**BETA BLOCKER USAGE AND OUTCOMES ACCORDING TO PATIENT RISK IN PATIENTS WITH HEART FAILURE AND PRESERVED EJECTION FRACTION**

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Background: Studies of patients with heart failure (HF) have shown reduced use of beta-blockers (BB) among higher risk populations. However, these studies focused upon patients with reduced ejection fraction (EF<40%). We wished to determine if this relationship exists in HF patients with preserved EF (HFPEF) who have been selected for aggressive therapy with cardiac catheterization.

Methods: Data on HF admissions was collected using the Alberta Provincial Project for Outcomes Assessment in Coronary Heart Disease (APPROACH). Patients with measured EF<40%, left ventricular end-diastolic internal diameter (LVID)>56 mm or who had no data pertaining to BB use were excluded. Subjects were stratified by risk of mortality using a scoring tool validated in systolic HF. Rates of BB prescription for each group were determined. Kaplan-Meier survival curves to 4-years post-admission were constructed and a Cox proportional hazards model was calculated for mortality according to risk group.

Results: 210 subjects were included. Mortality across low, medium, and high-risk groups were 8%, 18%, and 38% respectively. BB prescription rates were 60%, 63% and 61% respectively (p=0.86). BB prescription was not associated with a significant survival benefit even when adjusted for confounders (HR 0.95, 95% CI 0.63-1.45). Stratification by risk showed similar results.

Conclusion: Unlike previous studies, we did not see evidence of risk-treatment discordance among our cohort of HFPEF patients. This may be a result of studying subjects who had been selected for aggressive therapy with cardiac catheterization. Additionally, BB use in this group was not associated with a significant reduction in mortality independent of risk.