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<th>Advantages of Blood Pressure Optimisation Study</th>
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12. Prevalence of Hypertension in the Hong Kong Cardiovascular Risk Factor Prevalence Study Cohort

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Introduction: In 1995-6 2881 Hong Kong men and women aged 25-74 were randomly chosen to participate in the Hong Kong Cardiovascular Risk Factor Prevalence Study. Here we report the prevalence of hypertension in subjects recalled for follow up after 6 years.

Methods: 1046 subjects (506 men, 540 women; age 47+9 yrs) were randomly chosen from the cohort. Blood pressure was measured carefully, after 5 min of rest, 3 times at 5-min intervals. Hypertension was defined as systolic pressure of ≥140 mmHg and/or diastolic pressure of ≥90 mmHg or having medication to treat hypertension.

Results: The prevalence of hypertension in 1995-6 and 2001-2 is 18.0% and 26.7% respectively (p<0.001). After adjusting for age, the prevalence of hypertension has increased by 15.7%. In 2001-2, the prevalence of hypertension in >44 years is 31.8+4.9% in men and 52.3±5.4% in women.

Conclusion: The prevalence of hypertension rises sharply with age, especially after 55 years of age. The prevalence of hypertension in male under 45 appears to have doubled since the last survey.

13. EVALUATION OF EFFICACY AND TOLERABILITY OF A FIXED DOSE COMBINATION OF LOSARTAN AND RAMIPRIL IN THE MANAGEMENT OF HYPERTENSIVE PATIENTS WITH ASSOCIATED DIABETES MELLITUS

LORD TRIAL (Losartan Ramipril in Diabetic Hypertensives)

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Aim: To evaluate efficacy and tolerability of combination of Losartan ± Ramipril 1.5mg or Losartan 10mg ± Ramipril 5mg once a day depending upon the baseline BP 12 weeks.

Results: The data was evaluated on a total of 315 patients. The mean prestudy systolic BP was 163.0±14.4 which was significantly reduced to 126.8±9.7 at the end of 12 weeks (P<0.001). Similarly the mean diastolic BP was 96.9±8.33 at baseline which was significantly reduced to 79.82±5.42 at the end of 12 weeks (P<0.001).

Conclusion: The fixed dose combination of Losartan and Ramipril showed good to excellent efficacy response in 98.10% patients and achieved a target blood pressure of <140/90 mmHg in 76.05% patients and 96.14% patients reported good to excellent tolerability. The combination reduced the urinary albumin excretion in majority of the patients with microalbuminuria and proteinuria.

14. Advantages of blood pressure optimisation study

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Introduction: Lowering blood pressure (BP) reduces cardiovascular events but aggressive BP control may not be advantageous. Our aim was to compare optimal BP control (<120/80 mmHg) with conventional BP targets (<140/90 mmHg) in hypertensive patients in terms of target organ damage and tolerability.

Method: 23 hypertensive patients (13 men and 10 women, age 47±7 years) were randomly allocated to optimally versus conventional treatment for 6 months. Initial therapy was lercanidipine 10 mg daily. For BP control, the dose could be doubled or other drugs added. We studied three indices of target organ damage, left ventricular mass index (LVMI), flow-mediated dilation (FMD) of the brachial artery and 24 hour urinary albumin excretion (UAE). The coefficient of variation of LVMI and FMD measurement were 7.4% and 5.4% respectively.

Results: BP decreased significantly by 21.1±3.4/13.4±2.1 mmHg in the conventional group and 26.6±3.8/17.9±1.5 mmHg in the optimal group. The changes in MESOR DBP were greater with felodipine, but the pulse pressure was reduced significantly lower by 4.7±2.3 mmHg in the optimal group (p<0.05). Ambulatory BP was doubled after four weeks if clinic BP was not controlled and treatment continued for a total of 12 weeks. Lercanidipine BP and HR were recorded before and after the active treatment phase and biochemical parameters were monitored.

Conclusion: Both treatments were well tolerated and there were no treatment-related drop-outs. Fixed circadian variations in BP showed significant reductions in the midline-estimating statistic of rhythm (MESOR) of systolic (S) BP and diastolic (D) BP with both lercanidipine (mean MESOR 9.5±7.3) and felodipine (mean MESOR 6.2±5.6). The changes in MESOR D/BP were greater with felodipine, but the pulse pressure was reduced (p=0.02) to similar extent by both treatments (-4.0±2.3 mmHg for lercanidipine, -7.0±1.6 mmHg for felodipine). Reductins in circadian amplitudes of BBP and DBP were not significant with either treatment. The MESOR of HR was increased (4.5±1.7 beats/min, p=0.02) among subjects treated with lercanidipine and the circadian amplitude of HR was also increased, from 15.7±6.1 to 25.5±2.4 beats/min (p=0.02). Clinic BBP and HR values showed similar changes to the MESOR values. There were no significant changes in plasma biochemistry or urinalysis with either treatment.

Conclusion: Felodipine had a greater BP lowering effect than lercanidipine in these doses, especially in reducing DBP. However, the increase in HR variability seen with lercanidipine may be an additional benefit for hypertensive patients.