D13

BLOOD PRESSURE CONTROL WITH LOW DOSE FELODIPINE ER IN FILIPINO HYPERTENSIVES.

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The clinical efficacy and tolerability of low doses (2.5 mg and 5 mg) of felodipine extended release (F, Plendil®) was compared to placebo (P) in 35 (16 male/19 female) mild to moderately hypertensive Filipino patients (mean supine DBP±SEM, 100±1 mmHg). After a 2 week P run in period patients were treated once daily for 2 weeks with F 2.5 mg and F 5 mg and P. All tablets were given in random order. Two patients did not complete the study, one moved away and another was withdrawn for poor compliance. The most common adverse event was headache in 6 P, 5 F 2.5 mg and 8 F 5 mg treated patients. Blood pressure (BP) data are mmHg for the 33 patients that completed the study. Standing blood pressure (SBP/DBP) at 24 h post dose for P, F 2.5 mg and F 5 mg were 160/101, 146/96 and 143/93 mmHg. Supine BPs were 159/93, 149/92 and 147/88, respectively. BP (mmHg) control (DBP <90) occurred in 39%, 45%, and 79% of the P, F 2.5 mg and F 5 mg treated group.

	Standing			Supine		
	Mean	(95% CI)	p-value	Mean	(95% CI)	p-value
Changes in SBP						
P vs F 2.5 mg	13	(9;18)	0.0001	10	(5;14)	0.0001
P vs F 5 mg	17	(12;2)	0.0001	13	(8;17)	0.0001
F 2.5 vs F 5	3	(-2;8)	>0.20	3	(-2;8)	>0.20
Changes in DBP						
P vs F 2.5 mg	5	(2;8)	0.004	2	(-1;5)	0.1884
P vs F 5 mg	8	(5;11)	0.0001	7	(4;9)	0.0001
F 2.5 vs F 5	3	(1;6)	0.03	5	(2;8)	0.001

It is concluded that F 2.5 mg and F 5 mg once daily resulted in dose related blood pressure reductions in Oriental patients with primary hypertension. Both doses were well tolerated.

Key Words:
Felodipine ER, hypertension, Filipino

D14

EFFECTS OF DILTIAZEM AND ATENOLOL ON BLOOD-GLUCOSE, SERUMLIPIDS, SERUMURATE AND QUALITY OF LIFE IN HYPERTENSIVE PATIENTS. A SWEDISH-FINNISH LONG TERM STUDY.

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Objective: To study the effects of Diltiazem (D) and Atenolol (A) on S-Lipids, fB-Glucose, S-Urate.and Quality of Life in hypertensive patients.

Design and Methods: In a Swedish-Finnish long term multi-center study 256 patients with mild to moderate hypertension were randomized to treatment with diltiazem retard (D) or atenolol (A)after a placebo run-in period. Patients who did not achieve adequate blood-pressure (BP) reduction had the doses increased and, in a third step, additional captopril medication. The treatment in group D lasted for two years while group A was treated for 1 year and then given D for another 2 years. 127 patients received D 120 mg x 2 initially and 129 patients got A 50 mg x 1. At randomization BP was 163(16)/101(5) and 164(17)/101(4) mm Hg in group D and A, respectively.

Results: After 1 year BP was significantly reduced in both groups and to similar degree.The BP reduction was maintained during the rest of the study. After 1 and 2 years HDL was significantly increased ($p<0.001$) in group D. There was a corresponding significant reduction of the LDL/HDL ratio. In group A there were no changes after 1 year regarding the lipoprotein levels. The group A which was then switched to D showed similar improvements regarding HDL and the LDL/HDL ratio as the original D group. Regarding quality of life D tended to improve the Minor Symptoms Evaluation Profile, wher as there was no such tendency in the A group.

Conclusions: It is concluded that D and A are equally effective in lowering BP. Long term treatment with D but not with A, has a favourable effect on HDL and the LDL/HDL ratio.

Key Words: atenolol, bloodglucose, diltiazem, hypertension, serumlipids, serumurate, quality of life

D15

More effective blood pressure control with once daily felodipine-metoprolol (Logimax®) than with enalapril.

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The purpose of this study was to compare the antihypertensive efficacy and tolerability of felodipine-metoprolol o.d. with enalapril o.d.

After a 4-week (w) run-in period on placebo 120 patients, 47 men and 73 women with a mean age of 55 years and a supine diastolic blood pressure (DBP) 95-115 mmHg, were randomised to felodipine-metoprolol (FM) 5/50 mg o. d. or enalapril (E) 10 mg o.d. in this double-blind study. If BP remained suboptimal after 4 w (supine DBP > 90 mmHg 24h post dose) the dose was doubled for a further 4 w. All unfavourable events, whether or not considered causally related to study medication, were recorded as adverse events (AE).

The mean supine BP at randomisation was 166/100 mm Hg in the FM group and 163/101 mm Hg in the E group. After 4 w, the mean reduction in BP was 16/11 mm Hg in the FM group (n=58) and 9/5 mm Hg in the E group (n=59) The mean reduction was 7/6 mm Hg larger after FM compared with E ($p=0.0031/p<0.0001$). After 8 w, the reductions were 20/12 mm Hg in the FM group(n=56) and 11/7 mm Hg(n=58) in the E group. The mean reduction was 8/5 mm Hg larger in the FM group ($p=0.001/p=0.003$).

A significantly larger proportion of patients achieved BP control (supine DBP≤ 90 mm Hg) after 8 w in the FM group, 63% compared to 41% in the E group ($p<0.05$). The dosage of study drug was increased for 40% of the patients in the FM group and 61% in the E group.

Three patients in the FM group and 4 in the E group discontinued study drug due to AE. A similar number of patients reported AE in both treatment groups. The most common AE in the FM group were headache, peripheral oedema and feeling of warmth/flush, and headache, coughing and fatigue in the E group.

It is concluded that felodipine-metoprolol 5/50 - 10/100 mg o.d. reduces blood pressure more effectively than enalapril 10-20 mg o.d. 24 h post dose. Both treatments were well tolerated.

Key Words:
Felodipine-metoprolol, enalapril

D16

HYPERTENSION OPTIMAL TREATMENT STUDY: PREDICTORS OF RESPONSE TO TREATMENT IN THE U.S. COHORT.

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The Hypertension Optimal Treatment (HOT) Study is an international intervention trial with two major objectives: examining the effect of 1) lowering diastolic blood pressure (DBP) to three target levels (≤90, ≤85, ≤80 mmHg), and 2) low dose aspirin on morbidity and mortality. As of April 30, 1994, the US investigators randomized 2,646 (out of 19,196 worldwide) patients.

At baseline, there were no significant differences between target groups in terms of blood pressure, age, gender, smoking status, medical history, concomitant medications, serum creatinine, and cholesterol. Mean age (±SD) was 60.8±7.2 years with 68% of patients being male. Mean qualifying blood pressure was 167±16/105±4 mmHg; heart rate was 80±12 bpm. Of those patients previously treated for hypertension, calcium channel antagonists were used in 49.3%, ACEI in 43.2%, diuretics in 37.5%, ß-blockers in 20.8%, and other agents in 15.5%.

At the three month visit (n=2245), 53.7% of patients in the ≤80 group, 71.3% in the ≤85 group, and 83.8% in the ≤90 group achieved their target blood pressure; titration to target blood pressure is permitted until the six month visit. Only 15%, 14%, and 16% of patients had DBP >90 mmHg in the ≤80, ≤85, and ≤90 target blood pressure groups, respectively. At the six month visit (n=1357), 68% of patients in the ≤80 group, 78% in the ≤85 group, and 88% in the ≤90 group achieved their target blood pressure. Only 7.5%, 11.3%, and 11.7% of patients had DBP >90 mmHg in the ≤80, ≤85, and ≤90 target blood pressure groups.

An analysis was performed to examine the relationship between age, gender, race, baseline blood pressure, and previous antihypertensive class used and ability to achieve target blood pressure. Black race ($p=0.001$), increasing age ($p=0.059$), prior ACEI treatment ($p=0.043$), and creatinine values above 1 mg/dl ($p=0.002$) were associated with difficulty in achieving target blood pressure.

The attainment of optimal blood pressure control can be readily achieved with antihypertensive therapy (felodipine ER was used as initial therapy). Well established predictors of response were found with the exception of previous treatment with ACEI. It remains to be further elucidated why prior treatment with ACEI predicts poor response to CCB based therapy.

Key Words:
Clinical trial, hypertension, and optimal treatment.