The role of urlc acid in impairment of the gfr in nonproteinuric patients with type 2 diabetes mellitus

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•this work has been carried out to find correlation between Uric Acid and kidney disease in type 2 DM patients.• Our aim was to study the role of Uric Acid in impairment of GFR in nonproteinuric patients with type 2 DM.In our study we found that:• Increased uric acid levels were associated with increased risk of the development of hypertension and cardiovascular disease.• Our study included 100 type 2 DM patients; 64 male and 36 female, range of age was 32-87 years, 22 patients were CRP positive, SUA range was 4.4-10.3 mg/dl, e-GFR range was 42-151 ML/min, FBS range was 125-211 mg/dl, DM duration range was 1-62 years and 8 mg/dl; the e-GFR Cholesterol Level was167-292 mg/dl.• In the patients with SUA was 91± 23.635 ml/min, FBS was 148.01 ± 27.10mg/dl and HBA1c was 7.592 ± 90 mL/min; SUA was 5.76 ± 1.876 mg/dl, FBS 0.7840.• In the patients with e-GFR was 162.174 ± 14.865 mg/dl and HBA1c was 7.420 ± 0.6765.• There was statistical significant correlation between SUA levels, and BMI, HbA1c, FBS, SBP, -Cholesterol level and e-GFR.• There was statistical significant correlation between e GFR levels, and age, BMI, HbA1c, FBS and SUA.• There was statistical significant negative Correlation between e-GFR and SUA.• There was statistical non significant Correlation between CRP, and weight and BMI; positive with weight but negative with BMI.• There was statistical Comparison between smoker and non smokers in different variables (SBP, DBP, e-GFR, SUA, CRP and Cholesterol level) and this Comparison was statistically non significant except in DBP was significant.• There was statistical Comparison between male and female in e-GFR and SUA and this Comparison was statistically non significant.ConclusionUA is a Novel marker of inflammation and remodeling within the arterial vessel wall and hyperuricaemia caused renal microvascular disease; but Hyperuricaemia may also be caused secondarily by renal impairment.RecommendationSUA should be investigated in all patients with DM and CKD and treatment of Hyperuricemia.