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ATRIAL FIBRILLATION LINK TO EXCESS MORTALITY IN PATIENTS WITH LEFT VENTRICULAR DYSFUNCTION: LINKED TO RAPID VENTRICULAR RESPONSE OR INDEPENDENT PROGNOSTIC MARKER?

Poster Contributions
Poster Hall, Hall C
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Session Title: Emerging Developments in HFpEF and Arryhthmias
Abstract Category: 13. Heart Failure and Cardiomyopathies: Clinical
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Background: Prognostic implications of atrial fibrillation (AF) in patients with left ventricular dysfunction (LVD) were mainly inferred from meta-analyses and post-hoc analysis of trials testing different hypotheses. Thus, intrinsic prognostic role of AF vs. rapid ventricular response in routine clinical practice is undefined.

Methods: Consecutive patients with LVD (EF<50%) diagnosed at Mayo Clinic 2003-2011with complete electrocardiographic, clinical and comorbidities characterization were enrolled. Organic valve disease and previous valve surgery were excluded.

Results: Among 16,709 patients diagnosed with LVD (age 67±14 years, EF 36 ±10%, 32% female), 20% were in AF (Warfarin prescribed in 78% of AF). During follow-up of 4.38 ±3.5 years, 49% of patients died. AF predicted excess-mortality under medical management univariately (hazard-ratio1.34 [1.27-1.40], p<0.0001) and after adjusting for age, sex, comorbidities, symptoms, ejection fraction, and heart rate (hazard-ratio 1.11[1.04-1.18], p=0.001) with incremental power to the model (p<0.0001). Subgroup analysis demonstrated excess mortality with AF in all subsets, notably in patients with controlled heart rate (Figure).

Conclusions: AF is an incremental and independent marker of excess mortality in patients with LVD irrespective of associated clinical and hemodynamic characteristics and heart rate. The potential to reduce this excess mortality should be evaluated in clinical trials.