D037

THE SAFETY OF ADRENALEIN PHARMACOLOGIC STRESS TESTING IN PATIENTS WITH END-STAGE RENAL DISEASE.
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Adrenaline is increasingly being used as a pharmacologic stress agent in conjunction with radionuclide myocardial perfusion imaging in the evaluation of coronary artery disease. Patients with end-stage renal disease are at increased risk for concurrent coronary artery disease as this patient population generally has a higher prevalence of diabetes and hypertension, both of which are well established risk factors for coronary artery disease. The safety of adrenaline in patients with end-stage renal disease is not well documented in the literature.

The study consisted of thirty-nine consecutive patients with end-stage renal disease who underwent adrenaline radionuclide myocardial perfusion imaging for cardiac risk stratification for consideration of renal transplantation. These patients received adrenaline with the standard infusion rate of 140 µg/kg/min. for 6 minutes. Since the development of first degree atrioventricular block has no clinical significance, we studied the frequency of second and third degree atrioventricular block and any sign or symptom of hemodynamic instability in patients with end-stage renal disease who received adrenaline infusion of 140 µg/kg/min. for 6 minutes.

A total of two patients (5.1%) had transient 2 to 1 atrioventricular block but no associated clinical symptoms. No patient had third degree atrioventricular block (0%). Only one patient (2.6%) had transient symptomatic hypotension, BP 81/46 with dizziness, at 4 minutes into adrenaline infusion, the patient was placed in the Trendelenburg position and BP at 5 minutes and 6 minutes was 94/48 and 116/56, respectively.

Our study demonstrated that patients with end-stage renal disease tolerate adrenaline infusion well. The frequency of second and third degree atrioventricular block was 5.1% and 0%, respectively, all were transient and not associated with specific symptoms. Therefore, adrenaline stress testing in conjunction with radionuclide myocardial perfusion imaging can be used safely in patients with end-stage renal disease for evaluation of coronary artery disease and risk assessment.

Key Words:
adrenaline, end stage renal disease, renal transplantation

D038

MARITAL COHESION AND AMBULATORY BLOOD PRESSURE IN EARLY HYPERTENSION
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Of psychosocial factors affecting hypertension, only work-related effects have been demonstrated. There is little data on another context of daily life, the marital relationship.

Objective: An observational study to examine the relation between marriage and ambulatory BP [ABP] in men and women, screened, but not medicated, for essential hypertension with office diastolic BP [DBP] ≥ 90 mmHg on three occasions not less than 5 weeks or more than 6 months apart.

Results: 134 males and 71 females, aged 20 to 65, with cohabiting partner, employed and unmarried for hypertension, all for a minimum of 6 months. The mean age was 46. On daytime (7am-11pm) ABP of a working day, 42% had DBP below 90 mmHg. Ninety-six percent were in the normal range for left ventricular mass index. Multiple regression analyses revealed associations with ABP of marital cohesion as measured by the Cohesion subscale [Cohesion] of the Dyadic Adjustment Scale. Lower Cohesion was related to elevated nighttime SBP (p=0.05) and 24 hr and nighttime DBP (p<0.01). Subjects with lower Cohesion (N=83) with more reported spousal contact had elevated nighttime SBP and DBP (p=0.05). The 7.3% of subjects with very low Cohesion demonstrated a 6 mmHg elevation of all ABP variables, controlling for gender, age, body mass index, regular alcohol consumption, previous treatment for hypertension and smoking (all p<0.05, except nighttime SBP).

Conclusion: In early untreated hypertension, marital strain may contribute to higher blood pressure. The small number in non-cohesive marital relationships appear at risk for sustained blood pressure elevations.

Key Words:
hypertension, gender issues marital strain

D039

SAFETY OF EPROSARTAN IN ELDERLY PATIENTS WITH HYPERTENSION.

Eprosartan, a non-hypotensive angiotensin II antagonist is approved for once daily treatment of hypertension in a number of countries at a starting dose of 600mg once daily. The efficacy of eprosartan in elderly hypertensive patients (≥65 years) has been demonstrated in a double-blind study and is presented elsewhere (Argenziano et al). Data presented here concentrate on the safety of eprosartan in the elderly. An eight week parallel group placebo controlled study of 304 patients included 56 patients aged ≥65 years randomized to 600, 800, or 1200mg eprosartan once daily and 28 patients aged ≥65 years randomized to placebo. In the eprosartan treatment groups, the percentage of patients with on-therapy adverse events (AEs) was similar in patients aged ≥65 (50.6%) and ≥65 years (48.2%) and comparable to the placebo group (58.7% and 46.4% respectively for <65 and ≥65 years). In pooled data from 9 double blind studies in a total of 2234 hypertensive patients, (29%, aged ≥65 years), the overall incidence of AEs in elderly patients taking eprosartan was similar to younger patients. Headache and upper respiratory tract infection were the two most frequently reported events (see Table). There was no increased incidence of AEs in elderly patients receiving eprosartan that might indicate an exaggerated hypertensive response or be of particular concern in this population.

Adverse Experiences ≤65 years (N=663) ≥65 years (N=681)

<table>
<thead>
<tr>
<th>Headache</th>
<th>14.3%</th>
<th>13.8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Respiratory Infection</td>
<td>12.7%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Myalgia</td>
<td>8.2%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Dizziness</td>
<td>5.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>3.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Postural Hypotension</td>
<td>0.4%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

These data demonstrate that at a dose of 600mg once daily and above, eprosartan is extremely well tolerated in elderly hypertensive patients with a safety profile similar to that seen in younger patients. Key Words:

eprosartan, elderly, angiotensin II antagonist, safety

D040

SUBGROUP ANALYSIS OF BLACK HYPERTENSIVE PATIENTS TREATED WITH EPROSARTAN OR ENALAPRIL: RESULTS OF A 26-WEEK STUDY
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Eprosartan is a novel angiotensin II AT1 receptor antagonist under investigation for the treatment of essential hypertension. A study comparing eprosartan with enalapril was conducted in 536 patients with essential hypertension (Sitting SBP 141±14 mmHg). Following 3 to 5 weeks on placebo, patients were randomized to receive either eprosartan (200-300mg bid) or enalapril (5-20mg od). After 12 weeks of therapy, a mean of the 2×2×4 crossover phase, patients were supplemented with HCTZ as needed; 81 out of 264 patients were treated with HCTZ in each group. Clinical endpoints were mean change from baseline for sit and stand DBP and SBP, proportion of responders in each group, and incidence of dry, nonproductive cough associated with each treatment regimen. Patients were classified as responders if their SitDBP was <90mmHg, or if it was <100mmHg and had decreased from baseline by at least 10mmHg. The effectiveness of eprosartan and enalapril was determined after grouping patients according to race. Of the black patients participating, 21% were randomized to eprosartan and 19 to enalapril. The baseline SitDBP for eprosartan was 101±11mmHg and 102±11mmHg for enalapril. The mean reduction from baseline for SitDBP in eprosartan-treated black patients was 13.3±2.7mmHg and in enalapril-treated patients was 12.4±2.5mmHg. The mean reduction for SitSBP in eprosartan-treated black patients was 23.1±6.4mmHg and 13.2±4.3mmHg for enalapril-treated patients. A higher percentage of black patients responded to eprosartan than to enalapril. At the study endpoint (last on-therapy visit), the response rate was 66.7% for eprosartan and 42.1% for enalapril. The incidence of dry, nonproductive cough was higher in enalapril-treated black patients (3.9%) than in those treated with eprosartan (0.0%). These results demonstrate that a greater proportion of black patients respond to eprosartan than to enalapril.

Key Words:
eprosartan, enalapril, ethnicity, diastolic blood pressure, systolic blood pressure