## ABSTRACT

## INTRODUCTION

Hyperuricemia is an independent risk factor for kidney dysfunction in diabetic patients. On the other hand, albuminuria is considered as the proxy of early stages of diabetic nephropathy. Study investigated the association between uric acid and albuminuria in patients with diabetes mellitus.

**MATERIALS AND METHODS:**

In a cross-sectional study of 100 patients with type 2 diabetes mellitus, serum uric acid and urinary albumin-creatinine ratio were determined. Other metabolic parameters including lipid profile, body mass index, blood pressure and renal parameters were assessed, as well. Urine albumin categorised into no significant , Micro, Macro albuminuia. Serum uric acid levels association with no significant, micro, macroalbuminuria evaluated.

**RESULTS:**

The mean age group was 49.25 years. Mean serum uric acid levels were 5.8 mg/dl. Mean urine albumin creatinine ratio was 159.41. In patients belonging to normal albuminuria, microalbuminuria and overt albuminuria groups, the mean total cholesterol level is 190.86, 195.83 and 235.00 mg/dl

respectively.mean total cholesterol level was significantly and consistently higher in microalbuminuria patients.

In patients belonging to normal albuminuria, microalbuminuria and overt albuminuria groups, The mean serum uric acid level is 3.59, 5,70 and 8.14 mg/dl repectively. The mean serum uric acid level was more in overt albuminuria group compared to the microalbuminuria group by 37% with a mean difference of 2.44 mg/dl . The mean serum uric acid level was more in microalbuminuria group compared to the normal albuminuria group by 30% with a mean difference of 2.11 mg/dl. There was a significant relationship between albuminuria with hypercholesterolemia.

**CONCLUSION:**

Study showed that higher serum uric acid concentrations were associated with a greater probability of albuminuria in patients with type 2 diabetes mellitus.