Title:
Evaluation of the comparative effect of captopril & losartan in treatment of diabetic nephropathy type II

Abstract:
Introduction: Diabetic nephropathy is a major cause of injury and death in diabetic patients. Studies have shown that angiotensin-converting enzyme inhibitors (ACE-Inhibitor) and angiotensin II receptor antagonists (ARB) delay the progression of diabetic nephropathy. For type 1 diabetes has been demonstrated that ACE-Inhibitor for the treatment of diabetic nephropathy is better than drugs of ARB category, but in type 2 diabetes, in spite of numerous articles, has not been established preference between the two category yet, so this study is designed and implemented for "Evaluation of the comparative effect of captopril & losartan in treatment of diabetic nephropathy type II".

Methods and materials: In this clinical trial, 60 patients with type 2 diabetic neuropathy were enrolled and randomly assigned to two groups of 30. The first group treated with the drug losartan 25 mg daily and the second group treated with the drug captopril 25 mg daily for 3 months. During the study, blood sugar control and blood pressure did not change in the treatment plan. At the beginning and end of the study, blood pressure were measured. Also at the beginning and end of the study, fasting blood sugar, serum creatinine, creatinine clearance, 24-hour urine protein and albumin were measured and recorded for all patients. During the study, two groups of patients were assessed in terms of side effects and satisfaction of treatment. The raw data after trouble was analyzed with SPSS software version 22. Results: The results of this study showed that patients taking captopril at the end of the study had significantly lower systolic and diastolic blood pressure compared to baseline, while patients taking losartan at the end of study had no significant change in mean systolic and diastolic blood pressure compared to baseline. Also, patients taking losartan at the end of the study had albuminuria average lower than baseline, while patients taking captopril had no significant change at the end of the study in albuminuria average compared to baseline. Discussions: Finally, this study showed that losartan in diabetes patients with albuminuria is a better choice than captopril and captopril in diabetes patients with hypertension are preferred than losartan.

Keywords:
Diabetic nephropathy, type II diabetes, losartan, captopril