Conclusion: Women seem to represent a lower-risk group than men. A spontaneous type-1 ECG at baseline doesn’t seem to be a risk factor for arrhythmic event in women.

0376
Arrhythmic storm in patients with Heart Mate® II. Incidence, risk factors and management
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Background: Rhythmic complications seen common after left ventricular (LV) assist device (LVAD), especially in the early phase of implantation (<30 days). We sought to identify the incidence and risk factors of arrhythmic storm occurring after Heart Mate® II (HM2) implantation.

Methods: All patients with HM2 implanted in our institution have been studied. Clinical data, occurrence of arrhythmia, implantable cardioverter-defibrillator (ICD), ultrasound parameters as well as follow-up have been analyzed.

Results: From January 2008 to April 2013, 33 patients (30 men, 38±10 years, LVEF 20±5%, ischaemic cardiomyopathy 82%, 70% bridge to transplant), were included. Before implantation, 15 had ICD (12 for primary prevention) and 11 had a history of sustained ventricular tachycardia (VT). The overall mortality rate was 48% with a mean follow-up of 11±11 months. Post-LVAD arrhythmic storm (10 patients, including 9 in the first 30 days) were more frequent in patients with prior VT (70% vs 17%, p=0.01), prior ICD (80% vs 30%, p=0.01), larger LV end diastolic diameter (77±9 mm vs 67±6 mm, p=0.02) and non ischaemic cardiomyopathy (40 vs 8%, p=0.053). Arrhythmic storm occurring just prior LVAD implantation (8 patients) was not associated with arrhythmic storm recurrence after. Endocardial VT ablation was performed in 6. The substrate was not related to HM2 cannula.

Conclusion: Arrhythmic storm are frequent (33%) after HM2 implantation, often occurring within one month in patients with prior VT episode.

0022
Incidence and predictors of new-onset atrial fibrillation in septic shock patients in a medical ICU: data from 7-day Holter ECG monitoring
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Objectives: New-onset atrial fibrillation (NAF) is a common complication of septic shock and incidence is underestimated. We sought to investigate the real incidence, associated risk factors for NAF, and its prognostic impact during septic shock in patients hospitalized in a medical Intensive Care Unit (ICU).

Design: Prospective, single-center, observational study.

Setting: Medical ICU in a large university teaching hospital.

Patients: All consecutive patients presenting between March 2011 and May 2013 with septic shock were eligible for inclusion, with the following exclusion criteria: patients aged <18 years, prior history of AF (paroxysmal or sustained), and patients transferred from another ICU with prior septic shock.

Intervention: After inclusion, all patients were equipped with long-duration Holter ECG monitoring for 7 days.

Measurements and Main Results: NAF was defined as an AF episode lasting more than 30 seconds. Patient characteristics, infection criteria, cardiovascular parameters, severity of illness, medical and technical support therapies were recorded. Among 66 patients, 29 (44%) developed NAF: 10 of which (34%) would not have been diagnosed without Holter ECG monitoring. NAF patients were older, and more often presented markers of heart failure, i.e. higher troponin and NT-pro-BNP levels associated with lower left ventricular ejection fraction (LVEF), as compared to patients who remained in sinus rhythm. NAF patients also had longer QRS duration and more often presented nonsustained supra ventricular arrhythmias (<30s) on the first day. In a multivariate model, only age (OR: 1.00, p=0.01) and LVEF<45% (OR: 13.01, p=0.03) remained associated with the occurrence of NAF. However, NAF was not an independent predictor of 28 or 90 day mortality.

Conclusion: This is the first study to examine the exact incidence and risk factors of NAF in septic shock patients. NAF is common, especially in older patients, and is associated with low ejection fraction. We did not find NAF to be independently associated with higher mortality in this study.

0430
Silent AF impairs patient’s outcome after acute myocardial infarction
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Objectives: The aims of our study were to assess silent AF incidence after acute myocardial infarction (AMI) and determine its impact on patient’s outcome.

Background: Silent AF has been suggested to be common in AMI. But its true incidence and patient’s clinical outcome remain unknown.

Methods: 849 consecutive AMI were prospectively analyzed by continuous ECG monitoring (CEM) during the first 48 hours after admission. Silent AF was defined as asymptomatic episodes lasting at least 30 sec. The population was studied into three groups: No AF, Silent AF, and symptomatic AF after AMI.

Results: One hundred and thirty five patients (15.9%) developed silent AF. Compared with the no AF group, patients with silent AF were markedly older (80±6.85) vs. 62 (53-75) years; with p=0.001), more frequently women (58 (43%) vs. 198 (30%); with p=0.006), and less smoker (26 (20%) vs. 242 (36%); with p=0.001). They had a significant left atrial (LA) enlargement with LA surface indexed 10.79 (8.61-12.58) vs. 9.30 (7.54-11.04)cm²/m²; with p=0.001 and LA volume indexed 29.50 (21.30-44.05) vs. 24.45 (18.25-33.15)cm³/m²; with p<0.001. Comparing these three groups, heart failure episodes after AMI were more frequent in silent AF group (36 (41.5%)) and in symptomatic AF group (27 (60.0%)) than in no AF group (13 (20.8%)) with p=0.01, and in-hospital mortality was higher in silent AF group (14 (10.4%)) and in symptomatic AF group (8 (17.8%) than in no AF group (9 (1.3%)) with p<0.001. By multivariate analysis, silent and symptomatic AF, LVEF and GRACE risk score were identified as independent explanatory variables for occurrence of in-hospital death after AMI.

Conclusion: Silent AF is very common after AMI and impacts patient’s outcome with more frequent episodes of heart failure (41.5%) and higher in-hospital mortality (10.4%). Our large prospective study suggests that silent AF screening should be improved after AMI in order to predict the prognosis of patients.