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RELATIONSHIP BETWEEN LEFT ATRIAL FUNCTIONS AND AMBULATORY BLOOD PRESSURE VARIABILITY IN PATIENTS WITH HEART FAILURE AND PRESERVED EJECTION FRACTION

SUPPLEMENTARY

Table 1. Blood pressure variability indices of the low and high BPV groups.

ABPM parameter (mm Hg)	Total (n=169)	Low BPV (24-hr SBP-SD), n=71	High BPV (24-hr SBP-SD), n=98	p value
24-hr SBP	127.2±18.4	125.0±18.9	128.8±18.0	0.245
24-hr DBP	72.1±10.7	70.1±10.6	73.6±10.6	0.061
Nighttime SBP-SD	9.7 (7.2–12.9)	7.7 (6.1–9.8)	12.4 (8.7–15.1)	<0.001
Daytime SBP-SD	8.6 (6.1–13.9)	6.4 (5.5–8.5)	13.3 (8.0–16.0)	<0.001
24-hr SBP-SD	11.5 (8.6–15.1)	8.4 (7.8–9.5)	14.0 (12.1–16.4)	<0.001
24-hr DBP-SD	7.8 (6.5–10.0)	7.0 (6.1–8.2)	9.3 (7.2–12.3)	<0.001
Nighttime SBP-ARV	10.8 (7.2–14.4)	8.4 (4.8–10.9)	12.8 (9.2–17.2)	<0.001
Daytime SBP-ARV	8.8 (6.2–13.0)	6.5 (4.9–9.9)	10.4 (7.7–15.3)	<0.001
24-hr SBP-ARV	10.5 (8.5–13.5)	8.6 (7.0–10.2)	12.5 (10–15.5)	<0.001
24-hr DBP-ARV	8.1 (6.50–9.90)	7.0 (5.6–8.8)	8.8 (7.6–11.7)	0.014
Weighted SD-SBP	8.4 (7.0–12.1)	7.30 (6.45–8.1)	11.5 (8.32–14.5)	<0.001
Weighted SD-DBP	6.9 (5.5–8.6)	6.2 (5.2–7.0)	7.5 (5.9–11.0)	<0.001
Weighted SD-HR	6.5 (5.1–8.4)	6.0 (4.95–7.4)	6.5 (5.5–8.7)	0.109

Data are mean±SD or median (IQR). ARV, average real variability, DBP, diastolic blood pressure, HR, heart rate, SBP, systolic blood pressure.

Table 2. Correlations between daytime and nighttime blood pressure variability and echocardiographic features

Variables	24-hr SBP-SD		Nighttime SBP-SD	
	SR	AF	SR	AF
Age, yrs	0.049	0.070	0.002	0.120
Creatinine, mg/dl	0.012	–0.017	–0.049	–0.037
Heart rate, bpm	0.069	0.289 (0.034)	–0.011	0.225
NT-proBNP, pg/ml	–0.75	0.083	0.008	0.029
LVMI, g/m ²	0.261 (0.020)	0.082	0.284 (0.011)	0.128
LA diameter, mm	–0.107	0.059	–0.085	–0.110
LAVI, (ml/m ²)	0.085	0.023	0.065	–0.070
LASr, (%)	–0.171	–0.405 (0.005)	–0.235 (0.045)	–0.244
Total LA emptying fraction, (%)	–0.128	0.134	–0.044	0.168
Total LA emptying volume, ml	0.044	0.211	0.169	0.181
LA expansion index (%)	–0.098	0.133	–0.036	0.203
Office SBP, mm Hg	0.308 (0.005)	–0.189	0.192	–0.237
Office DBP, mm Hg	0.318 (0.004)	–0.002	0.266 (0.017)	–0.092
24-hr SBP-SD, mm Hg	–	–	0.600 (<0.001)	0.733 (<0.001)
24-hr DBP-SD, mm Hg	0.583 (<0.001)	0.490 (<0.001)	0.583 (<0.001)	0.335 (<0.001)
Nighttime SBP-SD, mm Hg	0.600 (<0.001)	0.733 (<0.001)	–	–
Nighttime DBP-SD, mm Hg	0.332 (<0.001)	0.501 (<0.001)	0.526 (<0.001)	0.415 (<0.001)
24-hr SBP-ARV, mm Hg	0.676 (<0.001)	0.795 (<0.001)	0.645 (<0.001)	0.791 (<0.001)
24-hour DBP-ARV, mm Hg	0.542 (<0.001)	0.395 (0.003)	0.447 (<0.001)	0.343 (0.011)
Nighttime SBP-ARV, mm Hg	0.547 (<0.001)	0.545 (<0.001)	0.889 (<0.001)	0.827 (<0.001)
Nighttime DBP-ARV, mm Hg	0.392 (<0.001)	0.487 (<0.001)	0.455 (<0.001)	0.476 (<0.001)
Weighted SD-SBP, mm Hg	0.226 (0.044)	0.678 (<0.001)	0.384 (<0.001)	0.638 (<0.001)
Weighted SD-DBP, mm Hg	0.689 (<0.001)	0.415 (<0.001)	0.469 (<0.001)	0.316 (0.020)
TPLS	0.006	0.065	–0.023	0.065
RV strain, %	–0.060	–0.323	–0.138	–0.242
LAVmax/LASr	0.253	0.355 (0.031)	0.308 (0.017)	0.251
LASt	0.352 (0.015)	0.326 (0.005)	0.269 (0.067)	0.346 (0.003)

Data are r values (p value, if <0.05). ARV, average real variability; DBP, diastolic blood pressure; HR, heart rate; LA, left atrium; LASr, left atrial reservoir strain; LASt, left atrial stiffness index; LAVI, left atrial volume index; LVMI, left ventricular mass index; NT-proBNP, N-terminal prohormone of brain natriuretic peptide; RV, right ventricle; SBP, systolic blood pressure; SD, standard deviation; TPLS, time to peak longitudinal strain.