Objective: Radiofrequency catheter ablation (RFCA) for inducible ventricular tachycardia (VT) reduces the incidence of implantable cardioverter-defibrillator (ICD) therapy. However, whether RFCA improves long-term outcome of patients receiving ICD remains unknown. Methods: We retrospectively reviewed long-term outcomes of 43 consecutive patients receiving ICD for sustained VT, in whom inducible VT had been documented by electrophysiological studies. Fourteen patients underwent adjunctive RFCA before defibrillator implantation (Group 1), and 29 received defibrillator implantation alone (Group 2). Clinical records were searched for adverse events, including deaths, re-hospitalization, and ICD therapy. Results: Baseline left ventricular ejection fraction (Group 1 vs. Group 2, 43±14% vs. 49±15%, p=0.2) and follow-up periods (1297±911 days vs. 1735±904 days, p=0.15) were not different between two groups. The only significant difference between the groups was with history of VT (10 vs. 9, p=0.02). All death was not significant different (2 (15%) vs. 7 (24%), p=0.7). Re-hospitalization due to cardiac was not different (8 vs.13, p=0.5). Six patients (43%) received ICD appropriate therapy in Group 1, and 8 (26%) in Group 2 (p=0.5). Conclusion: The current study demonstrated that prophylactic RFCA for inducible VT prior to defibrillator implantation did not provide improved long-term benefits compared with ICD therapy alone in patients with sustained VT. The performance of adjunctive RFCA for patients receiving ICD may require further clarifications.

Keywords: ICD, VT ablation