

University of Baghdad	
Alkindy College of Medicine/ Research Module	
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Abstract	<p>Retrospective Study: Association of Glycemic Status and Kidney Function Tests in type 2 Diabetic Patients.</p> <p><u>Background:</u> Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. Diabetic nephropathy is the kidney disease that occurs as a result of diabetes. Nephropathy is the leading cause of chronic renal failure worldwide and is responsible for renal failure in about one third of patients who undergo dialysis. Many studies suggested that glycemic control is a significant modifiable risk factor in the pathology of kidney disease among individuals with diabetes, both in the presence and absence of other microvascular damage.</p> <p><u>Aim of the study:</u> The aim of this retrospective study was to evaluate the association of glycemic status with kidney function tests in type 2 diabetic patients.</p> <p><u>Patients and Methods:</u> A retrospective cross-sectional study included (116) type 2 diabetic patients attended the Obesity Research and Therapy Unit (ORTU) at Al-Kindy College of Medicine and the Endocrinology and Diabetes Center. Period of Data collection started from January until March of 2018. Previously diagnosed patients as type 2 diabetic patients with reported values of FSG, A1C and kidney function tests were included in the study. Patients that previously diagnosed with renal failure or kidney diseases were excluded from the study. Blood tests from medical records included: FSG, A1C, serum creatinine, urea and uric acid. In adults, the most widely-used equations for estimating glomerular filtration rate (eGFR) from serum creatinine are the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation.</p> <p><u>Results:</u> The patients were divided into two groups according to A1C levels; group1 (A1C \leq7) and group2 (A1C >7). It was found that the levels of FSG, A1C, eGFR and uric acid were significantly higher ($P < 0.05$) in patients of group2 (A1C >7) as compared to those of group 1 (A1C \leq7). Group 2 patients had higher risk of chronic kidney diseases according to eGFR levels categories when compared to group1.</p> <p><u>Conclusion:</u> The key finding of the present study: The study group patients were not diagnosed previously to have kidney disease. However according to the eGFR categories; some of these patients were at higher risk of chronic kidney disease that categorized by A1C level as group 2.</p>

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