

## HYPERTENSION

## Risk of gout differs according to type of antihypertensive drug used

Various antihypertensive agents have been shown to alter serum levels of uric acid. To compare the risk of incident gout for a range of antihypertensive agents, Professor Hyon Choi and colleagues performed a population-based, nested case-control study using a general-practice database from the UK.

In total, data for 24,768 adults who had incident cases of gout and 50,000 randomly selected controls (matched according to age, sex, and calendar year) were assessed. After adjustment for various covariates—age, sex, calendar year, visits to general practitioner, BMI, alcohol use, smoking status, ischemic heart disease, hypertension, hyperlipidemia, and renal failure—incident gout was found to be 1.75 times more likely (95% CI 1.69–1.82) among individuals with hypertension than among individuals without hypertension.

After adjustment for the aforementioned covariates as well as for use of other antihypertensive agents, the risk of gout

was lower with current use of calcium-channel blockers (relative risk [RR] 0.87, 95% CI 0.82–0.93) and current use of losartan (RR 0.81, 95% CI 0.70–0.94), compared with no use of these drugs, among patients with hypertension. By contrast, risk was greater with current use of diuretics (RR 2.36, 95% CI 2.21–2.52),  $\beta$ -blockers (RR 1.48, 95% CI 1.40–1.57), angiotensin-converting-enzyme inhibitors (RR 1.24, 95% CI 1.17–1.32), and non-losartan angiotensin II receptor blockers (RR 1.29, 95% CI 1.16–1.43).

Choi *et al.* highlight that the study “provides the first large scale evidence for the independent differential effect of antihypertensive drugs for and against the risk for gout.”

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