F021
ASSESSMENT OF CURRENT TREATMENT TRENDS IN THE MANAGEMENT OF HIGH RISK HYPERTENSION
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The multiplicative nature of the interaction of cardiovascular risk factors (RF) warrants more aggressive management in multiple (high) risk individuals. In order to test the hypothesis that physicians do not recognize or treat multiple RF patients more aggressively than those with single RF, we measured univariate RF control rates in hypertension, hypercholesterolemia and diabetes, then calculated predicted and trivariate control rates from univariate values. The predicted rates were subsequently compared to observed values. The study population consisted of 1172 hypertensive diabetics admitted to a general hospital from June 30, 1998–July 31, 1999. ICD9 codes were used to define diabetes and antihypertensive drug use to define hypertension. Patients with heart failure were excluded. Available hospitalized systolic blood pressures on treatment (HSBP), glycated hemoglobin (HbA1c) and LDL cholesterol were related to values recommended by the American Diabetes Association and JNC VI guidelines (SBP ≤130 mmHg, HbA1c ≤7% and LDL ≤100 mg/dL).

Results: Population means ± SD were as follows: Age:66±12 years, HSBP=139±24 mmHg, HbA1c=7.9±1.6%, LDL=102±45 mg/dL. The univariate control rates for HSBP, LDL and HbA1c were 42%, 46% and 32% respectively. The predicted and observed control rates for patients with 2 or 3 risk factors controlled to target were:

<table>
<thead>
<tr>
<th>Risk factor controlled</th>
<th>HSBP and LDL</th>
<th>Hba1c and LDL</th>
<th>HSBP and Hba1c</th>
<th>HSBP and LDL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted</td>
<td>20%</td>
<td>15%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>Observed</td>
<td>20%</td>
<td>15%</td>
<td>14%</td>
<td>8%</td>
</tr>
</tbody>
</table>

In conclusion, our data demonstrate that adequate control of multiple risk factors occurs in less than 20% of patients with 2 risk factors and less than 8% of patients with 3 risk factors. Physicians do not recognize or treat the multiple risk syndrome as aggressively as the condition warrants.

Key Words: Risk factors; guidelines; drug therapy

F022
THE RELATIONSHIP OF LEPTIN VS BMI IS LOST IN ADOLESCENTS GIRLS WHO DEVELOPED PREECLAMPSIA

Normal pregnancy is associated to increased levels of leptin which appears to be exacerbated in preeclampsia. We conducted this study to verify the profile of leptin in adolescents during normal gestation (NG) and pre-eclampsia (PE). We studied 19 adolescents (12–18 yrs of age), 5 who developed PE, and 15 with NG, during the hole gestation. Serum leptin levels were evaluated by radioimmunooassay, and blood pressure (BP) using DINAMAP 1846. Patients who presented BP >140 /90 mmHg and proteinuria >300 mg/24h, without previous hypertension were considered with PE. To adjust for Body Mass Index (BMI), we used the ratio of leptin to BMI, to compare the evolution in both groups, Leptin levels and BMI increased during NG and PE reaching the highest values after 30 weeks of gestation. During NG, leptin correlated significantly with BMI at 21–30 weeks (r=0.71; p<0.0004) and after 30 weeks of gestation (r=0.94; p<0.0001). These correlation were lost both at 20–30 weeks (r=0.8; p=0.1) and >30 weeks of gestation (r=0.7, p=0.2) in PE. Although leptin levels were not different between groups, the leptin to BMI ratio was significantly lower in NG when compared to PE: 21–30 weeks: 0.44±0.02 and 0.56±0.06 ng/dl (p=0.04), respectively; after 30 weeks: 0.41±0.04 and 0.70±0.15 (p=0.03), respectively. In adolescents, leptin to BMI ratio appears to indicate a higher risk of PE.

Key Words: Pregnancy; leptin; pre-eclampsia; BMI

F023
GENETIC POLYMORPHISM OF ANGIOTENSIN CONVERTING ENZYME (ACE) AND ITS RELATIONSHIP WITH HAPTOGLOBIN PHENOTYPES AND BIOCHEMICAL MARKERS OF CARDIOVASCULAR PATHOLOGY, IN ADOLESCENTS
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Angiotensin I converting enzyme (ACE) and haptoglobin (Hp) gene polymorphisms have been associated with the risk of several cardiovascular conditions. We have studied in a healthy sample of randomly selected adolescents, the relationship between the ACE and Hp gene polymorphisms and somatic characteristics, blood pressure and some biochemical markers of cardiovascular risk, mainly those related to oxidative stress. A subsample of 40 healthy adolescents included in a larger cohort of children studied from 2 to 5 years of age, were re-evaluated at 12 to 15 years. ACE genotype and activity were evaluated by PCR and spectrophotometry, respectively; haptoglobin phenotype by PAGE; erythrocyte transmembrane oxido-reductase (TOR) activity and total and LDL- MDA by spectrophotometry and active renin by RIA.

No associations were found between blood pressure, lipid profile, anthropometric parameters, body composition, active renin and TOR, according to the ACE gene polymorphism. Males showed higher values of ACE activity (73.4 U/l) than females (48.9 U/l) (p<0.01). Allele Hp 1 was associated with a higher activity of ACE (Hp 1.1=74.9 U/l, Hp 2.2=56.1 U/l - p<0.05), and so was the ACE D allele...