Efficacy and Evaluation of Catheter Ablation for Atrial Fibrillation with Heart Failure in Our Hospital

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Introduction: Background: Previously, catheter ablation (CA) was thought to be poorly effective for atrial fibrillation (AF) with heart failure (HF). Recently, the CASTLE-AF study showed CA has proved to be a safe and effective treatment for AF patients with HF. The aims of this study are to evaluate the efficacy of CA for AF with HF in our hospital.

Methods: A total of 52 AF patients (20 paroxysmal AF; 32 persistent AF) with HF were included. Mean follow-up period was 25±13 months. HF was defined as having EF ≤35% or less, or HF hospitalization within 1 year. The etiology of HF was 27 tachycardia induced cardiomyopathy (TIC), 8 coronary artery disease, 9 valvular disease, 4 diastolic cardiomyopathy (DCM), 3 hypertrophic cardiomyopathy, 1 AF bradycardia.

Result: Extensive ipsilateral pulmonary vein isolation (EPVI) was completed in all cases, and additional ablation was performed in 13 patients (5 SVC isolation, 7 linear ablation to posterior wall, 3 mitral isthmus ablation, 2 low voltage ablation, 2 non-PV foci), and CTI ablation was performed in 36 patients. AF recurred in 13 of 52 patients (25%), and 7 patients (13%) were hospitalized for worsening HF. HF was associated with AF in 5 of 7 patients.

Conclusion: CA of AF with HF presents an adequate success rate, improving symptoms and reducing rehospitalizations due to HF.