Triple-Drug Pill May Reduce Blood Pressure

VITALS

Major Finding: After 12 weeks, 66% of blacks and 72% of nonblacks reached a target BP goal of less than 140/90 mm Hg and 23% of blacks and 29% of nonblacks reached a target of less than 120/80 mm Hg by taking a pill combining three different medications, compared with those who took dual-combination therapies for 12 weeks.

Data Source: A phase III, randomized, parallel-group study of 2,492 adults with moderate to severe hypertension.

Disclosures: The study was funded by Daiichi Sankyo Inc. Dr. Oparil has received research grants from, and served as a speaker or consultant for, multiple pharmaceutical companies, including Daiichi Sankyo.

BY HEIDI SPLETE

FROM A MEETING SPONSORED BY THE INTERNATIONAL SOCIETY ON HYPERTENSION IN BLACKS

WASHINGTON — A triple-combination pill including 40 mg olmesartan, 10 mg amlodipine, and 25 mg hydrochlorothiazide significantly improved diastolic and systolic blood pressure in black and nonblack adults with moderate to severe hypertension, based on data from 2,492 patients in an investigational study.

Dr. Suzanne Oparil of the University of Alabama at Birmingham and her colleagues reviewed data from patients in TRINITY, a randomized, phase III parallel-group study conducted at 317 clinical sites in the United States and Puerto Rico.

The primary measure of effectiveness was a significant reduction in seated diastolic blood pressure after 12 weeks of daily treatment, and the secondary measure was a significant reduction in systolic blood pressure over the same period, Dr. Oparil said at the meeting.

Patients were randomized to receive one of four treatment protocols: 40 mg olmesartan, 10 mg amlodipine, and 25 mg hydrochlorothiazide (HCTZ); 40 mg olmesartan and 10 mg amlodipine; 40 mg olmesartan and 25 mg HCTZ; and 10 mg amlodipine and 25 mg HCTZ.

All treatment regimens yielded significant improvements in both systolic and diastolic blood pressure compared with baseline measures, but the triple-drug combination reduced seated diastolic blood pressure by an average of 20.8 mm Hg in black patients and 21.8 mm Hg in nonblack patients, which was significantly greater than the reductions in each of the three dual-therapy combinations.

The triple-drug combination also significantly reduced systolic blood pressure in blacks and nonblacks, with average reductions of 37.1 mm Hg and 38.9 mm Hg, respectively, both of which were significantly greater than the reductions in each of the three dual-therapy combinations.

In addition, 66% of blacks and 72% of nonblacks with a target blood pressure goal of less than 140/90 mm Hg were able to reach their goal on the triple-combination regimen, as were 23% of blacks and 29% of nonblacks with a target blood pressure goal of less than 120/80 mm Hg. The percentages in the triple-combination group were significantly higher than those in any of the dual-therapy groups.

The researchers excluded pregnant or lactating women and individuals with severe renal insufficiency, uncontrolled diabetes, uncontrolled hypertension, and a history of significant cardiac disease. The baseline demographics were similar across all groups, and the mean age of the patients was 54 years. Approximately 15% of the study population had controlled diabetes, and about 63% were obese.

The results suggest that the triple-drug therapy is equally effective for controlling high blood pressure in patients of different ethnic groups, the researchers noted.

The drug, marketed as Tribenzor, was approved by the Food and Drug Administration last month. One other triple-combination antihypertensive drug that includes amlodipine, valsartan, and HCTZ (Exforge HCT) was approved in 2009. ■