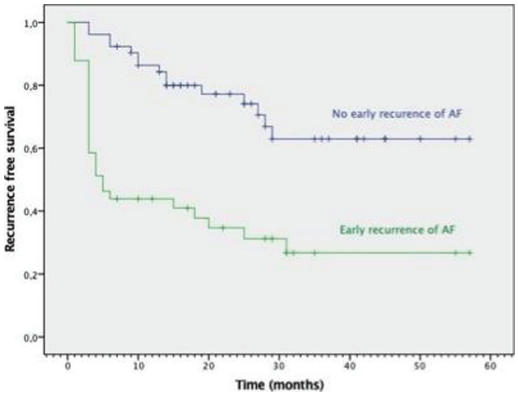
patients, long-term results are not satisfying if complete freedom of AF is used as success criterion. Predictors of long-term outcome have not been established so far and would be helpful for patient selection and the improvement of success rates.
Purpose: This study aimed to identify independent predictors of long-term success or failure of PVI, respectively.
Methods: All available medical records of a consecutive cohort of patients with paroxysmal atrial fibrillation (PAF) and persistent AF (PERSAF) who underwent their first PVI at our institution between January 2011 and June 2015 were retrospectively investigated. Clinical parameters such as sex, age, type of AF, hypertension, diabetes mellitus, body mass index (BMI), amiodarone-therapy at the time of intervention, and data collected during PVI such as left atrial pressure, left atrial volume, vein reconnection during PVI and results of a patient questionnaire were selected for univariate and multivariate analysis (Kaplan-Meier and Cox regression respectively). Endpoints were either documented episodes of AF or recurrence of symptoms as before PVI.
Results: After exclusion of 13 patients, 93 patients, 51 with PAF and 42 with PERSAF built the final study group. 18 were female, mean age was 59 (±10,6) years, 47 patients had hypertension, the mean BMI was 27,3 (±4,3), the mean left atrial pressure was 15,5 (±4,3) mmHg.
During follow-up of 33 (±14,5) months, 43 patients, 19 (44,2%) with PAF and 24 (55,8%) with PERSAF reached an endpoint after the blanking period of 3 months. Patients with endpoints during the first 3 months (= early recurrence of AF) experienced significantly more often recurrence of AF after the blanking period [28 (68,3%) vs. 15 (28,8%) respectively; p<0,001]. Univariate analysis with log-rank test revealed a significantly shorter freedom of recurrence in patients with hypertension (p=0,028), mean left atrial pressure >14 mmHg (p=0,015), BMI >25, PVI on amiodarone (p=0,037) and in patients who reached an endpoint during blanking period (p<0,001). On multivariate analysis reaching an endpoint during blanking period was the only significant predictor of recurrence of AF after the blanking period (hazard ratio 3,35; 95% confidence interval 1,70–6,59).



Conclusion: Patients after a first PVI who experienced an endpoint during the blanking period had significantly more often unfavourable outcome in the long-term.

P1519
Usefulness of 14-day novel leadless, adhesive patch electrocardiographic monitoring to detect atrial tachyarrhythmia following catheter ablation of atrial fibrillation

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Background: Conventional 24-hour Holter monitoring is used commonly for the follow-up of patients after ablation of atrial fibrillation (AF). However, it is not enough to investigate the occurrence of infrequent or asymptomatic atrial tachyarrhythmia (AT).
Purpose: The purpose of the study was to evaluate the patient compliance, device analyzable time, and diagnostic yield of a 14-day novel leadless, adhesive patch electrocardiographic monitor in patients following catheter ablation of AF.
Methods: 130 AF patients (98 males, mean age 67 years) underwent a 14-day leadless adhesive patch monitor following catheter ablation of AF.
Results: The total recording time was 13 days and 17±11 hours in all patients. The adhesive patch monitor did not affect patients' activities of daily living, including bathing. In only one patient, change of the adhesive patch location was required due to skin irritation on the 4th day. AT was identified in 38 (29.2%) patients (symptomatic in 18 patients and asymptomatic in 20 patients). The detection rate of AT was 15.7% on the first day, increasing to 21.0% on the 3rd-day, 25.6% on the 7th-day, and 29.2% on the 14th-day. AT: total duration (median 12 hours 16 minutes, range 14 minutes - 73 hours 19minutes); maximum duration (median 3 hours 56 minutes, 8 minutes – 20 hours 19 minutes), and AT burden (median 0.19%, 0.07%-21.8%).
Conclusions: A novel 14-day adhesive patch monitoring is feasible with high patient compliance, high analyzable time, improving AT detection after AF ablation. 14-day Novel Leadless is a promising new diagnostic and monitoring tool for the clinician to treat AF patients independently of symptoms.

P1520
Defining the blanking period after maze procedure for atrial fibrillation

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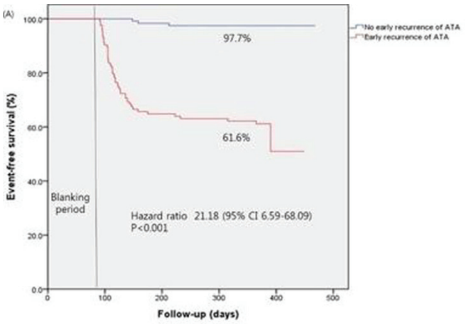
Background and purpose: Early recurrence (ER) of atrial tachyarrhythmia (ATA) is common after atrial fibrillation (AF) ablation., There is well unknown about current guidelines about of blanking period after maze procedure. We aimed to investigate the significance of ER during the first 3 months post maze procedure in predicting late recurrence (LR) and determine whether it varies according to timing.
We aimed to investigate that ER after maze procedure is a predictor of late recurrence and determine whether it varies according to timing.
Methods: From 2009 to 2017, a total of 290 patients underwent the open surgery with concomitant maze procedure were analyzed. Data were obtained from 12-lead electrocardiograms and holter monitoring during follow-up. Patients with atrial arrhythmia≥30seconds (s) within 3 month blanking period were stratified according to the timing of ER.
Results: A total of 146 patients (50.3%) experienced their last episode of ER during the first (n=82), second (n=15), or third (n=49) month of the 3-month blanking period. One-year freedom from ATAs was 97.7% in patients without ER compared with 96.9%, 66.7%, and 12.5% in patients with ER 1, 2, and 3 months after index procedure, respectively (P<0.001). Five-year freedom from arrhythmia was 91.5% in patients without ER compared with 80.0%, 66.7%, and 10.4% in patients with ER 1, 2, and 3 months post ablation, respectively (P<0.001). Receiver operating curve analyses showed a strong correlation between the timing of ER and late recurrence (area under the curve, 0.84, p<0.001). Hazard ratios about LR according to timing of the last episode of ER 1, 2, and 3 months were 1.45, 13.7, and 89.86, respectively.



	Freedom from LR, %	Hazard ratio	95%CI	p-value
No ER	97.7%			
ER during 1st month	96.9%	1.45	0.24-8.70	0.686
ER during 2nd month	76.9%	13.7	3.02-62.20	0.001
ER during 3rd month	10.4%	89.86	27.27-296.07	<0.001

Figure. (A) Freedom from atrial tachyarrhythmia (ATA) after maze procedure in patients with and without early recurrence of ATA and (B) freedom from ATA after maze procedure in patients with early recurrence of ATA 1, 2, 3 month post maze procedure.

Conclusion: Our study validates the blanking period after maze procedure for AF. As about 90% of patients with ER during the last 3 months post maze procedure experience late recurrence by 1 year and 5 year, we put into question the 90-day cut-off value. Randomized trials required to assess the shorter blanking period on clinical outcomes after ablation of AF.