

Effect of pentoxifylline in reducing proteinuria in patients with type 2 diabetes treated with angiotensin system blockers were compared with patients treated with ACEI or ARB

Abstract

Introduction: Diabetes mellitus is a group of metabolic disorders they have common pattern hyperglycemia phenotype. Metabolic regulation disorders caused by diabetes mellitus is secondary pathophysiological changes in multiple organs of the body such as nephropathy that brings along the problems for diabetic people and health care community. In this study pentoxifylline, a drug nonselective phosphodiesterase inhibitor, is assessed for reducing urinary protein excretion in diabetic patients.

Methods: 72 patients in this clinical trial, have chosen from endocrinology and nephrology clinic because of proteinuria in patients with type 2 diabetes and they have been admitted into two groups. Check lists, including demographic data and etc. were completed. In the group (A) ACEI or ARB drugs were prescribed to reduce proteinuria and in other the group (B) in addition to drugs, ACEI or ARB, pentoxifylline was prescribed. In the end of this study, the results in both groups were compared in terms of further reduction of proteinuria.

Results: there is significant association between proteinuria (urinary protein excretion in 24-hour average) and pentoxifylline effect in reducing proteinuria in patients with type 2 diabetes there. There is a statistically significant difference in systolic and diastolic blood pressure and HbA1c between the two groups at the beginning and end of the study there.

Conclusion: pentoxifylline can significantly decrease the proteinuria and was improved proteinuria independently of lowering blood pressure or reducing metabolic control.

Keywords: pentoxifylline, proteinuria, diabetes, angiotensin system