A027
THE CORRECTION OF DIURETIC INDUCED HYPOKALIEMIA IS MAINTAINED DURING LONG-TERM ACE INHIBITION TREATMENT

The blockade of renin-angiotensin system with ACE inhibitors (ACEI) is limited by alternative pathways of angiotensin II (AII) production. It has been described a normalization of plasma levels of AII and aldosterone after long-term ACEI treatment. We reviewed whether the protective effect of ACEI on hipokaliemia associated with thiazide diuretic therapy due to renin-angiotensin-aldosterone activation is maintained during long-term antihypertensive treatment in comparison with patients treated with a diuretic associated to other drugs in a historical cohort study. We selected patients with mild to moderate essential hypertension treated during at least four years with thiazide diuretics and other antihypertensive drug (ACEI, calcium channel blockers, beta and alpha blockers) and normal renal function (creatinine clearance >70 ml/min). A total of 166 patients were included in the study: 86 receiving ACEI and 80 with other drugs (40 CCB, 31 beta blockers and 9 alpha blockers) in addition to thiazide diuretics (82% hydrochlorothiazide 25–50 mg/d).

There was no difference between groups in gender, age, blood pressure levels, target organ damage, body mass index, diabetes, and biochemical parameters (creatinine, cholesterol, triglycerides, glucose, uric acid...). At baseline, plasma level of potassium was significant higher in ACEI group vs other drugs (4.16 ± 0.41 mmol/l vs 4.07 ± 0.46 mmol/l; difference 0.09; 95% CI: 0.01-0.18, p < 0.05) and hipokaliemia prevalence (<3.5 mmol/l) was clearly lower with ACEI (3.8% vs 10.5% difference 6.7%; 95% CI: 1.1-25.8 p < 0.01). These differences remained almost unchanged after four years of follow-up. We conclude that in a clinical cohort there are no evidences of aldosterone escape to long-term ACEI assessed as diuretic associated hypokaliemia.

Key Words: Hypokaliemia; ACE inhibitors; thiazide diuretics

A028
EFFECTIVENESS AND TOLERABILITY OF LERCANIDIPINE IN DAILY CLINICAL PRACTICE. ELYPSE STUDY

Lercanidipine is a novel lipophilic calcium channel blocker (CCB) that has exhibited a good antihypertensive efficacy and an excellent tolerability in randomized clinical trials. But, as it has been noted, daily clinical practice sometimes differ to randomized clinical trials. Thus, with the aim to investigate the profile of this new antihypertensive agent we designed a study called ELYPSE.

ELYPSE is a multicenter surveillance trial to analyze the efficacy and tolerability of Lercanidipine in clinical practice. Essential hypertensives, candidates to be treated with Lercanidipine are conferred to this drug (10/20 mg od) during a 6-month follow up. Blood pressure and presence of adverse effects are determined at 1, 3 and 6 months. We present the preliminary results of the first 3 month follow up. To date, 7469 patients have been included (40% males, age 63 ± 19 years). 62% are grade 2 hypertensives. 36% were untreated and 64% previously treated. Among the treated patients, 971 (13%) were included in the study due to adverse effects (AEs) with other drugs. Mean blood pressure (BP) at baseline was: 162.1/96.9 mmHg. At 3-month follow up: 141.8/83.8 mmHg. Only 542 (7%) patients exhibited AEs. The most frequent AEs have been headache (2.7%) and ankle oedema (1.1%), the others (tachycardia, flushing...) are <1%.

Conclusions: Lercanidipine has demonstrated to be an effective antihypertensive agent with an excellent tolerability in daily clinical practice. It is remarkable the very low incidence of the typical CCB-related AEs observed with this drug. These data confirm the results of randomized trials and support the potential benefit of this drug in terms of compliance in clinical practice.

Key Words: Lercanidipine; calcium channel blockers; antihypertensive drugs

A029
LACIDIPINE AND NIFEDIPINE-GITS COMPARATIVE EFFECTS ON PLATELET FUNCTION IN HYPERTENSION
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The antihypertensive action of lacidipine (4 mg) and nifedipine-GITS (30 mg), were compared in a group of 20 hypertensive patients (10 patients each group) in a single blind randomized inclusion study; platelet aggregation and platelet production of malondialdehyde were evaluated in a double blind fashion. Patients initially received identical placebo during 4 weeks; then acting treatment during 12 weeks.
Platelet aggregation test was carried out using as inducers, ADP, collagen and adrenaline at different concentrations. Determinations of malondialdehyde production by platelets both basal and after the stimulation of the arachidonic acid pathway (MDA-activated), by addition of N-ethylmaleimide were carried out at the end of placebo and active phases.

Blood pressure was reduced (systolic/diastolic) in 11/9 mmHg and 25/15 mmHg at the first week of treatment for lacidipine and nifedipine-GITS respectively and 20/12 mmHg and 25/15 mmHg at the first week of treatment for active phases.

Platelet aggregation can be appreciated below:

<table>
<thead>
<tr>
<th>Platelet Aggregation</th>
<th>Platelet Malondialdehyde</th>
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</thead>
<tbody>
<tr>
<td>ADP 10 μM</td>
<td>Collagen 0.5 μg/ml</td>
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<tr>
<td>Lacidipine 86.2 ± 3.8</td>
<td>88.4 ± 3.8</td>
</tr>
<tr>
<td>Nifedipine 87.9 ± 4.2</td>
<td>78.9 ± 8.8*</td>
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</tbody>
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*p < 0.01; **p < 0.05.