randomized to receive L 50 mg (n=60) or HCTZ 12.5 mg (n=60) for 6 weeks. Both groups were respectively force-titrated to L 50/HCTZ 12.5 mg or sham-titrated to HCTZ 12.5 mg for 6 weeks. Patients were then force-titrated to L100/ HCTZ 25 mg and HCTZ 25 mg for the remaining 6 weeks of the study. Clinic and 24-hour ambulatory BP were measured at baseline and after each 6-week treatment period. After 6 weeks, L 50 mg and HCTZ 12.5 mg induced significant and similar decreases in clinic BP and during each period of the 24-hour ambulatory BP monitoring (ABPM). At weeks 12 and 18, the combinations of L 50/HCTZ 12.5 mg and L 100/HCTZ 25 mg provided significant respective additional decreases in ambulatory systolic and diastolic BP suggesting a clear dose-response relationship. In contrast, the L 100/HCTZ 25 mg combination did not provide additional decreases vs L 50/HCTZ 12.5 mg in clinic BP. For the HCTZ-treated group, ambulatory and clinic BP decrements were statistically significant with the use of HCTZ 12.5 mg and HCTZ 25 mg. However, increasing the dosage of HCTZ 12,5 mg to 25 mg induced marginal and non-significant additional BP decrements. Between-treatment group comparisons demonstrated that both combinations of L/HCTZ provided significantly greater BP decreases than monotherapies with HCTZ during each period of the 24-hour interval and in clinic BP.

In conclusion, the results of the present study demonstrated the efficacy of a combination therapy with L and HCTZ in decreasing ambulatory blood pressures with a clear dose response relationship in patients with systolic hypertension. In addition, the results provided further evidence for the use of ABPM when assessing the efficacy of antihypertensive agents given alone or in combination.

Key Words: Angiotensin receptor antagonist, Diuretics, Ambulatory blood pressure monitoring

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ASSOCIATION OF LEFT BUNDLE BRANCH BLOCK WITH LEFT VENTRICULAR STRUCTURE AND FUNCTION IN HYPERTENSIVE PATIENTS WITH LEFT VENTRICULAR HYPERTROPHY: THE LIFE STUDY

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Background: Electrocardiographic (ECG) left bundle branch block (LBBB) is associated with left ventricular hypertrophy (LVH), but its relation to LV geometry and functional abnormalities in hypertensive patients with ECG LVH is unknown.

Method: Echocardiography was performed in 33 hypertensive patients with LBBB and 724 without conduction defect at the time of randomization in the Losartan Intervention for Endpoint reduction in hypertension (LIFE) study. All patients had stage II-III essential hypertension and LVH by electrocardiogram.

Results: The patients were similar in age, gender, body mass index and blood pressure. Both groups had similarly elevated mean level of LV mass index (125±27 vs.122±25 g/m^2) and relative wall thickness (0.42±0.06 vs. 0.41±0.07) (both p =NS).

In contrast, patients with LBBB had significantly lower LV fractional shortening (31±6 vs. 34±6%), ejection fraction (58±9 % vs 62±8%), as well as lower midwall shortening (15±2 vs.16±2%) and stress corrected midwall shortening (91±13 % vs. 97±13 %). (all p<0.05). Patients with LBBB also had lower mitral E/A ratio (0.67±0.18 vs. 0.81±0.33, p<0.05).

Conclusion: Among hypertensive patients at high risk because of ECG LVH, the presence of LBBB identifies individuals with worse LV global and regional systolic function and evidence of impaired LV relaxation but who do not have more severe LVH by echocardiography.

Key Words: left bundle branch block, hypertension, echocardiography

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EQUIVALENT BLOOD PRESSURE AND VENTRICULAR MASS REDUCTION OF INDAPAMIDE/ PERINDOPRIL COMBINATION AND AMLODIPINE IN BLACK PATIENTS WITH HYPERTENSION

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Background: We have shown that either indapamide or calcium channel blockers as monotherapy is effective as initial anti-hypertensive therapeutic agents in Black South African patients. The efficacy of indapamide/perindopril (IND/PE) combination has not been evaluated in these patients.

Aim: To compare the efficacy of IND/PE combination with amlodipine (AM) in reducing blood pressure (BP) and left ventricular mass (LVMI) in Black African patients with hypertension (HT).

Methods: 125 Patients with essential HT (mean day diastolic ambulatory BP (ABPM) >90 - ≤110mm Hg) were randomised to IND (SR; 1.5mg/day) or AM (5mg/day) for 1 month. PE (4mg) was added to therapy in IND patients who were not controlled (target mean day diastolic ABPM < 85mm Hg) or the AM dose was increased to 10mg/day. Follow-up was 6 months. LVMI was calculated from echocardiographic measurements.

Results: Mean day ABPM decreased at 2 months significantly in both groups (IND/PE: -20/-13mm Hg; AM: -21/-12mm Hg, SBP/DBP respectively). Reduction in both BP and LVMI was significant at 6 months without differences between groups (Table).

	Indapamide/Perindopril		**Amlodipine**	
	Baseline (n=64)	**6 Month (n=42)**	**Baseline (n=61)**	**6 Month (n=44)**
Age (years)	52 ± 11		54 ± 11	
Gender (n;%f)	42 (66%)		43 (77%)	
Mean Day SBP (mm Hg)	153 ± 12	130 ± 15*	152 ± 13	129 ± 11*
Mean Day DBP (mm Hg)	101 ± 6	86 ± 8*	99 ± 5	85 ± 5*
Control (n;%)	–	22 (52%)	–	23 (52%)
LVMI (g/m^2)	107 ± 26	85 ± 18*	107 ± 30	87 ± 16*
Relative wall thickness (ratio)	0.43 ± 0.07	0.37 ± 0.05*	0.41 ± 0.06	0.36 ± 0.04*

* *P<0.0001 compared to baseline*

Conclusion: IND/PE combination is as effective as AM in reducing BP and LVMI in Black South Africans with mild to moderate hypertension.

Key Words: left ventricular hypertrophy, Black African, indapamide

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HEALTH-RELATED QUALITY OF LIFE IN ELDERLY TREATED HYPERTENSIVE PATIENTS - DATA FROM THE STUDY ON COGNITION AND PROGNOSIS IN THE ELDERLY (SCOPE)

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The Study on COgnition and Prognosis in the Elderly (SCOPE, n=4,937) assessed the effect of candesartan (Cand) on cardiovascular (CV) events, cognition and dementia in elderly patients with hypertension. Blood pressure (BP) was reduced from 166/90 to 145/80 mmHg in the Cand group and from 167/90 to 149/82 mmHg in the control group. Cand-based treatment, compared with control treatment, reduced non-fatal stroke by 28%, but had no significant effect on the composite primary endpoint (major CV events).

This sub-study evaluated the effect on health-related quality of life (HRQL) in total 2,850 patients (mean age 76.4 years). Three validated questionnaires were completed at baseline and during follow-up (mean 3.7 years): the Psychological General Well-Being (PGWB) index, the Subjective Symptom Assessment Profile (SSA-P), and the EuroQoL. ANCOVA was used to test between group differences in change from baseline to last visit, adjusted for baseline value and country. Results are given in the table.

HRQL Scores in SCOPE

	Baseline		Change		Difference in Change		
	Cand	Control	Cand	Control	Mean	95% CI	P
PGWB							
total score	106.0	106.3	−4.26	−5.63	−1.37	−2.79; 0.05	.06
anxiety	25.0	25.1	−0.51	−1.01	−0.50	−0.88; −0.12	.01
depressed mood	16.1	16.1	−0.58	−0.58	−0.00	−0.23; 0.24	>.20
general health	14.2	14.2	−0.77	−0.93	−0.16	−0.44; 0.11	>.20
positive well-being	17.0	17.2	−0.79	−1.12	−0.33	−0.64; −0.02	.04
self-control	15.6	15.6	−0.46	−0.70	−0.23	−0.47; 0.001	.05
vitality	18.0	18.0	−1.05	−1.26	−0.22	−0.54; 0.10	.18
SSA-P							
cardiac sympt.	1.5	1.5	0.03	0.10	0.07	0.01; 0.13	.03
dizziness	1.9	1.9	0.23	0.19	−0.04	−0.14; 0.07	>.20
periph/circul. sympt.	1.7	1.8	0.25	0.30	0.05	−0.03; 0.12	>.20
EuroQol							
current health	74.0	74.1	−3.11	−5.30	−2.19	−3.81; −0.56	.01

In conclusion, HRQL was generally good at baseline and well preserved during follow-up in the presence of substantial BP reductions in both treatment groups. However, some results indicated an advantage of cand-based treatment. There should be no reason to withhold antihypertensive treatment in elderly patients due to concerns for HRQL.

Key Words: Health-related quality of life, Elderly, Hypertension

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COMPARISON OF A FIXED-DOSE COMBINATION VS DOSE TIRATION IN SECOND LINE THERAPY OF HYPERTENSION

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The present double–blind clinical trial compared two therapeutic strategies, combined therapy and dose-titration, as second-line treatment options after a first failure in patients not controlled with monotherapy, to assess potential advantages of each option.

Three hundred and twenty-eight patients went into a placebo run-in for 2 weeks and then received amlodipine 5mg for 4 weeks. Within non-controlled patients, 245 were randomly assigned to either a fixed-dose combination of enalapril 10 mg / nitrendipine 20 mg (E/N) (N=126) or to dose titration with amlodipine 10 mg (A) (N=119) for 6 weeks. The main efficacy variable was DBP.

Main Study Results

Efficacy	E/N (N=100)	A (N=98)	Diff.	95% CI	Chi² P
DBP and SBP <90/140 mmHg	55 (55%)	59 (60.2%)	−5.2	8.5 to −18.9	0.458
SBP <140 mmHg	60 (60%)	69 (70.4%)	−10.4	2.8 to −23.6	0.124
DBP <90 mmHg	75 (75%)	78 (79.6%)	−4.6	7.1 to −16.2	0.441

Tolerability	E/N (N=126)	A (N=119)	Diff.	95% CI	Chi² P
Incidence of related AEs	25 (19.8%)	44 (37%)	−17.1	−6.0 to −28.3	0.003
Incidence of leg oedema	14 (11.1%)	40 (33.6%)	−22.5	−12.5 to −32.6	<0.0001

During the double-blind period of the study E/N allowed control of BP in 2.8 patients per each patient that experienced related adverse events (55%/19.8%), while amlodipine allowed control of BP in 1.6 patients per each patient that experienced related adverse events (60.2%/37%). The risk/benefit assessment was better for enalapril/nitrendipine fixed-dose combination than for dose titration with amlodipine.

Key Words: fixed-dose combination, hypertension, second line therapy

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EFFECTS OF FIXED, LOW-DOSE COMBINATION AMLODIPINE/BENAZEPRIL THERAPY VS COMPONENT MONOTHERAPY ON SYSTOLIC BLOOD PRESSURE: RESULTS OF THE SELECT (SYSTOLIC EVALUATION OF LOTREL EFFICACY AND COMPARATIVE THERAPIES) TRIAL

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Outcome studies have shown that treating elevated systolic blood pressure (SBP) results in a significant reduction in cardiovascular morbidity and mortality. However, multiple drugs are often required to achieve target BP. The use of complementary agents such as an angiotensin-converting enzyme (ACE) inhibitor and a calcium channel blocker (CCB) in combination may result in a greater reduction in SBP, a higher