PO334 Hyperuricemia is Inversely Correlated with Glycemic Control in Type 2 Diabetes Mellitus

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PO344

HYPERURICEMIA IS INVERSELY CORRELATED WITH GLYCEMIC CONTROL IN TYPE 2 DIABETES MELLITUS

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Background: Diabetes is considered a major health problem with increasing prevalence, and leading cause of morbidity, mortality and vast complications. Cardiovascular disease is the most life-threatening consequences of diabetes mellitus with mortality rates up to two to four times higher for persons with diabetes mellitus. Landmark and historical research trials have shown a positive association between impaired glycemic control and the risk of coronary heart disease (CHD) and other diabetes complications such as nephropathy. Controlling hyperglycemia is important to reduce complications. For monitoring diabetes, A1C is now a standard methodology in diabetic clinics, which measures patient's glycemic control for the past 2–3 months. There are several diseases related to insulin resistance including type 2 diabetes mellitus (T2DM), prediabetes, metabolic syndrome, hypertension, dyslipidemia, hyperuricemia, obesity and low testosterone. Hyperuricemia is closely linked to metabolic syndrome's component in type 2 diabetic subjects. Currently, uric acid is still not considered a potential biochemical marker and target while managing diabetes. Furthermore, exact association between serum uric acid levels and diabetes mellitus (hyperglycemia) is still not clear. Aim of this study was to investigate the relationship between hyperuricemia and glycemic control in T2DM.

Method: The study was a cross sectional analytical study which has enrolled T2DM patients whowere on routine follow up in private out patients diabetic clinic. The study included type 2 diabetic patients. Patients with age <30 years and pregnant were excluded from the study. Patients with end stage renal disease or on dialysis and with active hepatic disease were again excluded from the study. Patients on diet control or only on oral hypoglycemic agents therapy were selected, and all those patients with insulin therapy were

excluded from the study. Uric acid and A1C was measured. Statistical analysis was performed using Pearson correlation test.

Result: Enrolled patients were 126 subjects, 76 male (60.3%) and 50 female (39.7%); mean of age was 49±18.4 years. The laboratory results of uric acid level was 6.3±3.2mg/dl. And A1C level was 8.69±2.43 %. Statistical test showed that uric acid significantly and inversely correlated with A1C ($r = -0.266$; $p = 0.004$).

Conclusion: Therewas significant inverse correlation between uric acid level and A1C in T2DM.

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