pts from noncardiac death. The 5 year cumulative survival was 83% and is clearly more favourable than the 5 yr cumulative survival of 64% of the placebo SCID HEFT study and the 3 yr cumulative survival of 64% of the COMPANION study. Spontaneous VT recurrence within 6 weeks after surgery was seen in 13 pts, and in 14 pts after 6 weeks. ICD was implanted in 12 pts, of whom showed correct VT recurrence in 9/12 after implant. Arrhythmia freedom and survival did not differ between selective and aselective resection. The 5 year cumulative freedom of VT, sudden arrhythmic death and adequate ICD discharge was 55%. Conclusions: Surgical resection of postinfarction VT is not at all a risky treatment and should be seriously considered in cases with repairable left ventricular aneurysm and recurrent VT/VF. This surgery causes a better survival than that of comparable VT patients because of left ventricular reshaping and VT abolishment. Additional studies are needed to determine the contribution of selective or aselective VT resection of exit sites for arrhythmia freedom. Extension of the ICD implantation strategy for reducing sudden arrhythmic death after surgery can further improve the outcome.

371 Catheter ablation of atrial flutter with Localisa navigation system
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Background: we tested a new non-fluoroscopic navigation system (Localisa, Medtronic Inc.) for real-time 3D localization of intracardiac electrodes in patients (pts) with atrial flutter referred for cavitricuspid isthmus ablation, to perform a single linear lesion using conventional catheters and to reduce radiation exposure.

Methods: we used Localisa system in 65 consecutive pts. Localisa generates, through three skin-electrode pairs applied in three orthogonal directions, three, high frequency, low energy fields across the thorax. The system allows the tracking of up to 10 electrodes simultaneously, enabling the tracking of both ablation catheters and mapping catheters at the same time. A special graphics software shows the real time catheter positions in 3D space and allow the marking of points of anatomical and electrophysiological interest. Total fluoroscopy time and ablation fluoro scopy time were compared to 65 matched pts, who underwent catheter ablation just before the use of Localisa in our laboratory.

Results: all pts were successfully ablated. A mean of 7 location points were acquired with navigation system to identify coronary sinus ostium, tricuspid annulus and inferior vena cava orifice. The mean total fluoroscopy time in Localisa pts and in control pts were 9.1±2.5 and 19.8±6.1 minutes respectively (p<0.001). The mean ablation fluoroscopy time in Localisa pts and in control pts were 0.6±0.3 and 6.9±1.4 minutes respectively (p<0.0001).

Conclusions: Localisa system is effective in standard catheter ablation procedure. A significant reduction of radiation exposure is possible with this system using real time 3D navigation. It allows to perform a linear lesion with a conventional 8mm tip ablation catheter.

372 Long term follow-up of patients with arrhythmogenic right ventricular cardiomyopathy and ventricular tachycardia treated by catheter ablation
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Introduction: Arrhythmogenic right ventricular cardiomyopathy (ARVC) is a heart muscle disease characterized by replacement of right ventricular myocardium by fibrofatty tissue and ventricular arrhythmias. Long term efficacy of catheter ablation is considered unsatisfactory because of the progressive nature of the disease and difficulties in identifying the arrhythmia substrate. This prospective clinical report presents the long term follow-up of patients with ARVC, who underwent catheter ablation for drug refractory VT.

Methods: 18 pts (mean age 42.8 ± 16.4 years, 12 males) with ARVC underwent mapping and ablation of VT. 12 pts guided by electroanatomical voltage mapping (group EA) and 6 pts classical ablation (group C).

All patients were diagnosed with drug resistant VT; cardiac arrest was observed in 4 pts, syncope - in 13 pts, frequent ICD shocks - in 3 pts, incessant VT resulting in heart failure - in 4 pts. Severe form of ARVC was observed in 10 pts, concomitant LV damage (LVEF 25-40%) in 2 pts. Follow-up period was 84.3 months (ranging from 63 to 126) for group C and 10.3 months (ranging from 2 to 24) for group EA.

Results: No major complications were observed. Repeated procedure was performed in 4 pts, 1 in EA group and 3 in C group. Syncope was observed in 2 pts with severe form of ARVC; in one of them (LVEF 25%) ICD was implanted, in the second case amiodarone was given. Recurrences of VT were observed in 7 pts (5 in EA and 2 in C group) early after ablation; VTs were modified in 3 pts (1 in EA and 2 in C group) with success rate 92% in group EA and 66% in group C. During follow-up period there were no fatal episodes. In 3 pts from EA group there was no need to continue antiarrhythmic therapy.

Conclusion: Catheter ablation guided by electroanatomical mapping should be a treatment of choice in pts with ARVC and drug refractory VT as a procedure that is both safe and successful in early and long term follow-up.

373 Electrocardiographic characteristics of repetitive monomorphic right ventricular tachycardia originating near the HIS-bundle
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Introduction: Most idiopathic nonreentrant ventricular tachycardia (VT) and ventricular premature contractions (VPCs) arise from the right or left ventricular outflow tract (OT). However, some right ventricular (RV) VT/VPCs originate near the His bundle region. Aim of this study was to investigate ECG characteristics of RVVT/VPCs originating near the His-bundle in comparison with RVOT-VT/VPCs.

Methods and results: Ninety RV-VT/VPC patients underwent catheter mapping and radiofrequency ablation. ECG variables were compared between RV-T/VPCs originating from the RVOT and near the His-bundle. Ten patients had foci near the His-bundle (His group), with the His-bundle local ventricular electrogram preceding the QRS onset by 15 to 35 ms (mean, 22 ms) and His-bundle pacing produced a nearly identical ECG to clinical VT/VPCs. The His group R-wave amplitude in lead II was significantly lower than in the RVOT group. An R wave in aVL was present in 6 of 10 His group patients, while almost all RVOT group patients had a QS pattern in aVL. Lead I in His group exhibited significantly taller R-wave amplitudes than RVOT group. His group QRS duration in the inferior leads had a shorter QRS duration than RVOT group. Eight of 10 His group patients exhibited a QS-pattern in lead V1 compared to 14 of 81 RVOT group patients. His group had larger R wave amplitudes in lead V5 and V6 than RVOT group.

Conclusion: VT/VPCs originating from the His-bundle has distinctive ECG characteristics. Knowledge of characteristic QRS morphology may facilitate catheter mapping and successful ablation.