

Supplementary Materials

Functional classification of extrasystoles based on hemodynamic features and risk of arterial vascular complications

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Table 1. Main kinetic parameters across groups (digital apexcardiography and sphygmography data of the common carotid artery and posterior tibial artery)

Parameter	Group A n=192	Group B n=442	Control n=106	Statistics
Apexcardiography: speed in ES, (10^{-5} Pa/sec), Median (Q1; Q3)	12.6 (12.5; 12.7)	16.3 (16.1; 16.4)	18.3 (18.2; 18.4)	H=566.452 p<0.001
Apexcardiography: speed in 1PES, (10^{-5} Pa/sec), Median (Q1; Q3)	25.4 (25.3; 25.5)	20.1 (20.0; 20.2)	18.3 (18.2; 18.4)	H=566.451 p<0.001
Apexcardiography: acceleration in ES, (10^{-5} Pa/sec ²), Median (Q1; Q3)	159.1 (156.6;160.7)	206.4 (204.2; 208.3)	231.5 (229.5; 233.9)	H=566.447 p<0.001
Apexcardiography: acceleration in 1PES, (10^{-5} Pa/sec ²), Median (Q1; Q3)	322.7 (320.4; 325.1)	254.8 (252.5; 256.6)	231.5 (229.5; 233.9)	H=566.446 p<0.001
Apexcardiography: power in ES, (10^{-10} Pa/sec ³), Median (Q1; Q3)	846.7 (827.6; 864.9)	1076.4 (1059.7; 1096.2)	1229.5 (1215.5;1241.0)	H=566.446 p<0.001
Apexcardiography: power in 1PES, (10^{-10} Pa/sec ³), Median (Q1; Q3)	1743.9 (1727.3; 1766.2)	1347.0 (1333.2; 1366.1)	1229.5 (1215.5;1241.0)	H=566.446 p<0.001

Parameter	Group A n=192	Group B n=442	Control n=106	Statistics
Apexcardiography: work in ES, (10^{-10} Pa/sec ²), Median (Q1; Q3)	57.6 (57.1; 58.3)	72.6 (71.8; 73.2)	81.1 (80.7; 81.9)	H=566.447 p<0.001
Apexcardiography: work in 1PES, (10^{-10} Pa/sec ²), Median (Q1; Q3)	113.2 (112.4; 113.9)	89.5 (88.9; 90.2)	81.1 (80.7; 81.9)	H=566.447 p<0.001
A. Carotis communis: speed in ES, (10^{-5} Pa/sec), Median (Q1; Q3)	11.7 (11.6; 11.9)	12.3 (12.1; 12.4)	17.6 (17.4; 17.7)	H=566.450 p<0.001
A. Carotis communis: speed in 1PES, (10^{-5} Pa/sec), Median (Q1; Q3)	23.5 (23.4; 23.6)	20.7 (20.6; 20.8)	17.6 (17.4; 17.7)	H=566.450 p<0.001
A. Carotis communis: acceleration in ES, (10^{-5} Pa/sec ²), Median (Q1; Q3)	147.0 (145.5; 148.5)	161.8 (159.8; 163.7)	212.4 (211.3; 214.6)	H=566.446 p<0.001
A. Carotis communis: acceleration in ES, (10^{-5} Pa/sec ²), Median (Q1; Q3)	289.2 (287.8; 290.5)	254.7 (253.4; 256.3)	212.4 (211.3; 214.6)	H=566.447 p<0.001
A. Carotis communis: power in ES, (10^{-10} Pa/sec ³), Median (Q1; Q3)	749.2 (734.4; 759.4)	737.6 (726.9; 748.9)	1053.9 (1040.9; 1067.1)	H=321.587 p<0.001

Parameter	Group A n=192	Group B n=442	Control n=106	Statistics
A. Carotis communis: power in 1PES, (10 ⁻¹⁰ Pa/sec ³), Median (Q1; Q3)	1476.1 (1464.6; 1485.6)	1264.4 (1255.1; 1276.2)	1053.9 (1040.9; 1067.1)	H=566.446 p<0.001
A. Carotis communis: work in ES, (10 ⁻¹⁰ Pa/sec ²), Median (Q1; Q3)	50.5 (49.9; 51.2)	51.7 (51.0; 52.4)	74.2 (73.5; 74.9)	H=414.473 p<0.001
A. Carotis communis: work in 1PES, (10 ⁻¹⁰ Pa/sec ²), Median (Q1; Q3)	102.0 (101.1; 102.7)	89.0 (88.3; 89.7)	74.2 (73.5; 74.9)	H=566.447 p<0.001
A. tibialis posterior: speed in ES, (10 ⁻⁵ Pa/sec), Median (Q1; Q3)	10.9 (10.8; 11.1)	11.0 (10.9; 11.2)	15.7 (15.6; 15.9)	H=287.538 p<0.001
A. tibialis posterior: speed in 1PES, (10 ⁻⁵ Pa/sec), Median (Q1; Q3)	21.3 (21.2; 21.4)	18.1 (18.0; 18.3)	15.7 (15.6; 15.9)	H=566.450 p<0.001
A. tibialis posterior: acceletarion in ES, (10 ⁻⁵ Pa/sec ²), Median (Q1; Q3)	125.7 (123.9; 127.3)	126.4 (125.1; 128.0)	181.0 (179.6; 182.8)	H=289.618 p<0.001
A. tibialis posterior: acceletarion in 1PES, (10 ⁻⁵ Pa/sec ²), Median (Q1; Q3)	251.4 (249.5; 252.7)	208.0 (206.3; 209.5)	181.0 (179.6; 182.8)	H=566.446 p<0.001

Parameter	Group A n=192	Group B n=442	Control n=106	Statistics
A. tibialis posterior: power in ES, (10^{-10} Pa/sec ³), Median (Q1; Q3)	525.7 (517.7; 536.6)	538.1 (524.1; 550.6)	771.1 (757.9; 786.7)	H=313.376 p<0.001
A. tibialis posterior: power in 1PES (10^{-10} Pa/sec ³), Median (Q1; Q3)	1075.5 (1063.6; 1091.0)	882.8 (869.1; 897.2)	771.1 (757.9; 786.7)	H=566.446 p<0.001
A. tibialis posterior: work in ES, (10^{-10} Pa/sec ²), Median (Q1; Q3)	41.5 (40.8; 42.0)	43.3 (42.4; 44.0)	61.9 (61.0; 62.6)	H=491.558 p<0.001
A. tibialis posterior: work in 1PES, (10^{-10} Pa/sec ²), Median (Q1; Q3)	85.8 (85.0; 86.6)	71.1 (70.5; 71.8)	61.9 (61.0; 62.6)	H=566.447 p<0.001

Data are presented as Median (Quartile 1, Quartile 3). H, *P* - Kruskal-Wallis test statistics. Pairwise comparisons were performed using the Steel-Dwass-Critchlow-Fligner method. Each parameter differed significantly between groups ($P<0.001$). Control group values correspond to regular cardiac cycles. Abbreviations. ES - extrasystole, 1PES - first postextrasystolic contraction, Pa - Pascal, sec - second.