P < 0.03 and r = -0.427, P < 0.03). Ratio E/A of IVS and PW were related to LV mass index (r = -0.509, P < 0.01; r = -0.531, P < 0.01).

We conclude that hypertensive LV hypertrophy caused significant changes in regional diastolic wall motion velocity: decreased E, increased A and inverted E/A ratio. Regional diastolic function of IVS and PW inversely related to the degree of wall thickness as well as to the value of LV mass index.

Key Words: Diastolic function; left ventricular hypertrophy; Doppler myocardial imaging

A015
EFFECTS OF ACE INHIBITION ON LEFT VENTRICULAR STRUCTURE AND FUNCTION IN HYPERTENSIVE PATIENTS WITH MYOCARDIAL INFARCTION
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The aim of the study was to evaluate the long-term effects of early introduced captopril treatment on wall motion asynchrony, left ventricular (LV) ejection fraction (EF), LV diastolic function (LVDF) and exercise capacity (EC) in hypertensive patients (pts) with acute myocardial infarction (AMI).

Fifty-six hypertensive pts with AMI (mean age 57.8 ± 8.3 years) were randomized to captopril group (n = 37) and control group (n = 19). Pts in the captopril group were treated with individually titrated dosages of captopril started within two days of the onset of AMI and continued for period of six months. Pts in the control group were not treated with any ACE inhibitor. In all pts echo examination at the enter into the study and symptom-limited bicycle ergometric test at the discharge from hospital were performed. Both examinations were repeated six months later. The wall motion asynchrony extent was assessed as wall motion score index (WMSI). We calculated EF while LVDF was evaluated through Doppler analysis of E/A ratio.

After six months a significant increased in EF and E/A ratio was observed only in the captopril group (EF from 35.6 ± 5.5 to 40.0 ± 5.8%, P < 0.005; E/A from 0.76 ± 0.19 to 0.87 ± 0.21, P < 0.02) and not in the control group (EF from 36.0 ± 5.3 to 38.3 ± 5.7%, NS; E/A from 0.80 ± 0.17 to 0.84 ± 0.19, NS). WMSI decreased significantly in the captopril group (from 1.52 ± 0.17 to 1.43 ± 0.20, P < 0.05), but not in control group (from 1.49 ± 0.19 to 1.46 ± 0.21; NS). EF increased significantly in captopril group (P < 0.005) as well as in control group (P < 0.02).

We conclude that six months of captopril treatment which was introduced early in hypertensive pts with AMI significantly improved EF, LVDF and recovered wall motion asynchrony.

Key Words: Captopril; ejection fraction; diastolic function; hypertension; acute myocardial infarction

A016
DIMENSIONS OF THE LEFT VENTRICLE, ATRIUM AND AORTIC ROOT IN PREGNANCY INDUCED HYPERTENSION

Aim: To evaluate the existence of changes in the structure of the left ventricle, atrium and aortic root in patients with pregnancy induced hypertension, a form of transient hypertension.

Material and Methods: Using M mode Echocardiography, we evaluated the dimensions of the left ventricle, left atrium and aortic root in patients with pregnancy induced hypertension (PIH). Study population consisted of 95 consecutive patients with PIH who were compared with 83 normal pregnant women (NPW). In both groups we evaluated: diastolic diameter (DD), systolic diameter (SD), septal thickness (ST), posterior wall thickness (PWT), left ventricular mass, left atrial dimension (LAD), and aortic root dimension (ARD).

Results:

<table>
<thead>
<tr>
<th></th>
<th>DD</th>
<th>SD</th>
<th>ST</th>
<th>PWT</th>
<th>LVM</th>
<th>LAD</th>
<th>ARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIH</td>
<td>48 ± 4</td>
<td>29 ± 4</td>
<td>10 ± 1.5</td>
<td>8.5 ± 1.3</td>
<td>187 ± 54</td>
<td>35 ± 3.6</td>
<td>27 ± 3</td>
</tr>
<tr>
<td>NPW</td>
<td>47 ± 4</td>
<td>29 ± 3</td>
<td>9 ± 1.4</td>
<td>9.3 ± 1.5</td>
<td>156 ± 35</td>
<td>35 ± 5.4</td>
<td>27 ± 3</td>
</tr>
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<td>p</td>
<td>ns</td>
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</table>

Conclusions: PIH increases the left ventricular mass due to an increase in the septal and posterior wall thickness. The dimensions of the left ventricle, left atrium and aortic root do not change.

Key Words: Pregnancy induced hypertension; left ventricular dimensions; atrial dimensions; aortic root dimensions

A017
LEFT VENTRICULAR FUNCTION IN PREGNANCY INDUCED HYPERTENSION

Background: The effects of chronic hypertension on left ventricular function are well known. However changes produced by transient hypertension, such as pregnancy induced hypertension (PIH) are not fully established.

Aim: To assess the potential of echo-Doppler to unmask left ventricular function impairment in patients with PIH.

Methods: Twenty eight women with PIH were studied prospectively with echo-Doppler done 2 to 4 days after delivery. We assessed left ventricular diastolic diameter (LVDD), fractional shortening (FS), E velocity (Ev), A velocity (Av), E/A ratio, isovolumetric relaxation time (IRT), isovolumetric contraction time (ICT), ejection time (ET), and the combined index of systo-diastolic performance (IRT + ICT) / ET (CI).

Twenty age matched normal pregnant women studied 2 to 4 days after delivery (NP), were used as controls.

Results: