Letters to the Editor

Doxazosin and ALLHAT Trial: A Response

We are following with great interest the discussion in the American Journal of Hypertension about the use of doxazosin in hypertension, as reflected by the correspondence between Drs. Poulter and Williams and Drs. Krakoff and Alderman regarding the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT).1

In 1997 to 1998 we conducted a relatively large local study (not to compare to the size of ALLHAT of course) in which diabetic hypertensive patients treated with angiotensin converting enzyme (ACE) inhibitor were changed to doxazosin. The purpose of our study was to compare the effect of doxazosin, in different doses, to ACE inhibitor, regarding glucose levels, glucose tolerance, and lipid profile on a 1-year of close follow-up. One hundred eight patients were included in the study and visited the hypertension clinic at least once a month for regular blood pressure (BP) measurement, treatment adjustment, and compliance evaluation. Questionnaire on complaints, side effects, and hospitalization were filled out. Blood glucose, lipid and kidney functions were monitored every 3 months.

Our main findings were an equally well-controlled BP both on ACE inhibitor and doxazosin (144/83 mm Hg v 139/80 mm Hg), a very small drop out rate for minor side effects (12 patients, one with dyspnea), and not even one case of hospitalization for congestive heart failure.

There was a favorable change in blood lipid levels with borderline significance (HDL mg/dL, 46 v 49 mg/dL; LDL, 136 mg % v 129 mg %; triglycerides, 170 mg/dL v 159 mg/dL).2

These results are surprising with regard to the ALLHAT study, as most of the adverse events as congestive heart failure or combined cerebrovascular disease in that study appeared during the first year of follow-up. In 4 years there was 25.45% of event, with in the first year alone, close to 10%. That means that the expected occurrence of cerebrovascular events in our study, according to ALLHAT study findings, should have been 10%, about 10 to 11 patients, mainly congestive heart failure.

This kind of statement can never be accurate, but at least the range of 5% to 15% can be claimed.

Surprisingly, we did not have even one hospitalization for congestive heart failure during the period of our study. It is unlikely that our patients were totally different from the ALLHAT population.3 In our study we included diagnosed diabetic patients; although past or present known cerebrovascular complications were excluded, still diabetes mellitus is considered a major risk factor for cerebrovascular diseases.

Were there major differences in age or other risk factors such as blood lipids and demographic characteristics? Comparing the data from the publication in 1996 to 2000,2,3 no obvious difference can be detected.

Was the follow-up less close or less accurate? The opposite is true. Our patients were seen at least once a month or even more often by a hypertension specialist.

Our patients were all white, younger than 65 years (mean age, 64 years); but these variables did not affect the ALLHAT findings; therefore, they should not affect our results.

Our study was not designed with the same end point as ALLHAT. However, the close follow-up of a relatively large group of high-risk diabetic patients for 1 year would enable us to detect all cerebrovascular events.

We would like to add to the conclusion of the editors so well stated that there are still unanswered questions about the use of doxazosin in low cardiac risk patients, patients with glucose intolerance, elevated lipid levels, or the use in combination with diuretics.

ESTHER PARAN
Head Unit of Hypertension
Soroka Medical Center
Faculty of Medicine
Ben Gurion University of the Negev
PO Box 151
Beer-Sheva, Israel

PII S0895-7061(02)02996-5

Address correspondence and reprint requests to Prof. E. Paran, Soroka Medical Center, Faculty of Medicine, Ben Gurion University of the Negev, PO Box 151, Beer-Sheva, Israel; e-mail: paran@bgumail.bgu.ac.il

References


Blood Pressure and Angiotensin Converting Enzyme Inhibitor Use in Hypertensive Patients With Chronic Renal Insufficiency

I read with great interest the article “Blood Pressure and Angiotensin Converting Enzyme Inhibitor Use in Hyper-
tensive Patients with Chronic Renal Insufficiency” in the December 2001 issue of the American Journal of Hypertension. Dr. Chi-yuan and colleagues provide an excellent introduction to the fact that in the United States blood pressure (BP) control is suboptimal¹ and that little is known regarding the control achieved in physician’s practice among patients with chronic renal insufficiency. They also stress the underuse of angiotensin converting enzyme (ACE) inhibitors in this important population and the few studies done to correlate different antihypertensive regimens with the different levels of renal dysfunction.

Although ACE inhibitors have been shown to have a greater effect in delaying renal failure,² ³ most of the studies have been done comparing ACE inhibitors with placebo.⁴ Only a few studies compared other antihypertensives with ACE inhibitors, and at least one showed a comparable renoprotective efficacy of the non-dihydropyridine calcium channel blockers with ACE inhibitors.⁵ Most of the studies had only one BP target, but a limit for lowest BP target was not established. It is unknown whether the beneficial effect can be equalized by other agents when the BP achieved are much lower.⁶ ⁷ It is important to remember that other interventions such as a low sodium diet, diuretics, tight BP control, whatever treatment is used, also enhance the antiproteinuric response to ACE inhibitors.⁸

In conclusion, I agree that more emphasis is needed on delaying renal disease progression with the use of ACE inhibitors, but more investigation is needed based on the different levels of renal function, different types of population, different types of medications, and different targets of BP.

LINA M. RAMIREZ
Department of Internal Medicine
Morehouse School of Medicine

References


