

**MIDKINE AS AN EARLY BIOMARKER OF CONTRAST-INDUCED ACUTE  
KIDNEY INJURY IN PATIENTS UNDERGOING PERCUTANEOUS CORONARY  
INTERVENTIONS FOR ACUTE CORONARY SYNDROME**

***Thesis***

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## **Abstract**

Contrast-induced acute kidney injury (CI-AKI) is an important, underdiagnosed complication of percutaneous coronary intervention (PCI) that is associated with prolonged hospital admission and significant morbidity and mortality. Midkine (MK) is a heparin-binding growth factor that regulates cell growth, survival and migration. The pathophysiological roles of MK are diverse, ranging from the occurrence of AKI to the progression of chronic kidney disease (CKD). The aim of study was to elucidate the role of serum MK as an early biomarker of CI-AKI in patients undergoing PCI for the acute coronary syndrome (ACS) and conclude that serum MK levels 2 hours after PCI can be used as an early predictor of CI-AKI in patients undergoing PCI.

**Keywords:** Contrast-induced acute kidney injury, percutaneous coronary intervention, Midkine, early biomarker, acute coronary syndrome.