



## Assessment of Some Biochemical Markers in Chronic Kidney Disease Patients in Al-Najaf Al-Ashraf Governorate

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**Abstract :** Chronic Kidney Disease was considered of the public health problems, which was loss in kidney function and structure with decrease of GFR for three month or more. In the present study was used biomarker (Neutrophil Gelatinase-Associated Lipocalin (NGAL), Adiponectin (ADPN), Erythropoietin(EPO)) and other parameter to diagnosis of chronic kidney disease (CKD). The study was conducted by taking 68 patients with CKD (34 men, 34 women) attending the Artificial Kidney Unit in Al-Sadder Teaching city and in Al-Hakeem hospital in the province of Al-Najaf Al-Ashraf and 20 healthy group. The concentration of NGAL, ADPN and EPO were measure, also urea, creatinine and other physiological were estimated in patients and healthy group. The result show significant increase ( $p < 0.05$ ) in the concentration of NGAL, ADPN, Urea and Creatinine but showed significant decrease ( $p < 0.05$ ) in the EPO, Hb, RBC, WBC and Lymphocytes in patients with CKD compared with healthy group. The result showed positive significant ( $p < 0.05$ ) positive correlation of NGAL with creatinine and urea. the study also shown significant ( $p < 0.05$ ) positive correlation of ADPN with NGAL and Creatinine. The study was revealed significant ( $p < 0.05$ ) positive correlation of EPO with hemoglobin, Red blood cells and platelets, but significant ( $p < 0.05$ ) negative correlation of EPO with NGAL and ADPN. The present study was concluded that NGAL, ADPN and EPO were marker to diagnosis and detection of chronic kidney disease.

**Key words :** chronic kidney disease, NGAL, ADPN, EPO.