

Physical exercise is essential for cardiac autonomic regulation in hypertensive patients treated with losartan or enalapril

Sports Medicine

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Table S1. Confidence interval of anthropometric, hemodynamic, and metabolic values of all groups.

	Control		Losartan		Enalapril	
	CI 95%	<i>P</i>	CI 95%	<i>P</i>	CI 95%	<i>P</i>
Anthropometric Parameters						
Age, years	-		-		-	
Height, m	-		-		-	
Weight, kg	-0.84 – 2.94	0.254	0.55 – 2.30	0.003	-7.49 – 9.20	0.831
BMI, kg/m ²	-0.23 – 0.94	0.221	0.16 – 0.78	0.004	-2.56 – 3.05	0.855
Hemodynamic Parameters						
HR _{resting} , bpm	0.74 – 4.51	0.010	2.46 – 8.87	0.001	1.80 – 8.03	0.004
SBP, mmHg	19.09 – 31.91	<0.001	7.08 – 16.04	<0.001	2.52 – 12.53	0.006
DBP, mmHg	13.82 – 29.68	<0.001	5.26 – 11.78	<0.001	2.01 – 9.55	0.005
MBP, mmHg	19.08 – 30.76	<0.001	6.41 – 13.06	<0.001	2.52 – 10.44	0.003
Metabolic Parameters						
VO _{2peak} , mL/kg/min	-10.27 – -4.48	<0.001	-8.52 – -5.06	<0.001	-8.46 – -4.91	<0.001
Total Cholesterol, mg/dl	11.71 – 34.14	<0.001	4.34 – 20.88	0.005	4.02 – 12.21	<0.001
HDL, mg/dL	-6.38 – 5.36	0.861	-8.92 – 3.35	0.365	-6.59 – -2.36	<0.001
LDL, mg/dL	4.67 – 19.51	0.003	3.34 – 19.67	0.008	-11.11 – 4.52	0.385
Triglycerides, mg/dL	15.72 – 57.70	0.002	-2.71 – 41.58	0.082	-15.89 – 31.81	0.489
Glucose, mg/dL	-3.95 – 5.08	0.794	6.87 – 29.78	0.003	1.37 – 7.67	0.008

m, meter; kg, kilogram; BMI, body mass index; VO_{2peak}, volume of oxygen consumed at the peak of exercise; L/min/kg, liters per min per kilo; mg/dl, milligram per deciliter; HDL, high density lipoprotein; LDL, light density lipoprotein.

Table S2. Confidence interval of cardiovascular autonomic modulation values of all groups in supine position.

	Control		Losartan		Enalapril	
	CI 95%	<i>P</i>	CI 95%	<i>P</i>	CI 95%	<i>P</i>
HR Variability						
Variance, ms ²	-460.47 – 13.40	0.063	-676.97 – -326.50	<0.001	-1172.88 – -46.65	0.036
LF, ms ²	-186.65 – 0.57	0.051	-144.66 – 44.25	0.281	-378.89 – -11.52	0.039
LF, nu	-1.79 – 9.15	0.172	1.99 – 9.57	0.005	-3.42 – 12.08	0.253
HF, ms ²	-150.35 – -18.69	0.015	-143.69 – -43.64	<0.001	-388.48 – -29.27	0.025
HF, nu	-9.15 – 1.79	0.172	-9.57 – -1.99	0.005	-12.08 – 3.42	0.253
Ratio LF/HF	-0.69 – 0.39	0.574	-0.042 – 1.44	0.063	-0.16 – 1.53	0.103
SBP Variability						
Variance, mmHg ²	-6.61 – 6.65	0.869	-3.59 – 6.17	0.597	-10.09 – 3.83	0.367
LF, mmHg ²	0.29 – 3.92	0.025	-1.56 – 2.70	0.593	-3.51 – 0.94	0.247
Spontaneous BRS						
BEI	-0.13 – -0.047	<0.001	-0.089 – 0.033	0.346	-0.078 – 0.058	0.761
Ramps n°	-20.37 – 0.56	0.062	-0.63 – 19.88	0.064	-4.69 – 17.67	0.237
Gain, ms/mmHg	-2.99 – -0.52	0.009	-3.03 – -0.91	<0.001	-3.98 – -0.55	0.013
Gain down, ms/mmHg	-3.59 – 0.59	0.010	-3.003 – -0.91	<0.001	-3.66 – -0.073	0.042
Gain up, ms/mmHg	-2.72 – -0.56	0.005	-3.06 – -0.84	0.002	-4.19 – 0.98	0.004

HR, heart rate; LF, low frequency; HF, high frequency, ms, milliseconds; nu, normalized units; SBP, systolic blood pressure; mmHg, millimetres of mercury; BRS, baroreflex sensitivity; BEI, baroreflex effectiveness index.

Table S3. Confidence interval of cardiovascular autonomic modulation values of all groups after tilt test.

	Control		Losartan		Enalapril	
	CI 95%	<i>P</i>	CI 95%	<i>P</i>	CI 95%	<i>P</i>
HR Variability						
Variance, ms ²	-282.21 – -34.17	0.016	-403.45 – 57.15	0.132	-843.52 – 190.30	0.004
LF, ms ²	5.38 – 94.19	0.030	-112.63 – 6.26	0.072	-252.62 – -35.23	0.013
LF, nu	-0.32 – 9.05	0.066	-6.32 – 9.53	0.677	5.98 – 21.16	0.002
HF, ms ²	-72.74 – 5.92	0.090	-182.58 – 34.09	0.168	-221.99 – -74.07	<0.001
HF, nu	-9.05 – 0.32	0.066	-9.53 – 6.32	0.677	-21.16 – -5.98	0.002
Ratio LF/HF	-0.31 – 1.89	0.146	-0.57 – 2.88	0.179	-0.043 – 8.17	0.052
SBP Variability						
Variance, mmHg ²	-0.27 – 24.36	0.055	1.25 – 11.51	0.017	-6.06 – 7.98	0.776
LF, mmHg ²	-0.37 – 10.05	0.066	-0.29 – 5.97	0.073	-2.07 – 5.75	0.334
Spontaneous BRS						
BEI	-0.13 – 0.024	0.164	-0.083 – 0.042	0.502	-0.086 – 0.018	0.005
Ramps n°	-27.04 – 4.58	0.151	-10.64 – 16.29	0.666	-14.81 – -1.77	0.016
Gain, ms/mmHg	-2.19 – 0.15	0.083	-1.24 – 1.01	0.834	-1.99 – -0.91	<0.001
Gain down, ms/mmHg	-2.45 – -0.049	0.042	-1.48 – 0.085	0.078	-1.85 – -0.53	0.001
Gain up, ms/mmHg	-2.03 – 0.66	0.294	-1.15 – 1.90	0.612	-2.33 – -1.17	<0.001

HR, heart rate; LF, low frequency; HF, high frequency, ms, milliseconds; nu, normalized units; SBP, systolic blood pressure; mmHg, millimetres of mercury; BRS, baroreflex sensitivity; BEI, baroreflex effectiveness index.