

**1069-120 Improved One-Year Survival of Hospitalized Heart Failure Patients Between 1995 and 2000**

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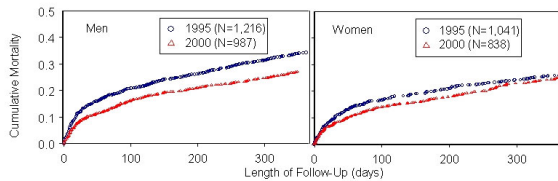
**Background:** Few studies have examined population-based secular trends in survival of patients with congestive heart failure (CHF).

**Methods:** We obtained lists of discharge diagnosis codes in 1995, and again in 2000, from 22 Minneapolis-St. Paul hospitals; identified patients 35-79 years old with a CHF discharge code; and reviewed a sample of the records (50% of 1995 records; 38% of 2000 records). To identify CHF-related hospitalizations, we applied six published definitions of the syndrome to each record and selected patients whose records met at least four of these six definitions (2,257 patients in 1995; 1,825 patients in 2000). Each patient was followed for one year to ascertain vital status.

**Results:** The risk profile of the 2000 patient cohort was somewhat worse than that of the 1995 cohort in both sex groups. For example, previous diagnoses of CHF, coronary disease, hypertension, and diabetes were noted more frequently among patients hospitalized in 2000, particularly among women. The distributions of age and left ventricular ejection fraction were similar in the two cohorts. Within one year of admission in 2000, 28% of male patients and 27% of female patients have died, compared to 36% and 27% of their counterparts in 1995, respectively. Cumulative mortality, adjusted for age and history of CHF, is shown in the figure.

**Conclusions:** Survival of patients who were hospitalized for CHF has improved during the second half of the 1990s, more notably of male patients than of female patients.

Age & CHF History-Adjusted Cumulative Mortality of Hospitalized CHF Patients by Sex and Year



POSTER SESSION

**1070 Cardiovascular Disease in the Elderly: Pathophysiology and Interventions**

Monday, March 08, 2004, 9:00 a.m.-11:00 a.m.  
 Morial Convention Center, Hall G  
 Presentation Hour: 10:00 a.m.-11:00 a.m.

**1070-103 Effect of Aromatase Inhibition on Lipids and Inflammatory Markers of Cardiovascular Disease in Elderly Hypogonadal Men: A Double-Blind Placebo-Controlled Randomized Trial**

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**Background:** Androgen replacement in elderly men with declining testosterone (T) levels is an increasingly common, though controversial, practice. Recently, aromatase inhibitors have been proposed as a novel method of increasing endogenous T production in elderly men but the effects on lipids and cardiovascular risk have not been defined.

**Methods:** We randomized 37 hypogonadal men between the ages of 62-74 and T levels between 150-350 ng/dL to receive oral anastrozole (a potent aromatase inhibitor) 1mg daily, 1mg twice weekly, or placebo for 12 weeks. Serum levels of fasting lipids, C-reactive protein (CRP), interleukin-6 (IL-6), intercellular adhesion molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), and insulin sensitivity were assessed.

**Results:** Anastrozole normalized testosterone and decreased estradiol levels modestly at both doses. This intervention had no effect on fasting lipids, inflammatory markers (IL-6, CRP), adhesion molecules (ICAM-1, VCAM-1), or insulin sensitivity (homeostasis model assessment). There was, however, a significant positive correlation between changes in serum triglyceride and estradiol levels (p=0.005).

**Changes in Serum Markers (mean ± SD)**

		Testosterone (ng/dL)	Estradiol (pg/mL)	High Density Lipoprotein (mg/dL)	CRP (mg/L)	ICAM-1 (ng/mL)
<b>Anastrozole 1mg QD (n=12)</b>	Baseline	343 ± 61	26 ± 8	54 ± 11	2.3 ± 2.7	265 ± 82
	Week 12	572 ± 139*	17 ± 6*	51 ± 10	2.1 ± 2.0	259 ± 72
<b>Anastrozole 1 mg 2x/wk (n=11)</b>	Baseline	397 ± 106	27 ± 8	49 ± 12	1.8 ± 2.2	227 ± 49
	Week 12	520 ± 91*	17 ± 5*	45 ± 12	1.7 ± 1.7	219 ± 45
<b>Placebo (n=14)</b>	Baseline	344 ± 76	23 ± 4	50 ± 16	1.8 ± 2.6	254 ± 58
	Week 12	344 ± 85	25 ± 6	47 ± 15	1.5 ± 1.3	244 ± 52

\*p<0.001 compared to placebo

**Conclusion:** Short-term use of the aromatase inhibitor anastrozole normalizes serum testosterone levels in elderly men with mild hypogonadism without adversely affecting lipids, inflammatory markers, or insulin resistance. Further studies are needed to assess the long-term effects of aromatase inhibitors on cardiovascular health.

**1070-104 Age-Related Complications and Outcomes After Primary Percutaneous Coronary Interventions**

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**Background:** Prior investigations have shown that advancing age is associated with increased comorbid conditions and is an independent predictor of mortality in patients with acute myocardial infarction. However, the relationship of age to in-hospital complications and outcomes in patients undergoing primary percutaneous coronary intervention (PCI) is less known. **Methods:** We evaluated 2454 consecutive patients that underwent primary PCI between 1991 through 2002 at William Beaumont Hospital. Patients were characterized into 3 age-based groups (<50, 50-69 and ≥70 years). **Results:** In-hospital complications are as shown in table. No patient age <50 years died in hospital, whereas mortality occurred in 12 (1%) and 36 (4%) of patients aged 50-<70 years and ≥70 years, respectively (p<0.0001). **Conclusions:** Our data indicates that many in-hospital complications are increased with aging in patients undergoing primary PCI. This increased complication rates may, in addition to the increased comorbid conditions, contribute to the higher mortality observed with advancing age.

In-hospital complications

Complications	Age<50 yrs	Age 50-<70 yrs	Age ≥70 yrs	p-value
N	342	1231	881	
Intubation	0%	0.9%	1.4%	0.08
Intraaortic balloon pump	4.7%	7.2%	7.6%	0.18
New shock	0	0.5	0.5	0.62
Coronary perforation	0	0.6	0.5	0.54
Abrupt closure	0.3	0.7	0.5	0.54
No-reflow	1.5	2.2	2.5	0.54
Urgent CABG	0.9	1.6	1.7	0.55
Groin hematoma	12	16	24	<0.001
Retroperitoneal bleed	0	0.1	0.8	0.08
Major bleeding requiring transfusion	0	4.4	11.3	<0.001
Reinfarction	0.9	1.7	2.0	0.37
Renal failure	1.2	1.4	4.5	<0.001
Need for Dialysis	0.6	0.2	1.3	0.007
Stroke	0.3	0.2	0.9	0.037
Length of stay (mean [SD], days)	3.3 (2.4)	4.6 (13)	6.6 (14)	<0.001