**THERE IS NO SIGNIFICANT ASSOCIATION BETWEEN ADMISSION GLOMERULAR FILTRATION RATE AND LOCATION OR SEVERITY OF CORONARY ARTERY DISEASE**

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**Objective:** Studies have shown a causal relationship between chronic kidney disease and the anatomical proximity of coronary artery disease(CAD). The association between the admission GlomerularFiltration Rate(GFR) and the location or the severity of coronary artery disease, remains unclear. Our study aims to evaluate this association.

**Method:** We performed a retrospective cohort study by reviewing 638 electronic medical records for acute coronary syndrome patients between 2011 and 2013. We excluded 390 patients due to acute kidney injury or lack of data.

**Results:** The average age was 62+/-14 years, GFR was 83+/-34, 169(68%)were male, 225(90.7%) were Caucasian, 14 (5.6%) were Native American, 6(2.4%)were African American. On presentation,212(85.5%) had chest pain, 103(41.5%) dyspnea, 48(19.4%) diaphoresis, 64(25.8%) diabetes, 154(62.1%) hypertension, 122(49.2%) dyslipidemia, 128(51.8%) smoking history, 102 (41.1%) past history of CAD. Table shows CAD and GFR relationship.

**Conclusion:**There is no statistically significant association between CAD location and severity as function of GFR. However, left main (proximal vessel) disease severity showed a trend towards increasing severity with decreasing GFR. There is a weak correlation between the GFR and severity of left main CAD with correlation coefficient of -0.12. This may have been due to smaller studied population since only 52 out of 248 had left main disease. More studies are required to evaluate this association between GFR and CAD

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