P-383
PULSE PRESSURE PREDICTS EARLY RENAL DAMAGE IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AND ESSENTIAL HYPERTENSION
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Urinary microalbuminuria has been attributed to early stage renal damage. In addition, urinary microalbuminuria has been related to cardiovascular disease and diabetes mellitus. Increased pulse pressure (PP) has been shown to be an independent marker of cardiovascular mortality. In the present study the impact of pulse pressure on early stage renal damage including urinary microalbuminuria was investigated in patients with type 2 diabetes mellitus and patients with essential hypertension. Methods: Puls pressure and urinary microalbuminuria were measured in 87 normotensive patients with type 2 diabetes mellitus, 99 hypertensive patients with type 2 diabetes mellitus, and 85 patients with essential hypertension. Results: There was a positive correlation between pulse pressure and urinary microalbuminuria in normotensive patients with type 2 diabetes mellitus (r=0.26, p<0.05) and in hypertensive patients with type 2 diabetes mellitus (r=0.29; p<0.01). In addition, a positive correlation between pulse pressure and microalbuminuria could also be obtained in patients with essential hypertension (r=0.28, p<0.01). Pulse pressure was not correlated to blood urea nitrogen or serum creatinine in either group. Conclusion: Pulse pressure predicts early stage renal damage in patients with diabetes mellitus type 2 and patients with essential hypertension. Reduction of pulse pressure may be mandatory to avoid progressive renal failure(Supported by NSFC 39735013).

Key Words: Pulse Pressure, Microalbuminuria, Hypertensive Diabetes

P-384
EFFECTS OF ANGIOTENSIN RECEPTOR BLOCKADE (ARB) ON GLOMERULAR FILTRATION RATE (GFR) AND ON POSTURAL BLOOD PRESSURE (BP)
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We evaluated the effects of Irbesartan (IRB), an ARB, on GFR and on sitting as well as standing blood pressure (BP) in 30 patients with uncomplicated Stage I-II hypertension. Patients with a resting diastolic BP > 90 mmHg after a two week placebo run-in period were assigned to IRB therapy starting with a daily dose of 150mg/daily; if the goal diastolic BP (<90 mmHg) was not achieved, the dose was increased to 300mg/daily. The final stable dose was maintained for 8 weeks. Besides the clinical and routine laboratory parameters, GFR was measured with the highly sensitive GLOFIL technique. The results are shown in the table:

We conclude that IRB, a highly selective ARB, effectively lowers the blood pressure without causing postural hypotension and without compromising the GFR. These findings have pivotal implications for the role of ARBs in the clinical management of hypertension and in offering possible renoprotection. Target organ protection together with freedom from adverse effects widens the scope of ARB use in clinical practice.

Key Words: Fibronectin, Microalbuminuria, Diabetes