

Table1. Patient Characteristics

Patients Characteristics	Study Group (N =9)	Control Group (N=16)	P value
Age, yrs	79.78±5.59	59.06±8.78	0.000
Females, n (%)	8 (88.9)	5 (31.3)	0.006
Body mass index, kg/m2	23.04±1/798	24.11±1.69	0.151
Hypertension, n (%)	8 (88.9)	6 (37.5)	0.013
History of hypertension, yrs	11.78±8.136	2±3.3559	0.000
Diabetes, n (%)	1 (11.1)	2 (12.5)	0.918
Coronary artery disease, n (%)	3 (33.3)	3(18.8)	0.412
Chronic obstructive pulmonary disease, n (%)	2 (22.2)	0 (0)	0.049
Pulmonary embolus disease, n (%)	1 (11.1)	0	0.174
Echocardiography			
Mean LA size, mm	43.0±4.33	40.27±5.82	0.175
Mean RV size, mm	22.56±2.603	24.06±2.98	0.218
Mean LV size, mm	41.0±5.123	45.25±4.34	0.038
Mean IVS size, mm	10.67±1.803	10.81±1.424	0.825
Mean LVEF, %	60.78±9.72	65.75±5.94	0.124
Sinus of valsalva diameter, mm	29.33±2.87	30.31±4.045	0.529
Aortic annular diameter , mm	19.33±2.062	20.38±2.062	0.238
Ascending aorta diameter, mm	32.22±4.494	32.88±4.646	0.736
Pulmonary artery diameter, mm	24.00±3.00	22.94±1.879	0.285
Pulmonary artery pressure, mmHg	28.33±8.26	18.25±8.347	0.009
BNP, pg/mL	364.162±287.03	119.634±168.128	0.039

Values are mean ± SD, n (%), or mean (range)

LA = left atrium; RV= right ventricular; LV=left ventricular; IVS= interventricular septum; LVEF = left ventricular ejection fraction; BNP=[B-type natnuretic peptide](#)

Table 2.Mapping and Ablation Characteristics of Tachycardia

Procedure duration, min	121.2 ±35.4
Fluoroscopy time, min	11.2±5.4
Fluoroscopy dose, cGycm2	131.5±57.6

1	F	84	YES	220	1547	2001	36%	Double loop: isthmus between an LAAW scar and the MV	CW	CCW	0.18	0.11	87	Scar to MV	YES	YES	Sinus
2	F	86	NO	210	153 (noHD- map)	2577	23.7%	Double loop: isthmus between an LAAW scar and the MV	CW	CCW	0.20	0.24	132	Scar to MV	YES	NO	Sinus
3	F	77	NO	235	1003	1888	21.6%	Double loop: isthmus between an LAAW scar and the MV	CW	CCW	0.22	0.20	159	Scar to MV	YES	NO	Recurrence
4	F	82	NO	310	(incomplete map)	1311	19%	Double loop: isthmus between an LAAW scar and the MV	CW	CCW	0.19	0.18	121	Scar to MV	YES	NO	Recurrence
5	M	74	YES	290	2581	2808	17.1%	Double loop: isthmus between an LAAW and the base of the LAA	CW	CCW	0.06	0.16	127	Scar to MV and Scar to LAA	NO To localized atrial tachycardia	YES	Sinus
6	F	70	NO	190	1359	2116	37%	Double loop: isthmus between an LAAW and the MV	CW	CCW	0.21	0.08	134	Scar to MV	YES	NO	Sinus
7	F	77	NO	225	237 (noHD- map)	660 (noHD-map)	-	Double loop: isthmus between an LAAW and the MV	CW	CCW	-	-	-	Scar to MV	YES	NO	Sinus

8	F	82	NO	250	1610	2126	31.5%	single -loop: isthmus between an LAAW and the RSPV	Surround the Right pulmonary veins	0.25	0.17	86	Scar to RSPV	YES	NO	Sinus
9	F	86	NO	245	-	-	-	Double loop: isthmus between an LAAW and the MV	-	-	-	-	Scar to MV	YES	NO	Sinus

AT=atrial tachycardia; AF=atrial fibrillation; CV = conduction velocity; F =female; M=Male; LA = left atria; MV = mitral valve; PVI = pulmonary vein isolation; RA = right atria; CCW = counterclockwise; CW = clockwise; LAAW = left atrial anterior wall; TCL = tachycardia cycle length; HD=High-Density; RSPV=right superior pulmonary vein

Table 4. Patient Characteristics

Patients Characteristics	Study Group (N =9)	Control Group (N=83)	P value
Age, yrs	79.78±5.59	64.86±9.71	0.000
Females, n (%)	8 (88.9)	18 (21.7)	0.000
Body mass index, kg/m2	23.04±1.798	23.52±1.97	0.49
History of AF, n (%)	2 (22.2)	18 (21.7)	0.97
Hypertension, n (%)	8 (88.9)	43 (51.8)	0.034
Diabetes, n (%)	1 (11.1)	18 (21.7%)	0.46
Coronary artery disease, n (%)	3 (33.3)	12(14,5)	0.145
Pulmonary hypertension, n (%)	7 (77.8%)	20 (24.1)	0.001
Echocardiography			
Mean LA size , mm	43.0±4.33	40.38±5.74	0.19
Mean IVS size, mm	11.67±2.06	11.12±2.05	0.45
Mean RV size , mm	22.33±2.45	23.16±3.18	0.454
Mean LV size, mm	41.0±5.123	46.24±7.13	0.035
Mean LVEF , %	60.78±9.72	59.65±9.85	0.745
Sinus of valsalva diameter, mm	29.33±2.87	30.77±3.64	0.256
Aortic annular diameter , mm	19.33±2.062	20.24±2.22	0.244
Ascending aorta diameter, mm	32.22±4.494	32.60±3.71	0.775
Pulmonary artery diameter, mm	24.00±3.00	23.67±6.78	0.883
Blood tests			
Albumin, g/L	38.00±3.91	39.20±3.77	0.36
TC, mmol/L	3.90±0.51	4.51±1.07	0.008

LDL-c, mmol/L	2.26±0.48	2.78±0.92	0.099
HDL-c, mmol/L	1.14±0.30	1.26±0.33	0.288
Triglyceride, mmol/L	1.32±0.35	1.18±0.64	0.509
Fasting blood Glucose, mmol/L	6.25±1.50	6.20±2.17	0.948
BNP, pg/mL	343.43±273.36	245.00±473.66	0.543
D-Dimer, mg/L	1.22±1.77	0.75±0.76	0.447
Serum creatine, umol/L	74.89±16.91	88.08±102.04	0.701
Blood urea nitrogen, mmol/L	7.45±2.03	7.02±5.05	0.803
Uric acid, mmol/L	388.22±102.46	380.13±114.46	0.839
Homocysteine, umol/L	17.92±9.06	14.25±5.15	0.065
ALT, u/L	19.78±6.34	34.06±71.65	0.553
AST (u/L)	22.11±3.26	45.65±183.33	0.705
WBC, *10 ⁹ /L	6.99±2.13	6.62±1.63	0.527
Hemoglobin, g/L	137.78±11.14	148.58±17.44	0.073
Platelet , *10 ⁹ /L	228.44±35.51	217.35±52.55	0.539
Medication use, n (%)			
ACEI or ARB,	4 (44.4)	27 (32.5)	0.473
B-blocker	6 (66.7)	37 (44.6)	0.207
Calcium-channel blocker	6 (66.7)	34 (41.0)	0.140
Amiodarone	4 (44.4)	25 (30.1)	0.380

Values are mean ±SD, n (%), or mean (range)

AF = atrial fibrillation; LA = left atrium; RV= right ventricular; LV=left ventricular; IVS= interventricular septum; LVEF = left ventricular ejection fraction; TC = Total cholesterol; LDL-c = Low-density lipoprotein cholesterol; HDL-c = High-density lipoprotein cholesterol; BNP = B-type natriuretic peptide; ALT = alanine transaminase; AST = aspartate transaminase; WBC = White blood cell count; ACEI= indicates angiotensin-converting enzyme inhibitor; ARB=angiotensin receptor blockers

Table 5. Multivariate logistic regression analyses of multiple variables and the LAMRT originating from the LAAW

Variables	OR	95% CI	P value
Gender	0.046	0.003-0.835	0.037
Age	1.251	1.018-1.538	0.034
Hypertension	0.647	0.028-14.841	0.786
Pulmonary hypertension	5.239	0.265-103.477	0.277
TC	0.844	0.327-2.176	0.725
LV	0.916	0.725-1.157	0.460

TC = Total cholesterol; LV=left ventricular