CARDIOVASCULAR CO-MORBIDITIES AND FIVE YEAR SURVIVAL IN A LARGE CONTEMPORARY OUTPATIENT COHORT OF PATIENTS WITH CHRONIC HEART FAILURE

ACC Moderated Poster Contributions
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Background: Chronic heart failure (HF) has many causes and associated co-morbidities.

Methods: We determined the predictive value of cardiovascular co-morbidities on five year survival in a large outpatient cohort of 18,772 HF outpatients (median age 66yrs; male 69%;NYHA class I-IV 13, 40, 43, 4%; ischemic etiology 54%) who were referred and followed longitudinally (1999-2010) in the multidisciplinary clinics (n=28) of the Canadian Heart Failure Network (CHFN). HF patients, with either impaired or preserved left ventricular function, were treated in the local CHFN clinic based on national guidelines and local practice and data were entered into a common national network database. This analysis describes the cardiovascular co-morbidities recorded in the database at the time of the patient’s first database entry, and the subsequent five year survival using Cox proportional hazards regression.

Results: Data are described as a point estimate (95% confidence) [p value *<0.05, †<0.001] in a univariable analysis: Dyslipidemia 0.94 (0.88, 1.00) [NS]; Systemic hypertension 1.09 (1.02, 1.16)[*]; Valve disease 1.31 (1.21, 1.42)[†]; Coronary artery disease 1.37 (1.28, 1.46)[†]; Atrial fibrillation 1.43 (1.33, 1.52)[†]; Brady-arrhythmia 1.52 (1.31, 1.76)[†]; Pulmonary hypertension 1.55 (1.39, 1.72)[†]; Peripheral vascular disease 1.98 (1.81, 2.17)[†]; Renal disease 2.38 (2.22, 2.55)[†]; Cerebrovascular disease - transient ischemic attack 1.32 (1.14, 1.53), cerebrovascular accident 1.43 (1.27, 1.61)[†]; Diabetes type I - 1.29 (1.03, 1.62), type II - 1.28 (1.19, 1.39), type II on insulin - 1.83 (1.65-2.02)[†]; Current smoker 0.88 (0.79, 0.98)[*].

Conclusions: In this large contemporary outpatient database, survival to five years in patients with chronic HF is impacted by many cardiovascular clinical variables. However, additional conditions including renal disease, cerebral and peripheral vascular events and diabetes also contribute significantly to mortality. Integration of specialized clinics may provide opportunities to improve survival.