Comparison of Different Sartans on Uric Acid Levels in Hypertensive Patients

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Abstract

Background: There is observational data suggesting that sartans or angiotensin II receptor blockers may affect serum uric acid level. The effects of the antihypertensive drugs, sartans, on serum uric acid level are not well studied.

Aim: The present study was aimed to compare the effects of two well-known antihypertensive drugs losartan and candesartan on serum uric acid level in patients with hypertension.

Materials and Methods: A total of 80 newly diagnosed hypertensive patients were divided into two groups, with 40 patients in each group. Group 1 was given losartan (50 mg/day) and group 2 was given candesartan (8 mg/day). A control group of 50 apparently healthy individuals was included. Blood pressure and uric acid level were measured for controls and patients before and after drug administration.

Results: The results of this study found that there was a significant increase in blood pressure and uric acid in hypertensive patients before starting treatment (p =0.001), as compared with the control group. After 2 months of treatment, the systolic and diastolic BP was significantly reduced in the both losartan and candesartan groups (p= 0.001). Both drugs were similarly effective in reducing the blood pressure in patients with hypertension with no statistical significant difference between the 2 treatments. Serum uric acid levels were only significantly reduced after 2 months of treatment with losartan only (p= 0.001) but not with candesartan.

Conclusions: This study demonstrates significantly higher serum uric acid concentrations in hypertensive patients. Both losartan and candesartan therapy were similarly effective in reducing blood pressure in patients with mild to moderate hypertension. Losartan, but not candesartan, was associated with a decrease in serum uric acid levels. Therefore, our findings suggest that the antihypertensive drug losartan may be protective against the risk of gout among people with hypertension.

Key Words: hypertension, hyperuricemia, losartan, candesartan