1212-13 A Novel Form of Familial Bidirectional Ventricular Tachycardia

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Background: Familial polymorphic (FP) ventricular tachycardia (VT) is usually characterized by inducible and non-inducible forms. However, we describe a unique form of FP bidirectional VT that could not be differentiated electrophysiologically from FP VT with only inducible forms.

Methods: We studied the results of RFCA procedures of VT in pts with previous MI, non inducible pts 3 died in the follow-up. In group 2 all pts had a documented CPVT and a documented history of syncope. Two pts suffered from ischemic stroke and 2 pts suffered from total heart block. Before discharge 24 pts (26%) underwent ICD placement, either because of a nonsuccessful procedure or hemodynamically intolerable VT. During follow-up of 34±11 mos, recurrent VT was observed in 23% of all patients: 15% (11/74) in the successfully ablated pts and 59% (10/17) in the nonsuccessfully ablated pts (P=0.001). Of interest, successfully ablated pts who received an ICD after ablation had an ICD implanted before the procedure (32/43, 74%), had significantly fewer appropriate shocks for VT (5/30, 16%) than patients without (10/17, 59%) nonsuccessfully ablated (9/60, 15%, P=0.005). Twelve pts (13%) died: heart failure (6 pts), noncardiac cause (3 pts) and unknown cause (1 pt).

Conclusions: RFCA of CPVT can be performed with a high success rate (80%). A successful ICD implantation approach in patients with hemodynamically stable VT warrants further study.

1212-15 Should an Electrophysiological Study Be Performed in All Patients With Chronotropic Heart Failure and an Indication for Cardiac Pacemaker Before Implantation?

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Aim of this prospective study was 1) to assess how often a ventricular tachycardia was induced in patients with chronic heart failure and a history of VT/VF before CRT, and 2) to evaluate the outcome in these patients. Methods: Overall 48 pts (26 pts with prior myocardial infarction (MI), and 28 pts with dilated cardiomyopathy (DCM) were included. All pts with severe heart failure (NYHA III, IV) of low LV ejection fraction (EF<35%) and intraventricular conduction delay (>150 ms), however with no history of an arrhythmic event. In all pts programmed ventricular stimulation was performed. If a monomorphic ventricular tachycardia (VT) was induced, a biventricular ICD was implanted. Mean follow up (FU) was 12±6 months. Results: VT/VF was not induced in 24 pts, 2/24 pts died during FU due to heart failure (CHF). VF was induced in 6/28 pts with DCM and in 1/50 pts with MI. 1/11 pts died due to CHF. Outcome of pts with induced VT and ICD implantation are listed in the table. Conclusion: In 1/4 of pts with severe heart failure, low ejection fraction and conduction delay a VT was induced. The following results of the pts with induced VT and an ICD experienced a nonsignificant episodes of VT/VF. Thus, programmed ventricular stimulation may be considered in all pts with the indication for CRT before implantation to select pts at high risk for arrhythmic events.

1212-16 Do All Ischemic Ventricular Tachycardia Patients Need an Implantable Cardioverter Defibrillator?

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Background: Recurrent ventricular tachycardia (VT) in pts with previous myocardial infarction (MI) is associated with a poor prognosis due to high recurrence rates. Radiofrequency Catheter Ablation (RFCFA) of VT may serve as an alternative treatment option. We studied the results of RFCFA procedures of VT in pts with previous MI.

Methods: Standard ablation and mapping techniques were used. All inducible and hemodynamically tolerated VT were targeted.

Results: RFCFA was performed in 93 consecutive pts (83 male, age 66±10 yrs). Six pts underwent RFCFA because of non inducible VT. VT ejection fraction was 29±11%. The number of VT procedures was 2.1±1.3 VTs. The procedure was successful in 80% (74) of the pts (nonsusceptibility of VT and no recurrence (4±8 hours after RFCFA). Myocardial perforation occurred in 1 pt (recovered uneventfully after surgery). Two pts suffered from ischemic stroke and 2 pts suffered from total heart block. Before discharge 24 pts (26%) underwent ICD placement, either because of a nonsuccessful procedure or hemodynamically intolerable VT. During follow-up of 34±11 mos, recurrent VT was observed in 23% of all patients: 15% (11/74) in the successfully ablated pts and 59% (10/17) in the nonsuccessfully ablated pts (P=0.001). Of interest, successfully ablated pts who received an ICD after ablation had an ICD implanted before the procedure (32/43, 74%), had significantly fewer appropriate shocks for VT (5/30, 16%) than patients without (10/17, 59%) nonsuccessfully ablated (9/60, 15%, P=0.005).

Conclusions: RFCA of CPVT can be performed with a high success rate (80%). A successful ICD implantation approach in patients with hemodynamically stable VT warrants further study.