D068

THE ANTIHYPERTENSIVE EFFICACY AND SAFETY OF IRBESARTAN COMPARED WITH AMLODIPINE FOR THE TREATMENT OF MILD-TO-MODERATE HYPERTENSION.

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Irbesartan, a potent, long-acting angiotensin II receptor antagonist that is highly selective for the AT_1 receptor subtype, has been shown to effectively and safely lower blood pressure with once-daily administration. This study was designed to compare the antihypertensive efficacy and safety of irbesartan to amlodipine, a dihydropyridine calcium antagonist. The mean change from baseline in trough Seated Diastolic Blood Pressure (SeDBP) following a regimen of once-daily oral administration of the recommended starting doses of irbesartan (150 mg) or amlodipine (5 mg) was evaluated during a 4-week randomized, double-blind trial. Following a 3-week placebo lead-in period, 114 male and 67 female, non-African Americans subjects, with a mean age of 51.0 years, and mild-to-moderate hypertension (baseline SeDBP between 95 and 111 mmHg; mean SeDBP 99.7 mmHg) were randomized to receive study drug (n=89, irbesartan; n=92, amlodipine). After 4 weeks of treatment, there was a decrease from baseline in SeDBP ± SE of –9.4 mmHg ± 0.64 in the irbesartan group and –9.6 mmHg ± 0.63 in the amlodipine group. The difference between the two treatment groups was 0.2 mmHg (95%C.I. -1.5, 1.9). At two weeks, there was a decrease from baseline in SeDBP of –9.1 mmHg ± 0.58 and -8.4 mmHg ± 0.56 in the irbesartan and amlodipine groups, respectively. There were also decreases from baseline in trough seated systolic blood pressure (SeSBP) at 2 and 4 weeks which were similar in both groups (-12.2 mmHg and –12.0 mmHg for irbesartan and amlodipine, respectively at week 4). Nineteen (19) subjects in each treatment group reported adverse events during the blinded portion of the study, and 1 subject in the amlodipine group died during the study (death not related to study drug). Over the 4-week period of this study, both drugs showed comparable efficacy in reducing mild-to-moderate hypertension. Thus, irbesartan is a safe and effective first-line alternative for the treatment of mild-to-moderate hypertension in this population.

Key Words: Irbesartan, amlodipine, antihypertensive efficacy

D070

PROGNOSIS OF ELDERLY HYPERTENSIVE PATIENTS IN JAPAN

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To assess the prognosis of hypertension in the elderly, 700 elderly hypertensive patients, age ≥ 60, were recruited and followed up for 4 years. Seventy-three cerebro-cardiovascular events including eighteen deaths occurred. In 32 patients, cancers were newly found, and 12 of them were died of cancer. The incidence of cerebro-cardiovascular events were significantly higher in those patients who had concomitant disorders including renal dysfunction, diabetes mellitus, hyperlipidemia, compared with patients without concomitant disorders (odds ratio 6.35). Calcium antagonists were most frequently prescribed followed by β-blockers. There were no difference in the incidence of the cerebro-cardiovascular events and cancers among the classes of antihypertensive drugs. The morbidity and mortality rate of cerebro-cardiovascular events were 29.6 and 7.3 cases/thousand patients • year, respectively. These values were lower or equivalent to those reported in EWPHE, STOP, MRC II, SHEP, and Syst-Eur studies.

Key Words: elderly, treatment, cerebrovascular event, cardiovascular event, cancer, aging

D071

ANTIHYPERTENSIVE DRUGS VERSUS CARDIOVASCULAR RISK FACTORS: THE ZIMBABWEAN EXPERIENCE

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Introduction : High levels of serum total cholesterol (TC), low-density lipoprotein (LDL), lipoprotein (a) [Lp(a)] and fibrinogen (FIB) are risk factors for cardiovascular diseases in addition to diabetes mellitus and hypertension. Two or more cardiovascular risk factors that need correction often co-exist in some patients and such patients may have to attend different Specialist Clinics for the risk factors.
Objective : The core aim of this study was to examine the effects of antihypertensive drugs on lipid profile and fibrinogen levels of some hypertensive Zimbabweans.
Materials and Methods : We measured the serum total cholesterol, low-density lipoprotein and fibrinogen levels in 250 hypertensive Zimbabweans (120 males and 130 females) attending the "Hypertension Clinic" of Parirenyatwa Hospital in Harare, Zimbabwe. The median age of the patients was 57 years (range : 28-85 years). The patients were not taking lipid-lowering drugs, hormone replacement therapy, or thyroxine. They did not have diabetes mellitus or impaired glucose tolerance, and their liver, renal and thyroid function tests were normal. Their diastolic blood pressure (DBP) and systolic blood pressure (SBP) values were not less than 95 mmHg and 160 mmHg respectively. All the patients were undergoing antihypertensive treatment with either **"lipid-hostile"** antihypertensives (i.e. thiazide diuretics and beta-adrenoreceptor blockers) – 150 (60%) patients; **"lipid friendly"** anti hypertensives (i.e. alpha-adrenoreceptor blockers) -20 (8%) patients; or **"lipid-neutral"** antihypertensives (i.e. ACE inhibitors, Ca^{2+}-channel blockers) – 80 (32%) patients. The effects of the anti hypertensive drugs on serum total cholesterol (TC), LDL and plasma fibrinogen (FBI) were monitored and documented. Data captured were analysed statistically by Chi Square method.
Results : Secondary cardiovascular disorder (e.g. peripheral, cerebrovascular or ischaemic heart disease) was present in 110 (44%) patients. In these patients with vascular diseases, plasma fibrinogen concentration was significantly higher than in patients without cardiovascular disorder (median values:365 vs 341 mg/dl; P<0.0001). However, total serum cholesterol (TC) and LDL concentrations were higher in patient without secondary cardiovascular disease than in patients with accompanying cardiovascular disorder (median values : 7.8 vs 6.3 mmol/l and 5.5 vs 4.5 mmol/l respectively; P<0.0001). Plasma fibrinogen concentration was found to be significantly higher in patients undergoing therapy with **"lipid-hostile"** antihypertensives (n=150) than in those patients taking **"lipid-friendly"** (n=20), or **"lipid-neutral"** (n=80) antihypertensives (sub-total n = 100) – median values : 362 vs 336 mg/dl; P<0.01. This marked difference was not influenced by other factors that are known to increase plasma fibrinogen levels, e.g. age, gender, smoking status, etc.
Discussion and Conclusion : The results of this study suggest that fibrinogen is an 'autonomous' cardiovascular risk factor. Although reports on the effect of β-adrenoreceptor blockers on plasma fibrinogen levels are still controversial, most ACE inhibitors decrease plasma fibrinogen concentrations, and literature abounds with evidence showing that thiazide diuretics increase the plasma levels of this coagulation factor. It is not surprising, therefore, that in the present study, **antihypertensive drugs "hostile" to lipids** (thiazide diuretics) increased the plasma levels of fibrinogen (FIB) when compared to **"lipid-friendly"** or **"lipid-neutral" antihypetensive drugs**. This seemingly beneficial or harmful effect of antihypertensive agents on one of the major thrombotic factors must always be considered when selecting antihypertensive drugs for the overall reduction and/or management of cardiovascular risk.

Key Words: Antihypertensive Drugs, Cardiovascular risk factors