#0070

Higher Resource Utilization And Mortality Among Patients With Heart Failure Admited With Diabetic Ketoacidosis And Chronic Kidney Disease

Author/s:

Kenan Rahima MD, Trihealth, Fayaz Khan MD, Trihealth, Mohamad Hijazi MD, Trihealth, Mhd Kutaiba Albuni MD, Trihealth, Amin Eshghabadi MD, Trihealth, Leonid Khoklov MD, Trihealth, Tochukwu Ikpeze MD, Trihealth

Organizations/Affiliations:

Good Samaritan Hospital, Trihealth

Background: There is limited scientific evidence to evaluate cardiovascular outcomes among HF admitted with DKA and CKD. Therefore, we sought to evaluate clinical outcomes in this population.

Abstract

Methods: We queried the National Inpatient Sample 2017-2020 for adult patients hospitalized with DKA, CKD & HF. The primary outcome was inpatient mortality. The secondary outcomes were cardiogenic shock, cardiac arrest, LOS & total hospital charge. A multivariable logistic regression analysis was used to estimate clinical outcomes. P-value < 0.05 was significant.

Results: We identified 225,645 hospitalizations with DKA & CKD, and 60940 (27%) had HF. HF & Non-HF cohorts had a mean age of 61 vs 54 yrs; males 48.2% vs 52.7%; White 55.4% vs 51.3%; death during hospitalization of 7.8% vs 4.4% with an odds ratio (OR) of 1.4 (CI 1.3-1.6), a cardiogenic shock of 4.6% vs 0.7% with OR of 5.4 (CI 4.4-6.7), cardiac arrest of 3.8% vs 2.1% (OR 1.5, CI 1.3 – 1.7), LOS of 8.5 days vs 6.5 (IRR 1.21, CI 1.17-1.25) and hospital charge of $26016 vs $18205 (IRR 1.3, OR 1.2-1.4), all data have p-value <0.001 and adjusted for age, sex, race, Charlson comorbidity index score, obesity, atrial fibrillation, HTN, PVD, increased oxygen requirements, AKI and alcohol use, stroke, acute respiratory failure

Conclusion: Patients who were hospitalized for DKA, CKD & HF have more comorbidities, and demonstrated significantly worse clinical outcomes & associated with adverse outcomes. Clinicians should be aware of this negative predictor when treating patients with DKA & aggressively treat modifiable risk factors.