

Supplementary Material

Table A: Diameters, area values and aortic growth rate as indexed area of AAo and SoV both in end-systole and end-diastole, corresponding to the subgroups of CoA, NoCoA, reCoA, valve type 0, type 1 with RL cusp fusion and RN cusp fusion.

Variables	SoV ES					SoV ED				
	Diameter time 1 (mm, mean \pm SD)	Diameter time 2 (mm, mean \pm SD)	Area time 1 (cm ² , mean \pm SD)	Area time 2 (cm ² , mean \pm SD)	Growth rate area (area, cm ² /m*yr, mean \pm SD)	Diameter time 1 (mm, mean \pm SD)	Diameter time 2 (mm, mean \pm SD)	Area time 1 (cm ² , mean \pm SD)	Area time 2 (cm ² , mean \pm SD)	Growth rate area (area, cm ² /m*yr, mean \pm SD)
CoA	32.1 \pm 5.1	32.8 \pm 5.4	826.4 \pm 257.6	863.4 \pm 285.3	0.05 \pm 0.09	31.2 \pm 5.3	31.9 \pm 5.5	785.7 \pm 261.2	821.8 \pm 282.7	0.05 \pm 0.09
NoCoA	35.6 \pm 4.5	36.5 \pm 4.6	1004.4 \pm 255.2	1061.5 \pm 266.8	0.2 \pm 0.3	34.7 \pm 4.6	35.6 \pm 4.7	959.9 \pm 252.7	1010.9 \pm 265.7	0.1 \pm 0.2
reCoA	31.6 \pm 5.2	32.2 \pm 5.5	806.0 \pm 272.9	838.6 \pm 300.9	0.05 \pm 0.09	30.8 \pm 5.4	31.4 \pm 5.6	765.7 \pm 274.5	796.3 \pm 294.1	0.04 \pm 0.06
Valve type 0	32.4 \pm 5.3	33.1 \pm 5.6	839.4 \pm 278.8	880.7 \pm 308.3	0.08 \pm 0.1	31.3 \pm 5.6	32.1 \pm 5.8	786.5 \pm 286.0	828.0 \pm 313.9	0.08 \pm 0.2
Valve type 1, RL fusion	33.9 \pm 5.2	34.7 \pm 5.4	919.3 \pm 396.6	919.3 \pm 277.2	0.1 \pm 0.2	33.1 \pm 5.3	33.8 \pm 5.5	878.1 \pm 276.1	920.9 \pm 294.3	0.08 \pm 0.2
Valve type 1, RN fusion	35.6 \pm 4.1	36.9 \pm 3.9	1005.6 \pm 233.7	1079.5 \pm 229.4	0.3 \pm 0.5	34.9 \pm 4.2	36.1 \pm 4.1	966.6 \pm 232.3	1031.1 \pm 236.2	0.2 \pm 0.3

Variables	AAo ES					AAo ED				
	Diameter time 1 (mm, mean \pm SD)	Diameter time 2 (mm, mean \pm SD)	Area time 1 (cm ² , mean \pm SD)	Area time 2 (cm ² , mean \pm SD)	Growth rate area (area, cm ² /m*yr, mean \pm SD)	Diameter time 1 (mm, mean \pm SD)	Diameter time 2 (mm, mean \pm SD)	Area time 1 (cm ² , mean \pm SD)	Area time 2 (cm ² , mean \pm SD)	Growth rate area (area, cm ² /m*yr, mean \pm SD)
CoA	30.1 \pm 6.8	31.3 \pm 7.1	746.5 \pm 328.3	805.9 \pm 356.9	0.08 \pm 0.1	28.7 \pm 7.0	29.8 \pm 7.2	681.1 \pm 321.5	737.2 \pm 344.6	0.08 \pm 0.1
NoCoA	37.6 \pm 5.5	38.8 \pm 5.2	1134.3 \pm 316.1	1200.1 \pm 313.6	0.19 \pm 0.5	36.4 \pm 5.6	37.5 \pm 5.3	1060.8 \pm 317.6	1124.1 \pm 311.1	0.2 \pm 0.4
ReCoA	29.1 \pm 6.18	30.3 \pm 6.7	694.7 \pm 289.7	752.5 \pm 329.8	0.08 \pm 0.1	27.7 \pm 6.3	29.0 \pm 6.8	633.4 \pm 281.3	692.9 \pm 320.7	0.08 \pm 0.1
Valve type 0	32.4 \pm 6.2	33.4 \pm 6.4	853.2 \pm 298.3	905.1 \pm 321.3	0.1 \pm 0.1	31.1 \pm 6.3	32.1 \pm 6.6	788.1 \pm 289.6	840.5 \pm 318.5	0.1 \pm 0.1
Valve type 1, RL fusion	34.0 \pm 7.4	35.1 \pm 7.5	948.5 \pm 388.3	1011.6 \pm 403.6	0.1 \pm 0.2	32.6 \pm 7.6	33.8 \pm 7.6	880.4 \pm 386.0	940.4 \pm 396.6	0.1 \pm 0.2
Valve type 1, RN fusion	38.5 \pm 4.3	39.7 \pm 3.9	1177.3 \pm 264.8	1245.8 \pm 247.6	0.4 \pm 1.1	37.3 \pm 4.4	38.4 \pm 3.9	1104.2 \pm 266.2	1169.1 \pm 241.5	0.3 \pm 0.7

CoA= coarctation; RL= right coronary and left coronary; RN= right coronary and non-coronary.