**Clinical implications of device-detected atrial fibrillation in cardiac resynchronization therapy**

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**Supplementary Table S1. The baseline characteristics of the patients in each AF groups**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Device-detected AF(N = 19) | Previous AF(N = 54) | *P* value |
| **Clinical characteristics** |  |  |  |
| Age, year | 66 (59–69) | 71 (64–76) | 0.027 |
| Male  | 11 (57.9) | 39 (72.2) | 0.385 |
| BMI, kg/m²  | 24.3 (21.6–26.9) | 22.5 (21.6–25.5) | 0.172 |
| NYHA class II  | 7 (36.8) | 14 (25.9) | 0.542 |
| SBP, mmHg | 107 ± 7 | 110 ± 15 | 0.623 |
| DBP, mmHg | 64 ± 5 | 68 ± 8 | 0.157 |
| Heart rate, bpm | 62 ± 13 | 71 ± 14 | 0.145 |
| LBBB | 13 (68.4) | 24 (46.2) | 0.163 |
| QRS duration, ms | 169 ± 23 | 163 ± 23 | 0.363 |
| QRS ≥150 ms | 13 (68.4) | 36 (70.6) | 0.999 |
| CRT-D | 18 (94.7) | 50 (92.6) | 0.833 |
| AVNA within 1 month after CRT implantation | 0 (0) | 21 (38.9) | - |
| Previous RFCA | 0 (0) | 5 (9.3) | - |
| Ischemic etiology | 4 (21.1) | 12 (22.2) | 0.999 |
| Hypertension | 9 (47.4) | 35 (64.8) | 0.287 |
| Diabetes mellitus | 8 (42.1) | 26 (48.1) | 0.852 |
| Chronic kidney disease | 1 (5.3) | 18 (33.3) | 0.016 |
| Stroke | 0 (0) | 13 (24.1) | - |
| **Medication** |  |  |  |
| Beta-blocker  | 19 (100.0) | 49 (90.7) | 0.318 |
| ACEi/ARB  | 18 (94.7) | 49 (90.7) | 0.999 |
| MRA  | 15 (78.9) | 46 (85.2) | 0.497 |
| AAD | 3 (42.9) | 20 (37.0) | 0.240 |
| OAC | 7 (36.8) | 18 (33.3) | 0.999 |
| Digoxin | 3 (15.8) | 15 (27.8) | 0.368 |
| **Laboratory data** |  |  |  |
| eGFR, ml/min/1.73 m2  | 75.0 (70.5–90.0) | 62.5 (36.0–88.0) | 0.035 |
| NT-proBNP, pg/mL | 934 (602–2215) | 2429 (1260–6687) | 0.035 |
| Log NT-proBNP  | 3.2 ± 0.5 | 3.4 ± 0.6 | 0.156 |
| Troponin-T, pg/mL | 23 (13–35) | 28 (16–47) | 0.161 |
| **Echocardiographic parameters** |  |  |  |
| LVEF, % | 26 ± 5 | 26 ± 7 | 0.124 |
| LAVI, ml/m2 | 48.0 (38.7–58.7) | 63 (48–87) | 0.007 |
| LVESV, ml | 163 (111–222) | 135 (95–156) | 0.121 |

Values are expressed as the mean ± standard deviation, median (interquartile range), or numbers (%).

AAD, antiarrhythmic drug; ACEi, angiotensin-converting enzyme inhibitor; AF, atrial fibrillation; ARB, angiotensin receptor blocker; AVNA, atrioventricular nodal ablation; BMI, body mass index; CRT, cardiac resynchronization therapy; CRT-D, cardiac resynchronization therapy-defibrillator; DBP, diastolic blood pressure; eGFR, estimated glomerular filtration rate; LAVI, left atrial volume index; LBBB, left bundle branch block; LVESV, left ventricular end-systolic volume; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; NT-proBNP, N-terminal pro-brain natriuretic peptide; NYHA, New York Heart Association; OAC, oral anticoagulation; RFCA, radiofrequency catheter ablation; SBP, systolic blood pressure.

 **Supplementary Figure S1. The BiV pacing rate of each AF groups**

**(A)** BiV pacing percentage **(B)** Proportion of optimal BiV pacing (≥98%)

AF, atrial fibrillation; BiV, biventricular.