CLINIC AND METABOLIC EFFECTS OF LOSARTAN VERSUS CANDESARTAN IN PATIENTS WITH METABOLIC SYNDROME

Suwaed Zaid, Gerasymenko O.V.
The National University of Pharmacy, Kharkiv, Ukraine
zaid_suwaed@yahoo.com

Metabolic syndrome is a disorder includes three out of five of the following medical conditions: abdominal obesity, hypertension, impairment of glucose metabolism due to insulin resistance and dyslipidemia. The number of such patients is increasing every year, which initiated the question of the choice of the antihypertensive agent, which will have not only antihypertensive effect, but also have a positive metabolic effect.

The aim of our research was to investigate the effects of losartan and candisartan (angiotensin II receptor antagonist) on Blood pressure and serum uric acid in hypertensive patients with metabolic syndrome.

Material and Methods. We studied 44 Case History of newly diagnosed mild hypertensive patients, having markers of metabolic syndrome. The hypertensive patients were divided into two groups. Group 1 (22 patients) was given losartan (50 mg/ day) and group 2 (22 patients) candesartan (8 mg/ day) for a duration of 2 months. Metabolic syndrome was diagnosed according to diagnostic criteria of metabolic syndrome related to the American National Cholesterol Education Program-Adult Treatment Panel III.

Results. We have investigated significant antihypertensive effect of losartan and candesartan. The level of blood pressure were in group 1 before treatment 143.60 ± 7.72/ 92.18 ± 6.21 mm Hg and after 2 month treatment by losartan it become 136.82 ± 8.4/ 83.92 ± 6.3 mm Hg ($p<0.001$). The level of blood pressure were in group 2 before treatment 145.78 ± 5.39/ 91.44 ± 6.15 mm Hg and after 2 month treatment by candesartan it become 136.82 ± 8.4/ 86.07± 5.0 mm Hg ($p<0.001$). Significant drop of uric acid was noted after treatment with losartan but not with candesartan. The level of uric acid in group 1 before treatment was 306.69 ± 67.72 mmol/L, after losartan treatment it was 275.92 ± 61.63 mmol/L ($p<0.001$). The level of uric acid in group 2 before treatment was 302.94 ± 56.86 mmol/L, after candesartan treatment it was 289.99 ± 50.28 mmol/L ($p=0.132$(NS)).

Conclusions: Losartan can be useful therapeutic agent to control blood pressure and to reduce serum uric acid level in hypertensive patients having markers of metabolic syndrome and hyperuricaemia.