PROGNOSTIC ROLE OF ATRIAL Fibrillation AND Heart Rate Control IN CHRONIC Heart Failure Patients

Poster Contributions
Poster Sessions, Expo North
Sunday, March 10, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Role of Comorbidities in Heart Failure: From Diabetes, Pulmonary Disease, Hypertension to Atrial Fibrillation
Abstract Category: 15. Heart Failure: Clinical
Presentation Number: 1263-287

Authors: Savina Nodari, Marco Triggiani, Laura Lupi, Alessandra Manerba, Giuseppe Milesi, Elena Rocco, Nicola Berlinghieri, Annalisa Pizzuto, Silvia Suardi, Clara Villa, Livio Dei Cas, Cardiology Department University and Spedali Civili Hospital of Brescia, Brescia, Italy

Background: Atrial Fibrillation (AF) is common in Heart Failure (HF) patients (pts). Heart Rate (HR) control is challenging and maybe associated with poor prognosis in this population. The aim of this study was to analyze the prognostic role of AF, in relation to the value of HR, in chronic HF pts.

Methods: we performed a retrospective analysis of pts with reduced Left Ventricular Ejection Fraction (LVEF<45%) and stable clinical condition (neither events nor therapeutic changes in the previous 3 months) followed in our HF clinic. Demographic, clinical, echocardiographic and laboratory parameters were recorded. We considered as composite endpoint the occurrence of cardiovascular (CV) death and HF or CV hospitalization at 1 year follow-up. We analyzed clinical characteristics and events in sinus rhythm (SR) pts and in AF pts, stratified according to median baseline HR value (70 bpm).

Results: A total of 528 pts (mean age 66.9 ± 13 years, 82% male) were enrolled. Almost all pts were receiving beta-blockers (n=485; 92%) at maximum tolerated dose. Composite endpoint occurred in 151 pts (28.6%). In a multivariable model, the presence of AF (p < 0.001), low LVEF (p < 0.002) and a worse NYHA function class (p = 0.007) independently predicted events. In AF pts (n=121; 23%), those with HR ≥ 70 bpm compared with those with HR < 70 bpm were more likely to have clinical and functional congestion despite they were receiving a significant higher dose of beta-blockers (33.8±23 vs 21±13.5 mg/day; p=0.002). In SR pts (n=407; 77%), no significant differences between the two HR groups, were recorded for mean NYHA class (1.8±0.7 vs 1.8±0.7; p=NS), mean LVEF (37.5±8% vs 36±9%; p=NS) and beta blockers dose (26±17mg vs 29±22 mg; p=NS). Event free survival was significantly lower in AF pts with HR ≥ 70 bpm compared to other groups (p < 0.05).

Conclusions: Atrial fibrillation is associated with an increased risk of events in chronic stable HF pts, especially in those with HR ≥ 70 bpm. Our findings suggest that in pts with HF and AF, HR control should be considered an important goal when rhythm control strategy failed. Further prospective studies testing new HR control strategies are needed.