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LOSARTAN BENEFITS OVER ATENOLOL IN NON-SMOKING HYPERTENSIVE PATIENTS WITH LEFT VENTRICULAR HYPERTROPHY: THE LIFE STUDY
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The Losartan Intervention For Endpoint reduction in hypertension (LIFE) study showed superiority of losartan over atenolol for reduction of composite risk of cardiovascular death, stroke, and myocardial infarction in hypertensives with left ventricular hypertrophy. We compared risks in never-smokers (n = 4656), and current (n = 3033) and previous (n = 1499) smokers, who had similar clinical baseline characteristics. In these categories, similar numbers of patients were randomized to losartan and atenolol, and BP was lowered similarly on the drug regimens. Impact of smoking on endpoints and treatment effects were measured by hazard ratios (HR) by Cox regression, adjusting for gender, age, alcohol intake, exercise, and race. Overall BP control (<140/90 mm Hg) was achieved in 50% of smokers and 46% of non-smokers at end of follow-up. Composite endpoint rate was higher in previous (28/1000 yrs; HR 1.20, 95% CI [1.03, 1.38], P = 0.02), as well as current (39/1000 yrs; HR 1.94, 95% CI [1.65, 2.28], P < 0.001) smokers than in never-smokers (21/1000 yrs). In never-smokers, risks of composite endpoint (Figure; rate 18 vs 23/1000 yrs; P = 0.008) and stroke (rate 8 vs 13/1000 yrs; HR 0.61, 95% CI [0.47, 0.80], P = 0.001) were lower with losartan than atenolol. Similar but non-significant effects were observed in previous smokers for composite endpoint (Figure) and stroke (HR 0.78, 95% CI [0.59, 1.04]). Although drug regimens appeared not to differ in current smokers (stroke HR 0.94, 95% CI [0.65, 1.36]), smoking-treatment interactions were non-significant. In summary, smokers have substantially higher cardiovascular risk than non-smokers, despite similar BP control. Losartan reduces the risk of primary composite endpoint and stroke in non-smoking hypertensive patients with left ventricular hypertrophy in the LIFE study.

Key Words: Smoking, Hypertension, Cardiovascular Risk

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THE LIMITS OF ANTIHYPERTENSIVE THERAPY. WHAT THE FIRST WORLD CAN LEARN FROM THE THIRD WORLD
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Objective: There is a rapid development of the “second wave epidemic” of cardiovascular disease that is now flowing through developing countries and the former socialist republics. It is now evident from World Health Organisation data that coronary heart disease and cerebrovascular disease are increasing so rapidly that they will rank No 1 and No 5 respectively as causes of global burden by the year 2020.

Design and Methods: This study analyses the data from the current literature.

Result: In spite of the current low prevalence of hypertensive subjects in some countries, the total number of hypertensive subjects in the developing world is high and a cost-analysis of possible antihypertensive drug treatment indicates that developing countries cannot afford the same treatment as developed countries. Control of hypertension (BP < 140/90) occurs in only 5 – 10%. There are varying responses to effectiveness of antihypertensive therapy in black hypertensive patients. Black patients respond well to thiazide diuretics, calcium channel blockers, vasodilators like a-blockers, hydralazine, reserpine and poorly to b-blockers, ACE inhibitors and AII receptor antagonists unless they are combined with a diuretic. Thiazide diuretics should be the baseline drug in the treatment of hypertension in blacks.

Conclusion: A comprehensive cardiovascular disease (CVD) programme is necessary. There are social, economic, cultural factors which impair control of hypertension in developing countries. Hypertension control is ideally suited to the initial component of an integrated CVD control programme which has to be implemented in developing countries. Primary prevention, through a population-based lifestyle, as well as cost-effective methods of detection and management, are synergistically linked. The existing health care infrastructure needs to be orientated to meet the emerging challenge of CVD, while empowering the community through health education.

Key Words: Antihypertensive Therapy, Developing World, Control of Hypertension

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EFFECT OF BASELINE COGNITIVE FUNCTION ON OUTCOMES IN THE STUDY ON COGNITION AND PROGNOSIS IN THE ELDERLY (SCOPE)
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The Study on Cognition and Prognosis in the Elderly (SCOPE) was the first large-scale clinical trial to determine the effects of angiotensin II type 1 receptor blockade on cardiovascular and cognitive outcomes in elderly patients with mild to moderate hypertension. The present analysis evaluates whether cognitive function at baseline affected cognitive and cardiovascular outcomes in SCOPE.

SCOPE included 4,937 patients, aged 70 – 89 years, with systolic blood pressure (BP) 160 – 179 mmHg and/or diastolic BP 90 – 99 mmHg, and Mini Mental State Examination (MMSE) score ≥ 24. Double-blind treatment was initiated with candesartan (8 – 16 mg once daily) or placebo. Open-label therapy was added as needed to control BP, both in the candesartan (49%) and control (66%) groups. Low cognitive function (LCF) at baseline was defined as MMSE score 24 – 28 (N = 2,070), and high cognitive function (HCF) as MMSE score 29 – 30 (N = 2,867). Mean age was 77.3 years in LCF patients and 75.8 years in HCF patients. Baseline characteristics were similar between candesartan and control groups both in LCF and HCF patients.