

THE ASSOCIATION BETWEEN ANTIHYPERTENSIVE THERAPY AND THE INCIDENCE OF PARKINSON'S DISEASE IN PATIENTS FOLLOWED IN GENERAL PRACTICES IN GERMANY

Authors: Warda A, Reese JP, Tanislav C, Kostev K.

AIM

The aim of this study was to investigate the potential association between antihypertensive therapy and the incidence of Parkinson's disease (PD) in patients followed in general practices in Germany.

MATERIALS AND METHODS

This study included patients aged ≥ 40 who had received initial diagnoses of PD in 1,203 general practices in Germany between January 2013 and December 2017 (index date). After applying similar inclusion criteria, PD cases were matched to non-PD controls using propensity scores based on age, sex, and treating physician. The primary outcome of the study was the incidence of PD as a function of the use of antihypertensive drugs (diuretics, β -blockers, calcium channel blockers, angiotensin-converting enzyme inhibitors, and angiotensin II receptor blockers). Logistic regression models were conducted to study the association between the use of antihypertensive drugs and the incidence of PD after adjusting for codiagnoses and antihypertensive cotherapy.

RESULTS

The present study included 9,127 patients with PD and 9,127 patients without PD (mean age: 75.8 years; 48.4% women). The at-least-once use of diuretics (44.8% versus 38.4%; odds ratio (OR) = 1.23 (1.15-1.32)) was associated with an increased incidence of PD. However, this effect was not maintained for a therapy duration of at least 3 years, and no association was observed between the diuretic therapy duration and PD incidence. For all other antihypertensive drug classes, we found no significant associations with PD incidence.

CONCLUSIONS

No association was found between antihypertensive therapy duration and PD incidence. Further epidemiological studies are needed to compare the effects of subclasses of antihypertensives on PD.

Published in: *Int J Clin Pharmacol Ther.* 2019 Aug 20. doi: 10.5414/CP203559. [Epub ahead of print]



If you would like to read any of the studies in its entirety, please, contact us to obtain the full version of a publication. Also, our research director is at your disposal if you have any further questions.

Thank you for your interest!