

## **Abstract**

Remote ischemic preconditioning (RIPC) is a promising strategy for protecting against ischemic reperfusion injury. This study is a secondary analysis of a randomized study aimed to evaluate the effect of RIPC on the early increase in serum creatinine (SCr) following percutaneous coronary intervention (PCI) which is associated with contrast-induced acute kidney injury. Patients with stable angina undergoing elective PCI were assigned to control, RIPC, and continuous infusion of nicorandil groups. The endpoint of this study was the incidence of the early increase in SCr, a predictor of contrast-induced acute kidney injury, which was defined as either a > 20% or absolute increase by 0.3 mg/dl of SCr levels after 24 hours of PCI. This study included 220 patients in whom a dataset of SCr values was available. The incidence of the early increase in SCr was significantly lower in the RIPC than in the Control (1.3% vs 10.8%,  $p = 0.03$ ), but was not significantly different between the Nicorandil and the Control. In multivariate analysis, RIPC remained a significant factor associated with a reduction in the incidence of early increase in SCr. RIPC reduces the incidence of early increase in SCr in patients with stable angina following elective PCI.