

**AC035**

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

CHANGES IN KIDNEY FUNCTION DURING ACUTE HEART FAILURE HOSPITALIZATION INFLUENCE IN-HOSPITAL MORTALITY, BUT NOT OTHER 90-DAY HEART FAILURE OUTCOMES

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Heart Failure (HF) is associated with poor outcomes, particularly during hospitalization. Kidney function (KF) during HF hospitalization is dynamic and its trajectory may have varying prognostic implications. While some studies suggest that kidney dysfunction (KD) during HF hospitalization is detrimental, researchers continue to argue that worsening KF is a physiologic response to decongestive therapy and question its predictive effects on HF outcomes. This was a prospective observational study carried out among 145 adult patients hospitalized for acute HF at the Lagos University Teaching Hospital. KF was assessed using eGFR (daily for the first 7 days), and albuminuria (at admission). Participants were followed up for 90 days from admission or until death. The study outcome measures were a composite of all-cause mortality, HF rehospitalization, unscheduled hospital visit due to worsening HF symptoms and outpatient intensification of diuretic dose (primary), and each of the components of the primary outcome measures, plus in-hospital mortality (secondary). Participants were grouped into those with stable, worsened and improved KF based on eGFR over the first 7 days of admission. Median eGFR at presentation was 56.5mL (41.3-76.5). Over the subsequent 7 days, 50.3%, 29.7% and 20.0% of participants experienced worsening, stable, and improved KF, respectively. Participants who experienced either worsening or improved KF had 74% (HR=0.26, 95% C.I: 0.10-0.69, p=0.007) and 87% (HR= 0.13, 95% C.I: 0.03-0.56, p=0.006) decreased hazards of in-hospital mortality. Changes in KF during acute HF hospitalization are associated with significantly reduced hazards of in-hospital mortality.

Keywords: Heart Failure, kidney function, kidney dysfunction, eGFR, hospitalization, stable KF, worsening KF, improved KF, in-hospital mortality