HEART FAILURE AFTER INITIATION OF CHRONIC HEMODIALYSIS: A 16-YEAR FOLLOW-UP STUDY

Poster Contributions
Poster Sessions, Expo North
Sunday, March 10, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Role of Comorbidities in Heart Failure: From Diabetes, Pulmonary Disease, Hypertension to Atrial Fibrillation
Abstract Category: 15. Heart Failure: Clinical
Presentation Number: 1263-276

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Background: Heart failure (HF) is highly prevalent in hemodialysis (HD) patients (pts) and a predictor of mortality. However, the risk factors and long-term prognosis are not well known.

Methods: Data from the New Jersey MIDAS database and chronic hemodialysis network were used to identify 11491 HD pts hospitalized for a cardiovascular event (HF, n=3806, no HF; n=7685) between 1994 and 2009. Pts with an admission for HF prior to initiation of HD were excluded. Risk factors for HF and risk of mortality up to 16 years after the initiation of therapy were analyzed.

Results: Reasons for HD were: hypertension (32%-HTN), diabetes (32%), nephritis (23%), congenital (5%), AIDS (3%), and other (5%). Multivariate analysis demonstrated significant risk factors for developing HF after initiation of HD were: history of HTN, OR 1.61 (1.34-1.94); Medicaid or Self-pay insurance, OR 1.37 (1.21-1.55); bypass surgery (CABG), OR 1.37 (1.03-1.81); coronary disease, OR 1.35 (1.23-1.48); black race OR 1.18 (1.08-1.29); chronic lung disease, OR 1.13 (1.01-1.27). The risk of all cause mortality among those with HF was similar to those without HF for the first 4 years after starting HD (HR 1.15, [95%CI, 0.74-1.80]) but with a significant increase thereafter (HR 3.59, [95%CI, 3.16-4.07]). See Figure.

Conclusion: This 16-year study of HD pts shows that HTN, insurance type and CABG are the main risk factors for developing HF after starting HD. All cause mortality in HF pts is markedly increased especially after 4 years from initiation of HD.