**AN ASSOCIATION BETWEEN RENAL FUNCTION ONE YEAR AFTER KIDNEY TRANSPLANT AND INCIDENTAL PERICARDIAL EFFUSION**

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**Background**: Higher incidence of pericardial effusion is noted in renal transplant recipients compared to general population. It is unclear what factors precipitate this condition. In this study, we assess the association of renal function one year post transplant and development of pericardial effusion.

**Methods**: We perfomed retrospective chart review of 211 patients at a single medical center who underwent renal transplantation between 2005 to 2016 and received a transthoracic echocardiogram before and after transplantation. Patients were stratified into 2 groups: effusion after transplant (n=129) and no pericardial effusion (n=82.) Estimated glomerular filtration rate (eGFR) one year post transplant was collected. Odds ratios (OR) were calculated using univariate and multivariate logistic regression analyses to assess the association of eGFR and developing of pericardial effusion adjusted for baseline characteristics and comorbidities.

**Results**: Average age of total cohort was 52.4 ± 11.8 years old, the average BMI was 27.9 ± 5.1, 41% of patients were female, 95% had a history of hypertension, 20% had coronary artery disease, 42% had diabetes mellitus, 7.6% had a history of congestive heart failure, 7.5% had a history of cancer. The mean time to effusion after transplant was 4 ± 2.9 years. Patients with pericardial effusion were older, had higer prevalence of prior congestive heart failure and cancer. One year post transplant the mean eGFR was 52.7 ± 20.4 ml/min/1.73 m2, without significant difference between the groups. Of these, 23% of patients had an eGFR >60 ml/min/1.73 m2. Univariate and multivariate analyses demonstrate that eGFR<60 ml/min/1.73 m2at one year was not associated with the development of pericardial effusion (adjusted OR 1.74, 95% CI 0.78-3.89; p=0.174).

**Conclusions**: In our cohort of renal transplant recipients, there was no association between incidental pericardial effusion and eGFR one year after renal transplantation. Further studies are needed to identify risk factors for pericardial effusion in this patient population.