Original Paper

Prevalency of diabetic nephropathy among type 2 diabetic patients

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Abstract

Background and Objective: Diabetes mellitus is the most frequent cause of chronic renal failure. Microalbuminuria is the first clinically important sign of renal impairment in diabetes mellitus. The main pathophysiology of diabetic nephropathy is not understood. This study was done on 100 patients with type 2 diabetes for determination of the prevalence of diabetic nephropathy with urine albumin assay in Sina Hospital in Tabriz, North-West of Iran.

Materials and Methods: In this discriptive study, 100 patients with type 2 diabetes whome consecutively referred to Endocrine and Diabetes Clinic of Sina Medical Center in Tabriz were enrolled. At the first visit clinical and biochemical parameters such as systolic and diastolic blood pressure, age, sex, body weight, length, body mass index, FBS, HbA1C, plasma creatinine, urine microalbumin and urinary creatinine were measured. FBS, HbA1C, plasma creatinine, urine microalbumin and urinary creatinine measurements repeated every 2 months up to three times during the study. Patients with confounding factors such as uncontrolled hypertension, urinary tract infection, congestive heart failure and hyperlipidemia were excluded.

Results: The prevalence of diabetic nephropathy was 36% in our patients. There were not statistically significant differences in age and sex and diastolic – systolic blood pressure and creatinine between nephropathy and, non-nephropathy groups. There was significant differences in body mass index between two sex groups, females were more obese than males. Mean duration of diabetes in diabetic nephropathy group and in diabetic patients without nephropathy were 12.4±8.1 and 9.1±5.5 respectively ($P<0.05$). Comparison of HbA1c, FBS and drugs used for diabetes treatment were not significant differences between these groups.

Conclusion: This study showed that prevalence of diabetic nephropathy was higher than other studies, although there were not significant differences between FBS, HbA1c and hypertension in patients with and without diabetic nephropathy.

Keywords: Microalbuminuria, Renal failure, Diabetic nephropathy, Prevalence

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Received 9 Dec 2007 **Revised** 23 Jun 2008 **Accepted** 9 Nov 2008