**THE RELATIONSHIP BETWEEN BLOOD PRESSURE VARIABILITY AND 10-YEAR CARDIOVASCULAR RISK**

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*Objectives*: The aim of this study is to retrospectively analyze the impact of 24-hour blood pressure variability (BPV) on the development of future cardiovascular disease determined by The Pooled Cohort Risk Assessment Equations 10-year risk calculator.

*Background*: Blood pressure (BP) values alone may not fully explain the destructive effects of high BP. Although the adverse effects of hypertension are largely dependent on mean BP values, recent attention has focused on the possible role of BPV in the pathogenesis of hypertensive complications.

*Methods*: We retrospectively analyzed 250 adult patients, who had 24 h ambulatory blood pressure monitoring (ABPM). We defined mean blood pressure values, standard deviation (SD), and coefficient of variation (CV) of blood pressure on the basis of the recorded 24 h ABPM values as an indicator for variability in BP. The CV and SD of SBP over 24h were the primary parameters investigated in our study. The Pooled Cohort Risk Assessment Equations 10-year risk score was calculated as indicated by the ACC/AHA 2013 guideline on the assessment of cardiovascular risk and patients were grouped according to their risk profile; group 1 was consisted of patients with lower risk score (&#8804;7.5) , and group 2 was consisted of those with higher risk score (&#8805;7.5).

*Results:* Our analysis showed that mean systolic BP (SBP) value was higher in patients with higher risk score compared to those with lower risk scores. Parameters showing the BPV such as SD and CV of mean blood pressures were also significantly higher in in patients with elevated 10-year risk score compared to others. Our data revealed that that each 1% increase in CV of SBP could lead to a 1.258 fold increase in 10-year risk.

*Conclusions*: Our study showed that independently from baseline SBP, increased CV of SBP was associated with increased cardiovascular risk, as assessed by The Pooled Cohort Risk Assessment Equations 10-year risk calculator.