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Stress Hyperglycemia: A Predictor of Major Adverse Cardiac Events in Non-Diabetic Patients With Acute Heart Failure

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Abstract : There is a lack of consensus about the predictive value of raised blood glucose levels in terms of major adverse cardiac events (MACEs) in non-diabetic patients admitted for acute decompensated heart failure. The purpose of this research was to examine the long-term prognosis of acute decompensated heart failure (ADHF) in non-diabetic persons who had increased blood glucose levels, i.e., stress hyperglycemia, at the time of their ADHF hospitalization. The research involved 650 non-diabetic patients. Based on their admission stress hyperglycemia, they were divided into two groups.ie with and without (SHGL). The two groups' one-year outcomes for major adverse cardiac events (MACEs) were compared, and key predictors of MACEs were discovered. For statistical analysis, the two-tailed Mann-Whitney U test, Fisher's exact test, and binary logistic regression analysis were utilized. SHGL was found in 353 (54.3%) individuals. It was more frequent in men than in women. About 27% of patients with SHGL had previously been admitted for ADHF. Almost 62% were hypertensive, whereas 14 % had CKD. MACEs were significantly predicted by SHGL, HTN, prior hospitalization for ADHF, CKD, and cardiogenic shock upon admission. SHGL at the time of ADHF admission, independent of DM status, may be a predictive indication of MACEs.

Keywords : stress hyperglycemia, acute heart failure, major adverse cardiac events, MACEs
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