

### Comparison of Heart Rate Variability Values with Diastolic Dysfunction Parameters in Resistant Hypertensives

	E/A (P VALUE)	E/E' (P VALUE)	LA VOLUME INDEX (P VALUE)	LV MASS INDEX (P VALUE)
SDNN	-0,31 (0,1)	0,19 (0,31)	0,38 (0,042)	- 0,41(0,06)
SDANN	-0,67 (0,73)	-0,32 (0,09)	0,22 (0,25)	-0,26 (0,24)
RMSSD	-0,01 (0,94)	-0,15 (0,41)	0,15(0,42)	-0,321 (0,15)
HRV TRIANGULAR INDEX	-0,24(0,20)	0,34 (0,06)	0,31 (0,1)	-0,43(0,049)
MEAN HEART RATE	-0,60(0,76)	-0,003(0,98)	-0,09(0,62)	0,31(0,16)
Pearson correlation analysis was performed				

### PP-018

#### Relation of 24-Hour Urinary Aldosterone Levels with Nondipper Blood Pressure Pattern in Normotensive Individuals

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**Purpose:** A lot of studies conducted before have shown that there is a correlation between nondipper pattern with the left ventricular hypertrophy and diastolic dysfunction based on circadian rhythm of the blood pressure (BP). The main aim of the study is to investigate the relationship between the amount of the 24-hour urinary aldosterone and the nondipper pattern of the BP.

**Method:** The study included both an office and ambulatory BP which were monitored in normotensive people (office BP <140/90 mmHg, and the average 24-hour BP <130/80 mmHg) in individuals who did not use any drugs and who were less than 60 years of age. A total of 85 people (54 women, with an average age of 46.2±9.1 years) were included. By continuing with the normal nutrition. All patients were subject to 24 hours measurement of the blood pressure. At the same time, urine was collected and the level of the aldosterone was being measured under the adequate conditions, and, at the end of the study, the level of aldosterone was measured from all the samples (with the diametra aldosteron kit).

**Results:** The level of the 24- hour aldosteron level turned out to be significantly high in the nondipper group according to the statistics (dipper group 8.6 (5.0, 11.6) mgr/day, nondipper group 9.8 (7.4, 15.5) mgr/day, p=0.026) (Table-1).

**Conclusion:** The results of our study showed that the amount of the circulating aldosterone (Which is determined by measurement of 24-hour urinary aldosterone) is very high in nondippers. If we take into consideration that the level of aldosterone is related to the cardiac fibrosis, the high level of aldosterone in patients of nondipper group can be the cause of the heart issues.

Table 1. demographic data

	Dipper (n=42)	Nondipper (n=43)	p
Age	45.6±10.0	46.7±8.1	>0.1
Female, n (%)	24 (57.1)	30 (69.8)	>0.1
BMI (kg/m <sup>2</sup> )	28.4±5.0	30.1±3.7	0.08
LVEF (%)	66.9±4.2	65.3±4.4	0.09
LA diameter (mm)	31.9±2.9	33.8±3.0	33.8±3.0
Office SBP (mmHg)	125.6±9.3	126.2±7.1	>0.1
Office DBP (mmHg)	76.1±7.3	73.7±10.8	>0.1
24h SBP (mmHg)	119.7±7.2	120.4±7.3	>0.1
24h DBP (mmHg)	71.8±4.0	73.0±4.7	>0.1
Daytime SBP (mmHg)	127.3±8.5	122.2±8.9	<0.05
Daytime DBP (mmHg)	76.8±4.6	74.1±4.6	<0.05
Night time SBP (mmHg)	107.5±7.8	117.5±7.7	<0.001
Night time DBP (mmHg)	63.3±4.2	69.4±5.0	<0.001
Urinary aldosterone (mgr/day)	8.6 (5.0, 11.6)	9.8 (7.4, 15.5)	0.026

### PP-019

#### Evaluation of Coronary Sinus Strain in Patients with Dipper and Non-Dipper Hypertension

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**Objective:** Hypertension had been reported to affect both the left and the right ventricular functions but its effect on coronary sinus had never been investigated. The aim of this study was to investigate the effect of systemic hypertension on cardiac venous system by evaluating the coronary sinus strain (CSS).

**Methods:** One-hundred-and-twelve hypertensive patients without diabetes and forty-four healthy subjects (the control group) were evaluated consecutively at the outpatient clinic and enrolled in the study. Coronary sinus strain was evaluated with echocardiography in all subjects prior to blood pressure evaluation. 24-hour ambulatory blood pressure monitoring enabled the study population to be divided into 2 groups: 52 patients with dipper pattern hypertension and 60 with non-dipper hypertension.

**Results:** There was no significant difference regarding demographic characteristics and body mass index between the groups. Non-dipper pattern patients had a lower coronary sinus strain values compared to dippers but the difference did not reach statistical significance (140.8±54.2 and 164±68.4 p=0.087). Non-dipper pattern patients had significantly lower values of CSS compared to control group subjects (140.8±54.2 and 193.9±48.1 p<0.001). Similarly dipper pattern patients had significantly lower values of CSS values compared to controls (164±68.4 and 193.9±48.1 p=0.036). Comparing the three groups, the CSS values showed a progressive decrease from normal people to dipper and non-dipper patients hypertension. Correlation analysis revealed a positive correlation between the aortic strain and the CSS (r:0.247, p=0.002). There was a weak correlation between left ventricular mass and CSS but no correlation was observed between BMI adjusted LV mass and CSS (r:-164 p:0.041 and r=-109 p:0.174).

**Conclusion:** Our study suggest that systemic hypertension may affect cardiac venous system as well as arterial system that had been reported in many papers. The effect on venous system may be more pronounced in non-dipper pattern hypertension.

### PP-020

#### Effect of Diurnal Blood Pressure on Endothelial Functions in Essential Hypertensive Patients

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Hypertension is principal problem increasing nowadays and threatens community health by its complications. In healthy adults, blood pressure levels decrease nocturnally. 'Dipper' are the ones whose systolic blood pressure decrease >10% at night and 'nondipper' are the whose ones systolic blood pressure decrease <10% at night. In the nondippers group cardiovascular morbidity and mortality are increased.

Our aim in this study is to search for the effect of diurnal blood pressure on endothelial functions in essential hypertensive patients.

Our study comprised 30 dippers, 31 nondippers hypertensive patients and 25 healthy volunteers. Ambulatory blood pressure monitoring (ABPM) was hooked-up to hypertensive patients and they were grouped as dippers and nondippers. All individuals were measured by using flow mediated dilatation (FMD) from brachial artery by used to echocardiography.

The groups are similar in term of age, sex, body mass index, using cigarette and biochemical parameters. In nondipper group, the use of beta blocker is higher than dipper group (p=0.023) but, there is no difference between dipper and nondipper hypertensive groups in term of using antihypertensive drugs. FMD in the control group were higher than dipper hypertensive group and in dipper hypertensive group FMD is higher than nondipper hypertensive group (respectively p= 0.003, p=0.023).

In our study we found a relationship among nondipper hypertension and increased endothelial dysfunction. Also, dipper hypertension related to increased endothelial dysfunction. Nondipper hypertension known has more increased cardiovascular event and mortality risk. In this context, patients with hypertension should be followed with ABPM. Therefore nondipper hypertensive patients which have a higher risk can be identified. Thus, efforts for controlling blood pressure in nondipper hypertensive patients provide better risk modification.

### PP-021

#### Androgenic Alopecia is Associated with Increased Arterial Stiffness in Asymptomatic Young Adults

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