The prevalence of hypertension and diabetes was respectively 52% (n=311) and 27.4% (n=164). Pulse pressure was more than 65 mmHg for 132 subjects (22%), only 43 subjects without a history of hypertension.

The mean of PP is significantly high in hypertensive elderly (52.3 vs 58.4 mmHg), with cardiovascular events (55 vs 58 mmHg), diabetic subjects (54 vs 58 mmHg), and comorbidity (55 vs 58 mmHg). Using pulse pressure (high PP ≥ 65 mmHg) as a dependent variable, the multiple regression analysis reveals the independent influence of diabetes and cardiovascular events on PP.

**Conclusion:** This study has confirmed that subjects with the widest PP have the greatest risk of cardiovascular events. Elderly diabetic patients have a higher PP than non-diabetic elderly. These hemodynamic changes may contribute to the increase risk of cardiovascular disease associated with diabetes.

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**Gender peculiarities of pulse pressure and heartbeat rate in patients with arterial hypertension depending on age and presence of diabetes mellitus**

Larysa Zhuravlyova, Irina Ilchenko
Karkiv National Medicine University, Internal medicine #3, Karkiv, Ukraine

**Background:** Resting heartbeat rate (HR) is an independent predictor of mortality especially in patients with arterial hypertension (AH) and coronary artery disease. Pulse pressure (PP) is a marker of artery stiffness.

**Design of research:** the peculiarities of PP and HR dynamics were studied in 70 men and 68 women of the young age – 1st group (mean age: m – 38.4 ± 4.2 years; w – 39.2 ± 3.8 years) as well as in middle age – the 2nd group (mean age: m – 56.8 ± 6.4 years; w – 54.2 ± 5.2 years) with AH of 2nd stage along with the presence or absence of subcompensated (HbA1c – 7.3 ± 0.8%) diabetes mellitus type 2 (DM-2).

**Results:** Increase of PP and HR in patients with AH depends on gender, age and presence of DM-2. The data of our research show the highest values of PP and HR in women of middle age with DM-2.

**Conclusions:** Women with AH and DM-2 have more significant increase of PP and HR than men along with ageing. Such changes raise cardiovascular risk and demand control as soon as possible.

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**Usefulness of non-invasive ambulatory blood pressure monitoring (ABPM) in chronic dialysis patients (CDP)**

Emna Allouche, Hédi Baccar, Wejdène Ouechtati, Imen Fradi El Felah, Habib Ben Ahmed
Hôpital Charles Nicolle, cardiology, Tunis, Tunisie

**Introduction:** Arterial hypertension (AH) is a potent factor of cardiovascular death in chronic dialysis patients (CDP). Development of ambulatory blood pressure monitoring (ABPM) allowed a better analysis of inter-dialysis blood pressure (BP) profile.

We studied the relationship between ABPM findings and clinical and biological data in CDP, to determine its clinical application.

**Methods:** Retrospective study of 24 hours ABPM (after dialysis) in 28 CDP divided into 3 groups according to pre-dialyses BP profile:

- G1: CDP with controlled AH (n=8)
- G2: CDP with un-controlled AH (n=12)
- G3: CDP without AH (n=8)

**Results:** ABPM findings are correlated to clinical BP measurements before and after dialysis.

- Mean systolic ABP is lower than pre-dialysis clinical BP. 82% of CDP loose the BP circadian cycle.
- 64.3% of CDP and 83.3% of patients with AH had echocardiographic left ventricular (LV) hypertrophy.
- LV mass is correlated to BP load, the anemia’s severity, the loss of the BP circadian cycle and the use of acetate in dialysis bath.

**Conclusion**

ABPM in CDP has various clinical applications:

- Diagnosis of AH
- Evaluation of AH treatment
- Evaluation of cardiovascular death risk

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**Table – Abstract 223**

<table>
<thead>
<tr>
<th>Absent DM (n=71)</th>
<th>Present DM-2 (n=69)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>men (n=34)</strong></td>
<td><strong>women (n=37)</strong></td>
</tr>
<tr>
<td>1st group (n=16)</td>
<td>2nd group (n=18)</td>
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<tr>
<td>2nd group (n=18)</td>
<td>1st group (n=18)</td>
</tr>
<tr>
<td>2nd group (n=19)</td>
<td>2nd group (n=18)</td>
</tr>
<tr>
<td><strong>Pulse pressure (mmHg)</strong></td>
<td>42.3±2.7</td>
</tr>
<tr>
<td><strong>Heartbeat rate (beats/min)</strong></td>
<td>72.4±1.4</td>
</tr>
</tbody>
</table>