Arterial stiffness is an independent risk marker. We investigated determinants of its temporal variation in treated diabetic (II) hypertensives.

**Patients and Methods:** We evaluated 97 patients during a 28±5 months follow-up. Eighty nine (89) of them (age 63±8; 52-54% male) were prospectively and consecutively studied. We analysed clinical parameters, laboratory tests, ambulatory blood pressure monitoring (ABPM), echocardiogram and arterial distensibility by aortic pulse wave velocity (PWV) measurement (Compilor Colson) at the entry and at the end of the study.

**Results:** Initially 82% of patients were treated with more than 2 drugs and 46 (50,5%) were controlled (daytime BP<135/85). During the follow-up time cardiovascular or cerebrovascular events occurred (30-32%), 5 of which were fatal. In the following table correlation coefficients between their BP values, their control and PWV are shown.

<table>
<thead>
<tr>
<th></th>
<th>Initial PWV</th>
<th>Final PWV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual BP</td>
<td>r = 0.31 (0.002)</td>
<td>r = 0.27 (0.01)</td>
</tr>
<tr>
<td>24h SBP</td>
<td>r = 0.48 (0.000)</td>
<td>r = 0.32 (0.006)</td>
</tr>
<tr>
<td>24h DBP</td>
<td>r = 0.45 (0.000)</td>
<td>r = 0.31 (0.007)</td>
</tr>
<tr>
<td>Daytime SBP</td>
<td>r = 0.50 (0.000)</td>
<td>r = 0.27 (0.02)</td>
</tr>
<tr>
<td>Nighttime SBP</td>
<td>r = 0.45 (0.000)</td>
<td>r = 0.38 (0.01)</td>
</tr>
</tbody>
</table>

PWV temporal variation in this period of follow-up was not globally related with prognosis. At the end of the study the group with morbidity had a greater number of patients in the higher tertiles (2 and 3) of PWV compared to the group without morbidity.

**Conclusions:** PWV correlated with BP levels and their control. Greater arterial stiffness at the end of the study (higher PWV tertiles) correlated with higher morbidty.

Key Words: Arterial Stiffness, Diabetes Mellitus, Hypertension

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**P-415**

**REGIONAL VARIATION IN HYPERTENSION-RELATED PARAMETERS ACROSS THE USA IN THE CONVINCE TRIAL**

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Physician practice patterns vary widely across geographical regions in many conditions, including hypertension. The Southeastern US is often called the “Stroke Belt” because of this. In the Controlled ONset Verapamil INvestigation of Cardiovascular Endpoints (CONVINCE) trial, a common protocol was used in the USA and 14 other countries. We report here various parameters related to hypertension control, adherence to medications and visit schedule for 8144 patients enrolled in four geographical areas in the USA. There were 1570 patients from the Northeast, 1536 from the Northcentral states, 3412 from the South, and 1626 from the West. There were no major differences across regions in age or gender of enrollees, but the South enrolled the most non-whites (37%). Enrollees from the Northcentral region had the highest proportion with blood pressure <140/90 mm Hg at baseline, and the lowest proportion with more than one baseline cardiovascular risk factor. During follow-up, the proportion of volunteers achieving goal blood pressure (<140/90 mm Hg, average of 12 and 24 month values) ranged from 62.3% (West) to 69.6% (Northeast). The prevalence (in %) of the following parameters were found to have major differences (P < 0.001) across the four regions:

- Race/ethnicity
- White v. Other
- Systolic BP 140 mm Hg
- Age 70 years
- Prior CV Event
- Yes v. None
- Attended 2-year visit
- 81.1 88.0 81.5 74.7
- Stopped study meds
- 44.9 38.5 43.5 49.1

These data indicate that, in CONVINCE, there were some regional differences within the USA in several important hypertension-related parameters. The Western states had the lowest prevalence of baseline BP treatment, visit attendance, and persistence with blinded study medication. These differences may be attributable to how sites were selected to participate in CONVINCE, and may not an accurate reflection of general trends in hypertension treatment and control across the USA.

Key Words: Geographical Differences, Physician Practice Patterns, “Stroke Belt”