Abstract: P186

**Relationship between circadian rhythm of arterial pressure, vascular wall stiffness parameters and markers of vascular inflammatory reaction in postmenopausal patients**

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Introduction: Arterial hypertension (AH) is a leading cardiovascular disease and a predictor of early incapacitation and mortality in the population. The interrelation of target organs with hormonal and biochemical inflammatory status remains relevant in postmenopausal patients.

Objective. To study the correlation of 24-hour blood pressure profile, vascular wall stiffness parameters, sex hormone profile, parameters of lipid profile and vascular inflammatory markers in postmenopausal women with ??.

Materials and methods. 80 patients, 46 postmenopausal women ones (mean age 57.55± 6.12 years) with 1-2 degree ??, moderate and high cardiovascular risk were examined. All patients underwent 24-hour BP monitoring; sphygmography Vasera VS-1000 Series (Japan), with the evaluation indicators: PWV-R, PWV-L - pulse wave velocity for elastic arteries on the right or the left; CAVI- cardio-ankle vascular index; ABI-R, ABI-L - ankle-brachial; parameters of the lipid profile, lipid peroxidation, inflammatory markers and sex hormone profile were measured.

Results. AH in postmenopausal women are associated with an increase in BP variability, increased pressure loading, disturbance of 24-hour BP rhythm (“non-dippers”), great vessels rigidity, low level of estrogen, nitrites and increased level of APO-B, C -reactive protein, homocysteine, IL-6, myeloperoxidases, uric acid.

The following positive correlations were found: between PWV-R and systolic blood pressure (SBP) and diastolic BP (DBP) variability at night and SBP variability in the daytime, IL-6 (p = 0.047), homocysteine (p = 0.015), APO-B (p = 0.05), age (p = 0.01); negative with progesterone (p = 0.004); in addition, positive correlations were found between ABI-R and uric acid (p = 0.05), SBP variability in the daytime (p = 0.02).

Conclusions: AH is associated with target organ damage, in particular, with vascular wall stiffness, sex hormone profile and vascular inflammatory reaction in postmenopausal patients, that can determine the nature of cardiovascular complications.