Correlation between Microalbuminuria and Hypertension in Type 2 Diabetic Patients

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Abstract: Background: Hypertension is commonly found in patients with Diabetic Kidney Disease (DKD). Microalbuminuria is the first clinical sign of involvement of kidneys in patients with type 2 diabetes. Uncontrolled hypertension induces a higher risk of cardiovascular events, including death, increasing proteinuria and progression to kidney disease. Objectives: To determine the correlation between microalbuminuria and hypertension and their association with other risk factors in type 2 diabetic patients. Methods: One hundred and thirteen type 2 diabetic patients were screened for microalbuminuria and raised blood pressure, attending the diabetic clinic of Shaikh Zayed Hospital, Lahore, Pakistan. The study was conducted from November 2012 to June 2013. Results: Patients were divided into two groups. Group 1, those with normoalbuminuria (n=63) and Group 2, those having microalbuminuria (n=50). Group 2 patients showed higher blood pressure values as compared to Group 1. The results were statistically significant and showed poor glycemic control as a contributing risk factor. Conclusion: The study concluded that there is high frequency of hypertension among type 2 diabetics but still much higher among those having microalbuminuria. So, early recognition of renal dysfunction through detection of microalbuminuria and to start treatment without any delay will confer future protection from end-stage renal disease as well as hypertension and its complications in type 2 diabetic patients.

Keywords: hypertension, microalbuminuria, diabetic kidney disease, type 2 Diabetes mellitus **Conference Title:** ICDM 2015: International Conference on Diabetes and Metabolism

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