

#0068

Patients Admitted with Diabetic Ketoacidosis and a History of Non-alcoholic Fatty Liver Disease Have a Greater Risk of Mortality and Worse Clinical Outcomes

Author/s:

Kenan Rahima 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

Abstract

Background: There is limited scientific evidence to evaluate cardiovascular outcomes among patients with diabetic ketoacidosis (DKA) & non-alcoholic fatty liver disease (NAFLD). Therefore, we sought to evaluate clinical outcomes in this population.

Methods: We queried the National Inpatient Sample 2016-2020 for adult patients hospitalized with DKA & NAFLD. The primary outcome was inpatient mortality. The secondary outcomes were cardiogenic shock, cardiac arrest, gastrointestinal bleeding (GIB), intubation, length of stay (LOS) & total hospital charge. A multivariable logistic regression analysis was used to estimate clinical outcomes. P-value < 0.05 was significant.

Results: We identified 1,239,020 hospitalizations with ACS & 32,785 (2.6%) had NAFLD. NAFLD & Non-NAFLD cohorts had a mean age of 54.9 vs 45.6 yrs; males 52.7% vs 51%; White 57.6% vs 55%; obesity 17.8% vs 14.4%; AFIB 14.1% vs 6%; AKI 66% vs 45%; CKD 26% vs 18%, death during hospitalization of 21.6% vs 2.6% with odds ratio (OR) of 6.5 (CI 6.0-7.2), cardiogenic shock of 10% vs 0.6% with OR of 7.8 (CI 6.8-8.8), cardiac arrest of 11.1% vs 1.2% (OR 6.0, CI 5.4 – 6.8), GIB of 12% vs 3.7% (OR 2.3, CI 2.1-2.6), LOS of 9.2 days vs 4.8 (IRR 1.35, CI 1.31-1.41) and hospital charge of \$36502 vs \$13637, all data have p-value <0.001

Conclusion: Patients who were hospitalized for DKA & NAFLD have more comorbidities, 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.