Kaplan Meyer survival curves

the prevalence of HF from 2011 to 2016. Since the incidence did not increase in the same period, this suggests improved survival. However, the long-term mortality in HF was still very high, especially in patients >75 years of age.
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P6521

Comparison of peak oxygen consumption and percent of predicted oxygen consumption for predicting prognosis in young and female heart failure patients

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Background: Recent guidelines recommend the use of different cardiopulmonary exercise test parameters in conjunction to peak oxygen consumption (pVO2) to guide heart transplant listing in young patients and women, including the percent of predicted peak oxygen consumption (%ppVO2). However this recommendation is weakly supported by evidence.
Purpose: We aimed to compare %ppVO2 and pVO2 as risk predictors in young and female patients with heart failure and reduced left ventricular ejection fraction (LVEF).
Methods: Ambulatory patients with symptomatic heart failure and LVEF $\leq$40%, followed in our center, prospectively underwent a baseline comprehensive evaluation including clinical, laboratorial, electrocardiographic, echocardiographic, and cardiopulmonary exercise testing parameters; all patients were followed-up for 60 months. The combined endpoint was cardiac death, urgent heart transplantation or need for mechanical circulatory support. Patients were divided according to age (<50 and $\geq$50 years old) and gender.
Results: In the 263 enrolled patients (32% <50 year, 25% female, LVEF 28±7%), 74 events occurred. Using Cox regression analysis, %ppVO2 and pVO2 were predictors of adverse events (HR 0.80, 95% CI 0.75–0.85, p<0.001 and HR 0.94, 95% CI 0.92–0.97, p<0.001, respectively). Receiving operating characteristics curves are shown in figure 1. In young patients, %ppVO2 was a more accurate predictor of adverse outcomes (%ppVO2 - AUC 0.801, 95% CI 0.710–0.891, p<0.001 vs. pVO2 – AUC 0.769, 95% CI 0.662–0.876, p<0.001), while in older patients pVO2 performed better (%ppVO2 – AUC 0.782, 95% CI 0.693–0.871, p<0.001 vs. pVO2 – AUC 0.812, 95% CI 0.731–0.893, p<0.001). In women, %ppVO2 also had greater ability to discriminate outcomes (% ppVO2 – AUC
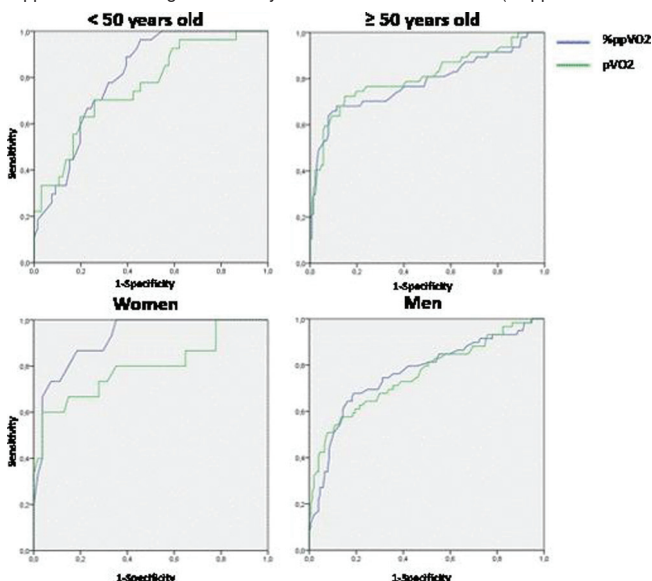

Figure 1

0.920, 95% CI 0.851–0.989, p<0.001 vs. pVO2 – AUC 0.795, 95% CI 0.645–0.945, p 0.001) whereas pVO2 was a slightly better predictor for men (%ppVO2 - AUC 0.759, 95% CI 0.681–0.837, p<0.001 vs. pVO2 – AUC 0.764, 95% 0.687–0.842, p<0.001). A cut-off value of 50% for %ppVO2 yield a specificity of 80% and sensibility of 50% for young patients and a specificity of 96% and a sensibility 47% for women.
Conclusion: Percent of predicted peak oxygen consumption was more accurate than peak oxygen consumption for risk stratification in young and female patients with heart failure and reduced ejection fraction.

P6522

Prognostic value of st2 in diabetic patients with heart failure and preserved ejection fraction

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Background: ST2 is currently considered as a risk factor for hospitalization and death in patients with systolic heart failure. However, the impact of ST2 and its cut-off level for such end-points as cardiac death, hospitalization for heart failure, non-fatal stroke in diabetic patients with heart failure with preserved ejection fraction (HFpEF) is not well established.
Aim: To investigate the prognostic level of ST2 for pre-defined study endpoint in diabetic patients with HFpEF.
Methods: A total of 82 patients with type 2 diabetes mellitus and HFpEF were enrolled in the study and followed-up for 24-month period. ST2 was determined by using kits of reagents "PresageST2" (USA). The relationship between ST2 levels and a composite endpoint including cardiac death, hospitalization for heart failure, non-fatal stroke was assessed using Roc analysis.
Results: During a median follow-up of 24 months 40 (48%) patients had the study composite endpoint. ST2 was the only predictor for composite endpoint within 24 months follow-up in diabetic patients with HFpEF (OR = 8.0, 95% CI = [1.52–42.03], p<0.05). ROC analysis has been shown that cut off point of ST2 concentration for cumulative endpoints was 24.88 ng/ml. Figure (Fig.1) demonstrates a significantly differences of Kaplan-Meier survival curves in patients with high (>24.88 ng/ml) and low (<24.88 ng/ml) concentrations of ST2.
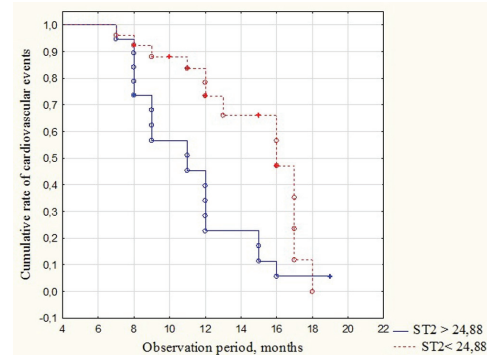

Figure 1.

Conclusion: The cut-off level of ST2 24.88 ng/ml is a strong and independent prognostic predictor in diabetic patients with HFpEF.

P6523

M235T polymorphism of ATG: prognostic marker of cardiovascular events in diabetic patients with heart failure with preserved ejection fraction, a 2 year follow-up

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Background: It has been shown a strong influence of ATG polymorphism on heart failure development. However, the impact of M235T polymorphism of ATG on cardiovascular events development in diabetic patients with heart failure with preserved ejection fraction (HFpEF) is still unknown.
Aim: To estimate whether M235T polymorphism of ATG is associated with cardiovascular events in diabetic patients with heart failure with HFpEF.
Methods: A total of eighty-two patients (50 females and 32 males; mean age 62,9±8,1 years) with HFpEF and type 2 diabetes mellitus were examined. Sixty-