**THE ASSOCIATION OF CONCOMITANT SERUM POTASSIUM AND GLUCOSE LEVELS AND IN-HOSPITAL MORTALITY IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION**

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**Objective:** to evaluate the association of serum potassium (mEq/L) and glucose (mg/dL) (K/glucose) levels with in-hospital mortality in acute myocardial infarction (AMI) patients.

**Background:** AMI is associated with metabolic changes, e.g., increased plasma concentrations of counter-regulatory hormones and changes K/glucose levels. The latter are associated with outcomes and investigated as potential focus for intervention.

**Methods:** 17670 AMI admissions were studied (mean age 67.8±4 years, 66.6% males). K/glucose levels were divided into equally sized categories. The intermediate category (glucose 124-143 / K 4-4.9) was the reference group. The associations with the outcome were assessed using Generalized Estimating Equations model, included the interaction of K/glucose levels, adjusted for the patient’s baseline characteristics and other laboratory data.

**Results:** 112531 results of K/glucose tests were recorded. K/glucose levels were significantly associated with in-hospital mortality (7.7% rate); highest risk being in patients with concomitant low K (<3.7) and high glucose (≥217), adjOR=2.53. Low-normal glucose levels attenuate the increased risk associated with low K

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