

Hypertrophy Resolves by Getting BP to Goal

BY SHERRY BOSCHERT

SAN FRANCISCO — To reduce left ventricular mass in patients with hypertension, getting the blood pressure to goal is what matters, not which antihypertensives you use, according to a phase III study.

The findings challenge conventional wisdom that credits renin angiotensin-aldosterone system inhibitors with being the most effective antihypertensives for left ventricular hypertrophy (LVH) regression, followed by calcium channel blockers, then beta-blockers, then diuretics.

"It turns out that's not the case," Dr. Alan B. Miller said at the annual meeting of the American Society of Hypertension. "It probably doesn't matter what

The literature that claims a major difference in outcomes in left ventricular regression" depending on the choice of drug "is scattered and based upon many erroneous conclusions," said Dr. Marvin Moser, of Yale University, New Haven, Conn. The CLEVER results support the idea that "if you lower blood pressure enough, you'll regress left ventricular hypertrophy regardless of what you use."

Rates of side effects were low, as

might be expected with these established medications, Dr. Miller said. Cough was somewhat more common (17%) in the high-dose lisinopril group than in the atenolol (5%) or carvedilol (9%) groups. Fatigue was more common with atenolol (17%) than in the other two groups (7% each). Dizziness was slightly more common with carvedilol (14%) than with atenolol (9%) or lisinopril alone (8%). Headaches were

reported by 12%-15% of patients.

Dr. Miller has been a consultant and speaker for GlaxoSmithKline, which markets Coreg and funded the study. Some of his coinvestigators were employees or consultants of the company. Dr. Miller also has been a speaker for AstraZeneca, which markets atenolol, and received research funds from Merck, which markets lisinopril. Dr. Moser reported having no conflicts of interest. ■



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DR. MILLER

drug you use. If you get to the blood pressure goal, good things happen—in this case, left ventricular regression, and I suspect clinical outcomes will follow," said Dr. Miller, professor of cardiology at the University of Florida, Jacksonville.

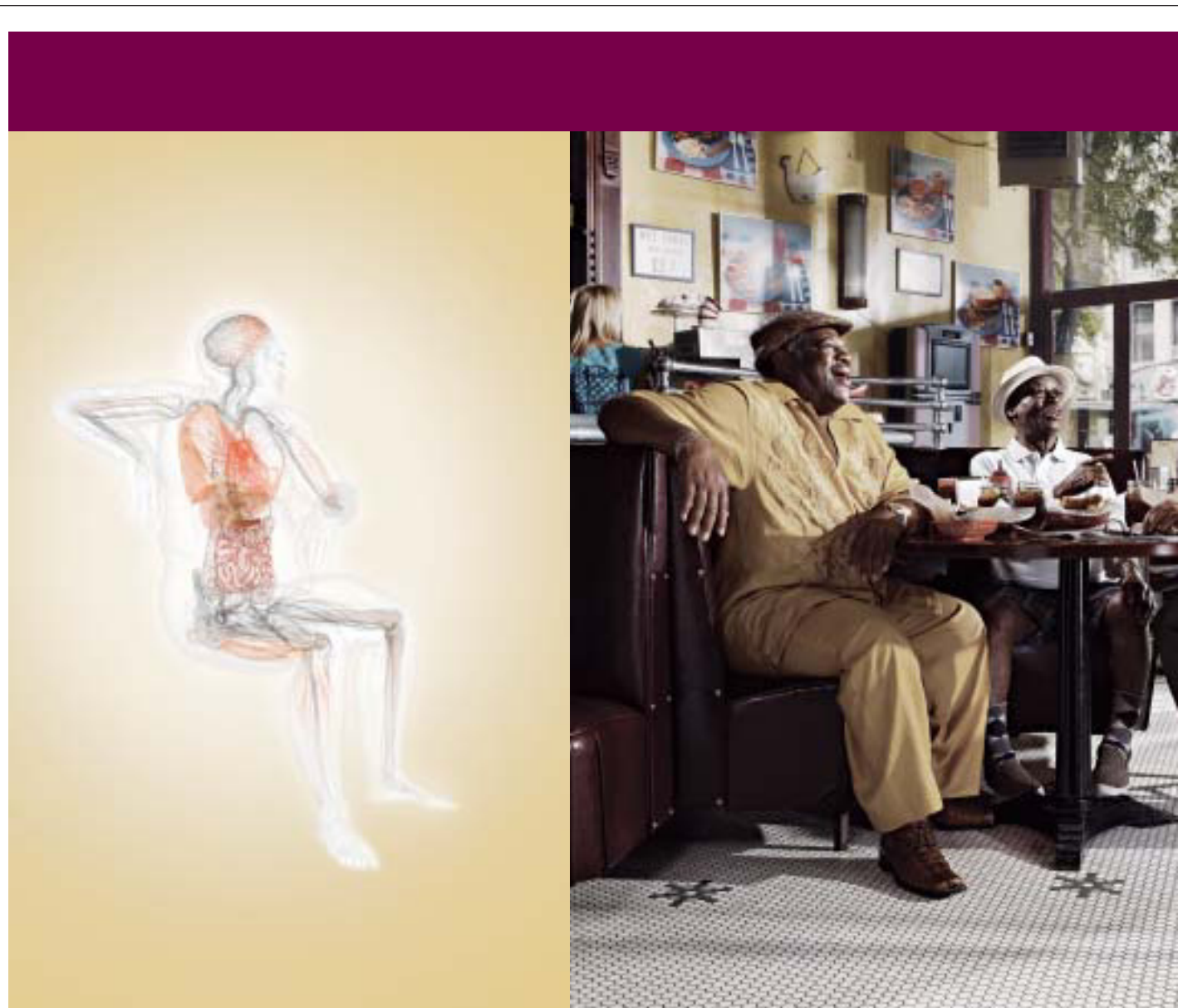
The multicenter, double-blind study included 287 patients with class 1 or class 2 hypertension and documented left ventricular hypertrophy who were being treated with 20 mg/day of the ACE inhibitor lisinopril. Patients were randomized to adjunctive therapy with up to 80 mg/day of the nonselective beta-blocker/alpha-1 blocker carvedilol CR (Coreg), up to 100 mg/day of the beta-blocker atenolol, or up to 40 mg/day of lisinopril without beta blockade. Some patients also required concomitant hydrochlorothiazide (12.5-25 mg/day) or hydrochlorothiazide plus amlodipine (5-10 mg/day) to control hypertension.

During 12 months of treatment, 73% of the carvedilol/lisinopril group, 67% of the atenolol/lisinopril group, and 79% of the high-dose lisinopril group reached recommended blood pressure goals (less than 130/80 mm Hg for the 25% of patients who had diabetes, or less than 140/90 mm Hg for other patients).

Follow-up echocardiography or cardiac MRI showed left ventricular mass regressed by a mean 6.3 g/m² in the carvedilol/lisinopril group, 6.7 g/m² in the atenolol/lisinopril group, and 7.9 g/m² in the high-dose lisinopril group, the Coreg and Left Ventricular Mass Regression (CLEVER) study found. The differences between groups in baseline and follow-up blood pressures and left ventricular mass were not statistically significant.

"The main message, which is important for the practicing doctor, is to use agents that bring the blood pressure to what the guidelines recommend," he said.

"I think this is an interesting study.



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