



QUALITY OF CARE AND OUTCOMES ASSESSMENT

CHARACTERISTICS OF PATIENTS REHOSPITALIZED WITH ACUTE DECOMPENSATED HEART FAILURE (ADHF) WITHIN 30 DAYS FOLLOWING DISCHARGE

ACC Poster Contributions
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Introduction: Rehospitalization within 30 days of discharge is a major health issue that has attracted national attention. Limited information is available on the clinical and laboratory characteristics associated with 30 day re-hospitalization for ADHF.

Methods: The data on 789 patients consecutively admitted with ADHF to an urban health care center within 8 months were analyzed for rehospitalization for ADHF within 30 days of discharge. Multivariate logistic regression was performed analyzing clinical characteristics and laboratory findings.

Results: Patients re-admitted with ADHF after the index hospitalization (n=73, 9.25%) were more likely to be African Americans (19.69% Vs 9.59%, p=0.035), younger (56.24±14.26 Vs 64.48±15.35, p=0.000) with lower left ventricular ejection fraction (34±17% Vs 40±20%, p=0.01) and lower admission GFR [GFR<60; 53.42% Vs 38.83%, p=0.01]. None of patients with new-onset HF was re-admitted within 30 days (n=115). Multivariate analysis identified the following variables as significant predictors of 30-day rehospitalization for ADHF.

Conclusions: Sepsis and infections other than pneumonia as well as subclinical cTnI elevation are under recognized contributing factors to 30 day readmission with ADHF following discharge.

Predictors of 30-day Rehospitalization for ADHF - Multivariate Logistic Regression Model

Variables	OR	p-Value	95% CI
Increasing Age	0.95	0.000	0.94-0.97
Subclinical cTnI (0.02 to 0.4 ng/ml)	2.06	0.009	1.20-3.55
Admission GFR < 60 ml/min/1.73 m ²	2.32	0.002	1.35-3.98
Moderate - Severe Tricuspid Regurgitation	3.92	0.001	1.75-8.80
Mild Mitral Regurgitation (MR) by Echocardiography	2.89	0.001	1.51-5.52
Moderate - Severe Mitral Regurgitation (MR) by Echocardiography	3.68	0.028	1.15-11.80
Hospital course complicated by sepsis & infections other than pneumonia	6.03	0.000	2.40-15.11

¶ OR = Odds Ratio; CI = Confidence Interval; GFR = Glomerular Filtration Rate; cTnI=Cardiac Troponin I