**LEFT VENTRICULAR FUNCTIONS & LIPID PEROXIDATION IN CHRONIC KIDNEY DISEASE**

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Left ventricular functions and lipid peroxidation were evaluated in 25 adult patients of chronic kidney disease (CKD) before and after 4 hours of hemodialysis using acetate dialysate. Lipid peroxidation was estimated by measurement of malonyldialdehyde (MDA) by thiobutyric acid method. Twenty patients were male and 5 were female with a mean age of 43.5±3.14 years. Their GFR was less than 20 ml/min. Left ventricle was dilated in all subjects & 18 of them had fluid overload and impaired cardiac contractility. Echocardiography revealed elevated left ventricular end-diastolic diameter and volume which were 54.36 ±7.30 mm and 219.4 ±76.77 ml respectively. Left ventricular end-systolic diameter and volume were also increased being 41.12 ±9.7 and 45.0 ±18.66 ml, respectively. The ejection fraction was decreased (mean 61.08±10.17). MDA levels were raised in all subjects and mean were 2.96 ± 0.89 u mol/L. All subjects also had elevated triglycerides, VLDL, & Cholesterol levels. Following hemodialysis there was a significant improvement in cardiac functions and fall in lipid peroxidation. Therefore it can be concluded that cardiac performance and lipid peroxidation have a negative correlation in patients of CKD and correction of metabolic abnormalities and removal of toxins leads to decrease in lipid peroxidation and improvement in cardiac performance.