Prospective observational study was undertaken in Saraswathi Medical College and Hospital, Bareilly including 100 patients admitted in the ICU, emergency and ward from 1st May 2019 to 31st Nov 2019. They were subjected to careful history taking and detailed clinical examination; routine investigations were done. The data was computed and was statistically analyzed.

RESULTS: Out of 100, 36 patients had AKI. Mean age of the patients with AKI was 50 ± 6.1 years and those without AKI was 53 ± 5.9 years. Out of 100, 44 had inferior wall MI, 36 had anterior wall MI and 20 had NSTEMI. Mean fasting blood glucose (mg/dL) in patients without AKI was 94.7 ± 32 and in those with AKI was 145 ± 48.9. Mean troponin I (ng/mL) was 2.4 ± 3.4 in patients without AKI and 5.29 ± 7.1 in those with AKI which was found statistically significant (p value = 0.015). Mean urea (mg/dL) and creatinine (mg/dL) was 33.9 ± 11.9 and 0.74 ± 0.11 respectively in patients without AKI and with AKI was 70 ± 48.9 and 2 ± 1.45 respectively. Patients with AKI after MI had a more number of complications like arrhythmia, heart failure, hypertension, LVEF (<30%), rupture (free wall or septum or papillary muscle) as compared to patients without AKI. Mortality in patients without AKI was 4 and in patients with AKI was 6.

CONCLUSION: High troponin I and older age are the most important risk factors for AKI in patients with acute MI. Post-MI complications and mortality in patients with AKI was more than that in patients without AKI. Careful monitoring of susceptible patients in ICU is recommended for early detection and management of AKI in patients with MI.

KEYWORDS: AKI, AKI in post MI, post MI patients, myocardial infarction, mortality, treatment, care, hospital stay.
In a study by Kirsten E. Fleischmann, Fox CS et al found that clinical factors, for example heart failure, hypotension, and the majority cardiac risk factors; and the procedures such as coronary artery catheterization and coronary artery bypass grafting, were found associated with increased risk for AKI. They found that mortality was 2.1% in patients without AKI, as compared to patients with mild, moderate and severe AKI was 6.8%, 14.2%, and 31.8% respectively. AKI was found to be associated with an increased risk of bleeding, i.e. 8.4% in patients without AKI and 32.7% in patients with severe AKI. (8) Parikh RP, Steven G, Coca DO; Yongfei MS, et al found that AKI has a graded and independent association with long-term mortality. They concluded that mild, moderate and severe AKI was associated with a 15%, 23% and 33% increased risk of death respectively at 10 years. (9)

Thus, we conclude that AKI is a frequent complication in AMI that is associated with notable short- and long-term mortality. Post-MI complication and mortality in patients with AKI was more than that in patients without AKI. Careful monitoring of susceptible patients in ICU is recommended for early detection and management of AKI in those patients.

**CONCLUSION:**

High troponin I and older age are the most important risk factors for AKI in patients with acute MI. Post-MI complication and mortality in patients with AKI was more than that in patients without AKI. Careful monitoring of susceptible patients in ICU is recommended for early detection and management of AKI in those patients.

**REFERENCES**