**LOW SERUM HIGH DENSITY LIPOPROTEIN CHOLESTEROL LEVEL AND LOW BODY MASS INDEX ARE ASSOCIATED WITH CONTRAST-INDUCED ACUTE KIDNEY INJURY IN PATIENTS UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION FOR MYOCARDIAL INFARCTION**

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*Background*: Contrast-induced acute kidney injury (CI-AKI) after primary percutaneous coronary intervention (PCI) is associated with significantly increased morbidity and mortality in patients with myocardial infarction (MI). Previous studies have shown that the most important risk factor for developing CI-AKI is pre-existing renal insufficiency. Older age, anemia, contrast volume, peri-procedural hemodynamic instability, diabetes mellitus, and acute hyperglycemia are also associated with CI-AKI. The aim of this study was to identify additional risk factors for CI-AKI in patients with MI undergoing primary PCI.

*Methods*: This study included 433 MI patients treated with emergency primary PCI. Baseline characteristics and clinical outcomes were compared between the groups of patients with and without CI-AKI and logistic regression analysis was performed to identify independent risk factors for CI-AKI.

*Results*: Serum high density lipoprotein (HDL) cholesterol level (odds ratio [OR] 0.950, 95% confidence interval [CI] 0.907–0.995; p = 0.031) and body mass index (BMI) (OR 0.794, 95% CI 0.664–0.951; p = 0.012) were found to be risk factors for development of CI-AKI in addition to pre-procedural estimated glomerular filtration rate (eGFR) (OR 0.951 95% CI 0.928–0.975; p < 0.001), and pre-procedural plasma glucose level > 154 mg/dL (OR 6.270, 95% CI 1.623–24.228; p = 0.008) on multivariate analysis.

*Conclusion*: In addition to decreased pre-procedural eGFR, and increased pre-procedural plasma glucose level, low serum HDL cholesterol level and lower BMI are associated with an increased risk of CI-AKI.