



ACC.14

TCT@ACC-12 | innovation in intervention

A817

JACC April 1, 2014

Volume 63, Issue 12



Heart Failure and Cardiomyopathies

30-DAY READMISSIONS IN CONTINUOUS-FLOW LEFT VENTRICULAR ASSIST DEVICE PATIENTS ARE A MARKER FOR ADVERSE OUTCOMES

Poster Contributions

Hall C

Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Heart Failure and Cardiomyopathies: Therapy II

Abstract Category: 14. Heart Failure and Cardiomyopathies: Therapy

Presentation Number: 1146-171

Authors: *Gabriel Sayer, William Cotts, Gregory Macaluso, Patroklos Pappas, Antone Tatoes, Geetha Bhat, Advocate Christ Medical Center, Oak Lawn, IL, USA*

Background: 30-day (30d) readmissions are an important heart failure (HF) outcome measure. In continuous-flow left ventricular assist device (CF-LVAD) patients, readmissions are common, but the causes of 30d readmissions and their association with long-term outcomes have not been described.

Methods: All patients implanted with a CF-LVAD at our center between 2005-2013 were reviewed. We excluded LVAD exchanges and non-discharged patients. We used linear regression and Kaplan-Meier survival analyses to model overall readmission rate and survival as a function of 30d readmission.

Results: 239 patients were studied (mean age 60, 77% male, 82% destination therapy) with a median follow-up of 1.3 years. 29% were readmitted with 30 days. The most common causes of 30d readmission were gastrointestinal bleeding (21%) infection (16%) and HF (13%). Readmitted patients had a longer index hospitalization compared to patients who were not readmitted (23.5 v. 18 days; $p = 0.02$). In patients with a 30d readmission, the median readmission rate was 3.7 (IQR 2.3-7.0) per patient-year as compared to 1.4 (IQR 0.4-3.3) per patient-year in those without a 30d readmission ($p < 0.001$). Regression analysis showed that 30d readmission significantly predicted readmission rate ($\beta = 4.0$, $p < 0.001$). In Kaplan-Meier analysis, survival was worse in patients with a 30d readmission.

Conclusions: 30d readmissions are common in CF-LVAD patients and are associated with a high rate of subsequent admissions as well as increased mortality.

