Characteristics of Acute Heart Failure Hospitalizations in a General Medical Ward in Southwestern Uganda

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Abstract

Predictors of in-hospital mortality among acute heart failure (AHF) patients managed in general wards of sub-Saharan Africa is unknown, yet this may aid in prioritization of high risk patients for focused interventions. We aimed to determine the clinical characteristics and predictors of in-hospital mortality in adults hospitalized with AHF in a Ugandan tertiary hospital without a specialized cardiology center. We reviewed the medical records of patients admitted with AHF to the general medical ward of Mbarara Regional Referral Hospital. We obtained sociodemographic, clinical, treatment, and outcome data. Analyses were performed using logistic regression. We identified 274 patients with AHF. The median age was 52 years (IQR, 35-67) and 191 (70%) were female. One hundred twenty (44%) patients had acute decompensation of chronic heart failure. Concurrent infection and medication noncompliance were precipitants in 32% and 27% respectively. Of our AHF patients, 36% were hypertensive and 31% had dilated cardiomyopathy. There were 50 (18.3%) in-hospital deaths. Of the 187 (68%) who had echocardiographic examination, 69% had reduced left ventricular ejection fraction (LVEF ≤ 45%). The overall length of hospital stay was 5 (IQR, 3 – 9) days. Predictors of in-hospital mortality being admitted with hypotension (AOR, 4.6, 95%CI 1.6 - 13.2, p=0.005) and a reduced LVEF (AOR, 7.6, 95%CI 1.6 - 35.4, p=0.010). After controlling for concurrent infection, hypotension remained a predictor of in-hospital mortality (AOR, 3.2, 95%CI 1.6 - 6.3, p=0.0003). Patients more often presented with acute “de novo” heart failure due to hypertension, and dilated cardiomyopathy with reduced left ventricular ejection fraction. Control of hypertension may reduce mortality from acute heart failure in South Western Uganda.

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