

# If Cheaper is Better to Treat Hypertension Then Why Aren't More Patients Prescribed Low Cost Diuretics

December 2 2008, by Mary Anne Simpson

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(PhysOrg.com) -- An independent study comparing a low cost diuretic to ACE inhibitors, calcium blockers and alpha blockers for the treatment of high blood pressure and hypertension was sponsored by the National Heart, Lung and Blood Institute. The study entitled Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) was conducted for the period of 1994 to 1998 with the last follow-up visit in March, 2002.

According to mainstream medical authority, "High blood pressure is a major risk factor for heart disease and the chief risk factor for heart failure and stroke. The study concluded that low cost diuretics should be the first line of defense in treating most patients with hypertension. Further, the study indicated that patients prescribed diuretics were less likely to die of heart failure. Diuretics were used during the 1950s as the primary treatment for high blood pressure.

The ALLHAT Study:

The ALLHAT Study involved 42,418 participants age 55 and older and was conducted at 623 clinics and centers throughout the U.S., Puerto Rico, Virgin Islands, Canada and Veteran Centers. Patients in the study had blood pressure 140 systolic and 90 diastolic or higher. The ALLHAT Study included, 47-percent women, 47-percent non-Hispanic White, 32-percent Black Americans, and 16-percent Hispanic Americans. Each participant had at least one other risk factor for heart

disease which includes smoking or type 2 diabetes. Black Americans were disproportionately represented because their risk for developing heart disease, stroke and heart failure is greater than the general population.

New guidelines were set as a result of the ALLHAT Study which categorized the threshold of 140/90 as Stage 1 Hypertension. Additionally, physicians were alerted to pay more attention to the systolic rate in patients over 55-years of age. Moreover, the study revealed that damage to arteries begins at a much lower blood pressure rate than previously determined. In fact, artery damage can be detected in heretofore "normal range" blood pressure patients.

The almost universally accepted findings of the ALLHAT Study conclude that patients prescribed calcium channel blockers instead of diuretics had a 38-percent higher risk of heart failure and a 35-percent higher risk for being hospitalized with heart failure. Patients prescribed Ace Inhibitors instead of diuretics had 2-4 millimeter higher systolic blood pressure readings. The risk of stroke was 15-percent higher and particularly noteworthy 40-percent higher for Black American. The Ace Inhibitor participants also had a 19-percent higher risk for developing heart failure and a 10-percent higher risk for requiring a coronary procedure like bypass surgery. The alpha-adrenergic blocker drug Doxazosin by Pfizer, a muliti-million dollar contributor to the study was dropped entirely by the researchers because it was deemed ineffective.

### What This Means for Millions of Patients:

Following the ALLHAT Study, some controversies arose. The source, intrigue and possible explanations is covered handily by New York Times writer Andrew Pollack in a recent article "The Evidence Gap: The Minimal Impact of a Big Hypertension Study published on November 27, 2008. The fact remains according to Dr. Claude Lenfant the former

director of the National Heart, Lung and Blood Institute at the time of the ALLHAT Study, "diuretics are the best choice to treat hypertension and reduce the risk of its complications, both medically and economically."

Current ALLHAT guidelines to physicians suggest the use of diuretics in conjunction with other prescribed treatments. Concerns about potassium depletion in patients using diuretics suggest physicians should monitor potassium levels and prescribe supplements. Concerns about incidences of diabetes in patients using diuretics has been discussed in various medical journals. Notwithstanding these side effects, the use of diuretics remains the most effective means of treating high blood pressure and preventing cardiovascular disease.

As with any medical treatment, a patient should consult with their physician before stopping or changing their blood-pressure lowering medication. According to ALLHAT Program Director at the time of the study, Dr. Jeffrey Cutler, "The new findings will allow doctors to achieve better blood pressure controls and more importantly, better cardiovascular health for their patients... it will do this at a more affordable price to patients." The missing component is the conversation between patient and physician that would have required pouring over hundreds of pages of medical studies and journal articles in order to know there is something to discuss.

For further reading on the subject: See [ALLHAT Study](#)

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Citation: If Cheaper is Better to Treat Hypertension Then Why Aren't More Patients Prescribed Low Cost Diuretics (2008, December 2) retrieved 27 April 2024 from

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