of gender bias in the management of HF; 2) Caregiver specialty may influence gender bias in management of HF.

1044-34 | Are Women With Heart Failure Treated Differently?

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Several studies have reported differences in the treatment of women with cardiovascular disease compared to men. We reviewed an administrative data set containing chart audits on 16,576 outpatients (pts) with a heart failure (HF) diagnosis from 136 US cardiology and multi-specialty practices to determine whether there were gender differences in the use of ACE-is. Pts had an ICD-9 code 428, were over the age of 21 years (yrs) and had at least 2 visits within the previous 12 months, the last visit occurring between 7/1/95 and 10/1/96. The mean age was 73 ± 12 yrs and 47% were women. Compared to men, women were older, had more hypertension, 49% vs 38% and less ischemic disease 32% vs 48%. The mean LVEF determined in 10,623 pts (64%) was significantly higher in women compared to men, 46% ± 17 vs 39% ± 16, p = 0.0001. ACE-I therapy was prescribed in 45% of women vs 53% of men. However, of the pts with an LVEF < 40%, 65% of women vs 69% of men received an ACE-I. The recommended target dose of ACE-I was prescribed in 35% of women and 37% of men.

The prescription of ACE-is remains suboptimal in pts with HF. Women appear to have better preserved LV function and more diastolic dysfunction compared to men. However, in pts with an LVEF < 40%, ACE-I prescription and dosing appears similar in men and women.

1044-35 | The Prognostic Significance of Valvular Abnormalities in Patients With Severe Left Ventricular Dysfunction

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Background: Left ventricular dysfunction is an increasingly common health problem with poor survival rates despite recent advances in treatment. However, even patients with markedly reduced function have significantly disparate survival. We examined the prognostic value of valvular disease in an unselected group of patients with systolic dysfunction (LV ejection fraction ≤35%) referred for echocardiography between 1988–1990, excluding patients with congenital heart disease.

Methods: Severity codes for valvular abnormalities were linked to a mortality database derived from state and national vital statistics and Cox proportional hazards models were used to measure their association with survival.

Results: Of 6605 patients referred for echo during this time period, 676 patients (mean age = 61 ± 3 years; M:F 2.2:1) had LV ejection fractions ≤35%; in this cohort, significant univariate predictors of death were aortic stenosis (χ^2 45, p < 0.0001; Severe AS relative hazard 3.8, C.I. 2.1–6.8) and mitral annular calcification (χ^2 19, p < 0.001; Severe MAC relative hazard 2.8, C.I. 1.1–7.6), with no significant predictive value of mitral regurgitation nor mitral valve prolapse severity; there were insufficient cases of aortic insufficiency and mitral stenosis for analysis. Unexpectedly, in a multivariate model including valvular abnormalities, ejection fraction and age, mitral annular calcification remained an independent predictor along with aortic stenosis.

Conclusion: Although the impact of aortic stenosis on survival is well recognized, the age-independent effect of mitral annular calcification in patients with severely reduced left ventricular function is provocative, warranting further investigation with particular attention to the relationship between MAC and cerebrovascular events.

1044-36 | Do Clinical Events Predict Subsequent Mode of Death in Patients With Advanced Chronic Heart Failure?

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Background: Prevention of sudden death (SD) in heart failure (CHF) pts is a priority, but prediction of SD is difficult. Efforts to define SD predictors have examined baseline pt data but not intercurrent events. PRAISE monitored nonfatal events in pts with advanced CHF over 14 months, so we evaluated their relation to cause-specific mortality.

Methods: We compared total mortality (TM), SD, pump failure death (PF), other deaths & SD/TM in 1) all pts; 2) pts with adverse events (AE) of worsening CHF; & pts with "life-threatening" events judged by an Endpoints Committee (EC), including 3) hemodynamic (HD) events (severe hypoperfusion,

pulmonary edema) & 4) nonHD events (sustained ventricular arrhythmias or myocardial infarction).

	n	TM%	SD%	PF%	other%	SD/TM
1) All PRAISE pts	1153	36	16	14	6.2	0.45
2) AE-CHF	451	50	15	27	8.0	0.30
3) EC-HD	71	55	5.6	37	13	0.10
4) EC-nonHD	45	49	22	13	13	0.45

Results: Nonfatal cardiac events increased mortality risk in PRAISE. NonHD events carried the most SD risk, but SD/TM was similar to the overall population. HD events carried the highest TM risk, but predicted lower incidence and proportion of SD.

Conclusion: SD remains prevalent in advanced CHF, but recent HD instability strongly predicts PF death, so HD event-free pts have greater potential survival benefit from anti-arrhythmic drugs/devices. Assuming devices may reduce SD by 50%, they would have reduced TM by 22% in group 1 but only by 15% in group 2, or 5% in group 3.

1044-37 | Decreased Left Ventricular Relative Wall Thickness Predicts Decreased Event-Free Survival in African Americans With Dilated Cardiomyopathy

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Background: LV wall thickness increases to match LV cavity diameter, preserving normal wall stress and contractile function. The ratio of wall thickness to cavity diameter, relative wall thickness (RWT), is therefore maintained constant in the normal heart, irrespective of heart size. In dilated cardiomyopathy (DCM), failure to maintain RWT has been associated with poor prognosis in whites. The impact of RWT differences in African Americans (AA) with DCM has not been studied.

Methods: LV dimensions and RWT were assessed on baseline echoes of all AA patients presenting to our heart failure service from 1991 to 1997. Multiple clinical covariates were assessed, obtained from a prospective database. Measured outcome was survival to a combined clinical endpoint, including death and cardiac transplantation.

Results: 54 AA pts (40M, 14F) were identified, with mean follow-up of 20.1 ± 15.4 mos. RWT < 0.3 (2SD below the population mean), NYHA class, and history of hypertension (HTN) were significant predictors of decreased event-free survival in univariate analyses. Pts with low RWT had a mean event-free survival of 13.8 ± 2.2 months, compared to 46.2 ± 4.0 months in pts with normal RWT (p < 0.001). There was no correlation between RWT and HTN. RWT < 0.3 remained a significant predictor (p = 0.053) in Cox multivariate regression, while NYHA class and HTN were no longer associated.
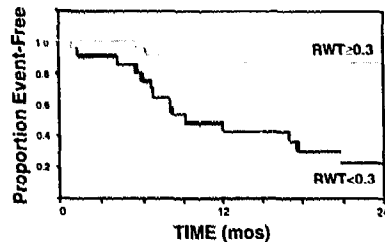
Conclusion: Inappropriately low RWT independently predicts death and/or the need for cardiac transplantation in AA with DCM.

1044-38 | Did Clinical Features Distinguish Low From Normal Ejection Fraction in Chronic Heart Failure in the DIG Trial?

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Background: Whether clinical data in chronic HF distinguish patients with a low versus normal LV EF is controversial.

Methods: Half of the patients in the DIG Trial database were randomly assigned to a Derivation Set, which was used to develop a linear regression model for EF based on medical history, physical exam and laboratory data kept on file. The remainder, a Validation Set, were used to assess this equation's predictive validity.

Results: The best model ($r^2 = 0.23$, p < 0.00001, Mallow's $C^p = 24.5$) retained these predictors: age, sex, previous MI, functional class, hypertension, angina, systolic and diastolic BP, heart rate, body mass index, elevated