41. ADHERE Risk Stratification Model For Long-Term Outcome in Thai Patient With Acute Heart Failure

Koravich Lorlowhakarn, Nongnapas Assawamasbunlue, Suchapa Arayakarnkul, Aekarach Ariyachaipanich, Division of Cardiovascular Medicine, Department of Medicine, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Body

Background: Acute Decompensated Heart Failure National Registry (ADHERE) evaluated blood urea nitrogen (BUN), systolic blood pressure (SBP) and serum creatinine (Cr) as predictors of in-hospital mortality. However, its prognostic value in predicting long-term mortality is unknown.

Methods: This is a retrospective study of patients hospitalized with acute heart failure (AHF) in a tertiary care center in Thailand between July 2017 to June 2019. First SBP, BUN and Cr levels were obtained. Baseline characteristics and 1-year mortality were compared using Chi-square and T-test.

Results: Of 772 patients who presented with AHF, 313 patients were enrolled (mean age 68.8 ± 15.8 years, 48.5% men, mean ejection fraction of 47.8%). Overall, 1-year mortality was 18.3%. Mortality rates classified by BUN, SBP and Cr are shown in the figure. Unlike ADHERE, patients with high BUN failed to show significantly higher 1-year mortality (21.5% vs. 17.2%, p = 0.40). However, patients with low BUN who also had low SBP showed significantly higher 1-year mortality than those with high SBP (27.5% vs. 11.8%, p <0.01).

Conclusion: In Thai patient hospitalized with AHF, 1-year mortality is very high. ADHERE risk stratification model is somewhat helpful in predicting patients' outcome.

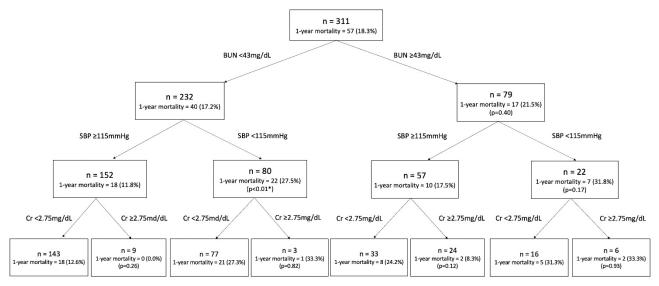


Figure 1. Analysis of 1-year mortality in AHF classified by ADHERE risk stratification model

Clinical Implications: My study help validate the use of ADHERE risk stratification model among Asians and for predicting long-term outcome in acute heart failure.