% female) with chronic HF and LV EF<45% (median follow-up: 35 months). An increase ≥10% of LV ESV at 6 months exhibited the worst survival (36% vs 85%, log rank 29.6, p<0.0001). The univariate determinants of LV remodeling at logistic regression analysis were: ischemic aetiology (p=0.007), chronic kidney disease (p=0.0085), mitral regurgitation (p=0.0047), NYHA class (p=0.0046), E/e' (p=0.0023), BNP (p=0.0002), peak cardiac power output (p=0.0002), peak CO (p=0.0002), peak LV ESV (p<0.0001), peak LV EF (p<0.0001), peak ESPVR (p<0.0001), and peak COPM (p<0.0001). Peak CPOM resulted the only independent predictor of LV remodeling (p=0.03), after adjusting for demographics, clinical, biochemical, and echocardiographic data.
Conclusion: Patients with HFrEF that developed LV remodeling during follow-up had the worst outcome. A compromised ESE-derived peak COPM was the most powerful predictor of LV remodeling.

CHRONIC HEART FAILURE – EPIDEMIOLOGY, PROGNOSIS, OUTCOME

P3747
The importance of the number of administrations for reducing heart failure readmissions

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Background: Readmission is a frequently occurring and serious economical and clinical issue associated with heart failure (HF). The majority of elderly patients with HF are frail and suffer from multiple chronic comorbidities. Consequently, they tend toward higher dependency on medications. Polypharmacy is a risk factor associated with adverse drug reactions and outcomes. Furthermore, an increased number of administrations may worsen drug adherence, which may lead to higher incidences of readmission.
Purpose: We aimed to test the hypothesis that increased administrations per day may be associated with readmission in patients with HF, independent of and incremental to conventional risk factors and polypharmacy.
Methods: We conducted a retrospective study of 452 consecutive patients with HF (median age, 81 years) who were admitted to the Hospital. They were followed up for determining the all-cause and HF-specific readmissions over a median of 2.5 years. The number of drug administrations per day and the number of kinds of medicines administered at the time of discharge from index admission were investigated. Drug adherence was confirmed by the presence of leftover medicine six months after discharge from index admission in 191 patients who regularly visited the Hospital.
Results: All-cause and HF-specific readmissions were observed in 269 (60%) and 145 patients (32%), respectively. The median number of administrations was three and the median number of kinds of administered medicines was nine. When the patients were divided into groups based on these median values, both outcomes were associated with a higher number of the kinds of medicine and a higher number of administrations (Figure A). The model is based on clinical parameters for predicting HF-specific readmission and was significantly improved by adding a higher number of kinds of administered medicine, and was further improved by adding a higher number of administrations (Figure B). However, a higher number of administrations did not significantly improve the model power for predicting all-cause readmission (chi-squared test: 38.0–39.4, p=0.18). A higher frequency of leftover medicine was observed in patients with higher number of administrations than in patients with lower number of administrations, but the value was not noted to be significant (22% vs 18%, p=0.62).

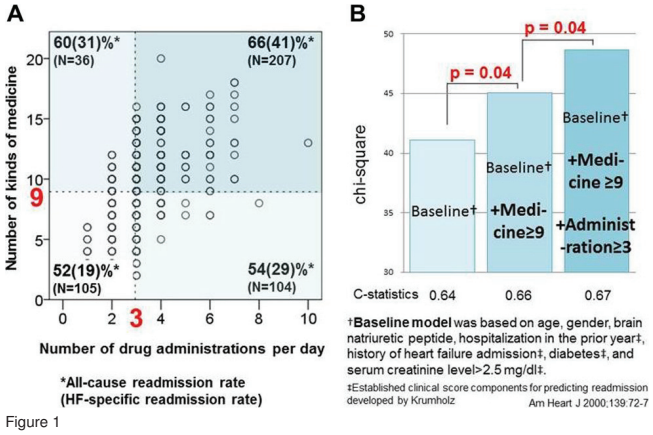

Figure 1

Conclusion: Aside from polypharmacy, the number of administrations may be an important factor in reducing the occurrence of HF-specific readmission. Prospective analysis for the association between the number of administrations and drug adherence is warranted for the confirmation of this result.

P3748
Are there gender differences in humoral activation of chronic heart failure patients?

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The aim of the study is to find if there are the gender differences in chronic heart failure and if it reflects in the levels of classic humoral substances NT-proBNP and new ones: copeptin and mid- regional pro-adrenomedullin (MR-proADM).
Methods: FAR NHL (FARmacology and NeuroHumoraL activation) registry is a database of patients treated in departments with specialized HF care in three University hospitals. The patients should have been treated for systolic HF: ejection fraction of left ventricle (EF) <50% and stable for at least 1 month, follow up was 1 year. Primary endpoint after 1 year follow-up was: death or hospitalization for decompensation of HF or heart transplantation (HTX) or LVAD implantation.
Results: To whole FAR NHL registry a total amount of 1100 patients were included, 889 males and 211 females. Mean age was 63.4 +12.0 in males and 66.7+12.3 years in females (p<0.001). Men had more often the diagnosis of ischemic heart disease 58.5 vs 46.9% (p<0.003) and previous myocardial infarction 45.4 vs 32.3% (p<0.001). There were no differences in systolic, diastolic blood pressure and heart rate. Mean EF was 30.2% in males vs 32.3% in females (p<0.003). There were no differences in the levels of NT-proBNP 1 466.8 pg/ml in males vs 1348.2 pg/ml in females (NS).
There were no differences between males and females in the levels of copeptin: 16.4 vs 16.3 pmol/l (NS) and MR-proADM: 0.65 vs 0.64 nmol/l (NS).
Conclusion: Although there are differences in etiology and some clinical features: women with chronic heart failure are older, less with ICD etiology and have higher EF than men, there were no gender differences in the humoral activation evaluated by NT-proBNP, copeptin and MR-proADM.

P3749
Management in a dedicated heart failure clinic is associated with improved over-all survival

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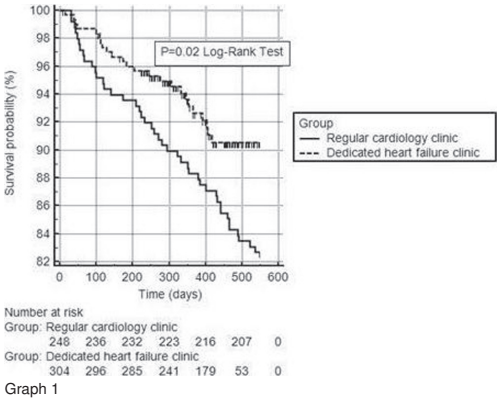
Background: We recently demonstrated that patients managed in a dedicated heart failure (HF) clinic receive better evidence-based pharmacotherapy and attain better functional capacity. However, it remains unknown whether this is also translated into better over-all survival.
Aims: To determine whether management in a dedicated HF clinic confers survival benefit.
Methods: A dedicated HF clinic was established in 1.5.2016, and all patients with ejection fraction ≤0.4 were actively solicited to enroll. The control group consists of all eligible patients who elected not to enroll at the index date. The treatment group consists of all patients who elected to enroll from the index date until 31.10.2017. We analyzed over-all mortality.
Results: As compared to the 248 patients in the control group with a mean (±SE) follow up of 519±6 days, the 304 patients gradually enrolled in the dedicated HF clinic over a mean (±SE) follow up of 498±8 days were more likely to be males (81.2% vs 73.0%, p=0.03) and to have worse baseline heart failure symptoms (56% in NYHA class 3–4 as compared to 38%, p<0.001), but were of similar age (mean age 71.4±0.7 years vs 71.4±0.5, p=NS), had similar ejection fraction values (31.8±0.4% vs 32.6±0.5%, p=NS), and were similarly likely to have ischemic



Graph 1