

diuretics, with better metabolic and hydroelectrolytic effects. Therefore, doxazosin GITS can be considered an useful alternative to thiazides as add-on therapy after antihypertensive monotherapy failure.

Parameter	Doxazosin GITS	HCTZ	P
LDLD cholesterol (mg/dl)	139.4 (40)	161.6 (73)	<0.05
HDL cholesterol (mg/dl)	58.3 (16)	48.9 (13)	<0.01
Triglycerides (mg/dl)	108.5 (45)	125.3 (52)	<0.05
HDL/Total chol. ratio	27.6 (8)	21.2 (7)	<0.001
Serum uric acid (mg/dl)	5.3 (2.6)	6.8 (3.1)	<0.05
Plasma Potassium (mEq/L)	4.1 (1.3)	3.7 (1.2)	<0.01

Key Words: Add-On Antihypertensive Therapy, Metabolic Effects, Doxazosin GITS vs. Hydrochlorothiazide

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UTILITY OF BLOOD PRESSURE DURING SUBMAXIMAL EXERCISE IN THE RISK STRATIFICATION OF PATIENTS WITH HIGH NORMAL BLOOD PRESSURE

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High normal blood pressure (BP) is associated with the metabolic syndrome and carries greater risk for developing hypertension and cardiovascular (CV) events. The Trial of Preventing Hypertension (TROPHY) is designed to determine if 2-years treatment with an angiotensin receptor blocker (ARB) reduces the development of high BP in these subjects. This report was generated from baseline data obtained prior to randomization to ARB or placebo in the first 127 subjects in the TROPHY Substudy. Substudy subjects underwent additional measurements of cardiovascular risk factors including a 2-hour oral glucose tolerance test and measurements of BP during a standardized submaximal exercise treadmill test for 6-minutes. The systolic (S)BP response to submaximal exercise is a powerful predictor of CV outcomes. We examined the utility of exercise SBP > as compared to < the 50%ile after 6-minutes submaximal treadmill exercise as a tool for overall risk stratification in the TROPHY Substudy subjects. Key findings are shown in the Table below.

	<50%ile	>50%ile	P
Screening BP, mmHg	132/87	132/86	NS
SBP, 6-min exercise	156 ± 2	194 ± 2	<0.001
BMI, kg/m ²	28 ± 1	31 ± 2	0.001
LDL-C, mg/dL	113 ± 4	127 ± 4	<0.01
fasting insulin, uU/mL	7.3 ± 0.5	12.4 ± 1.5	<0.01
1-hr insulin, uU/mL	73 ± 6	98 ± 13	<0.05
2-hr insulin, uU/mL	50 ± 5	78 ± 9	<0.01

Among subjects with high normal BP and of similar age and screening BP status, those with higher SBP values in response to a brief period of submaximal exercise had significantly greater values for other risk factors including BMI, total cholesterol (not shown), and LDL-C. Subjects with higher SBPs during submaximal exercise also had higher plasma insulin concentrations under fasting conditions and following a glucose load. The findings suggest that exercise BP is useful in identifying a subset of subjects with high normal BP that are at greater metabolic risk for CV disease. The results suggest that attempts to quantify the independent contribution of exercise SBP to CV risk should control for body mass index, total and LDL-cholesterol as well as markers of insulin resistance.

Key Words: Exercise Blood Pressure, Cardiovascular Risk Factors, High Normal Blood Pressure

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EFFICACY AND TOLERABILITY OF LERCANIDIPINE IN ELDERLY HYPERTENSIVES: RESULTS OF A MULTICENTER, DOUBLE-BLIND, RANDOMIZED STUDY

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The primary aim of this multicenter, double-blind, parallel-group study was to compare the tolerability of lercanidipine (LER) with that of amlodipine (AML) and lacidipine (LAC) in elderly (≥ 60 y, mean age 70 y) hypertensive patients. Peripheral edema is usually the main complaint during administration of long-acting dihydropyridine calcium channel blockers (CCBs); thus the study focused on the incidence of this adverse event (AE). A secondary objective was to compare the antihypertensive effects of the 3 CCBs. Patients were treated from 6 mo up to 24 mo (mean duration of treatment, 12 mo). Eligible patients were randomized in a 2:1:1 ratio to receive LER 10 mg qd (n=420), AML 5 mg qd (n=200), or LAC 2 mg qd (n=208). At each visit, if BP control was unsatisfactory (SBP/DBP $\geq 140/90$ mm Hg), the double-blind drug dosage was doubled to 20 mg qd for LER, 10 mg qd for AML, and 4 mg qd for LAC. If BP control was still unsatisfactory, open-label therapy with other antihypertensive agents could be added (enalapril 10 mg qd or atenolol 50 mg qd; dose doubled if needed); a diuretic could also be added (HCTZ 12.5 mg qd, dose doubled if needed). Results from the first 6 mo of treatment show that LER had significantly ($P < 0.0001$ Chi square) lower rates of edema and of early study discontinuations due to edema (8.3% and 1.9%, respectively) compared with AML (18.5% and 7.5%, respectively). No clinically important or statistically significant differences were noted between LER and LAC in the percentages of patients with edema and patients who dropped out due to edema. The incidence of other CCB-related AEs (flushing, headache, dizziness, asthenia, palpitations, and tachycardia) did not differ among the 3 treatments. Similar reductions in SBP/DBP and similar percentages of patients normalized, responders, and patients requiring combination therapy were seen in the first 6 mo of treatment in the 3 groups. The mean change in SBP/DBP for LER, AML, and LAC was similar: -30/14 mm Hg, -30/15 mm Hg, and -29/14 mm Hg, respectively. In conclusion, LER has an antihypertensive effect comparable to that of AML or LAC but is better tolerated than AML. AML is associated with a significantly higher percentage of patients with edema and dropouts due to edema compared with LER or LAC.

Key Words: Lercanidipine, Hypertension, Calcium Channel Blocker

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ANGLO-SCANDINAVIAN CARDIAC OUTCOMES TRIAL (ASCOT): BLOOD PRESSURE CHANGES AT 2.5 YEARS OF FOLLOW-UP

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On behalf of the ASCOT Steering Committee and Investigators.

ASCOT is designed to test two primary hypotheses:- that an antihypertensive regimen based on a calcium channel blocker/angiotensin converting enzyme inhibitor regimen will confer greater protection against nonfatal myocardial infarction and fatal coronary heart disease than a regimen based on a beta-blocker/ diuretic; and that lipid lowering with a statin in a subgroup of patients with total cholesterol < 6.5 mmol/l compared with placebo will significantly reduce the same coronary heart disease end points.

By May 2000 recruitment ended when 19342 patients with hypertension and at least 3 additional cardiovascular risk factors had been ran-