We conclude that AFFIRM and RACE trial data resulted in an early change in the management of patients with AF at these 2 institutions with a shift in practice towards a rate control strategy.

9:00 a.m.

875-3

Suppression of Paroxysmal Atrial Tachyarrhythmias: Results of the SOPAT Trial
Monica Patten, Renke Maas, Bernd Lüderitz, Frank Sonntag, R. Hatala, M. Dluzniewski, G. Opolski, Thomas Meinertz, University Hospital Hamburg, Eppendorf, Hamburg, Germany

SOPAT is a prospective, double-blind, randomized trial to answer the following questions: 1. What is the average rate of spontaneous events of symptomatic atrial fibrillation (sAF)? 2. Does treatment with sotalol or quinidine + verapamil significantly reduce the recurrence rate of sAF? 3. How safe are these drugs?

Over 60 months 1033 pts. (mean age 60 yrs, 63% male, 12% heart failure, presence of 1 or more cardiovascular risk factors, 55% were asymptomatic.) were enrolled in the study. During the one year follow-up period sAF was observed in 171 centers in Germany, Poland and the Slovak Republic. Pts. were randomized to either 160 mg sotalol tid (262 pts.), 160 mg quinidine + 80 mg verapamil (Q+V) tid (263 pts.), Q+V bid (256 pts.) or placebo (252 pts.). Pts. received an ECG recorder (RhythmCardII, Intromed) to record one 1-min ECG daily and in case of symptoms. ECGs were transmitted by telephone to a central analysis unit together with pts. symptoms. The primary endpoint was defined as the time to first recurrence of sAF or study discontinuation. Secondary endpoint was the number of days with AF. During the one year follow-up period 26260 Tele-ECGs were transmitted and analysed.

The mean follow-up period was 233 ± 152 d. Premature study termination was highest in the placebo group with 59% vs. 41% under Q+V tid, and 42% under Q+V bid and sotalol. Regarding the primary endpoint all active therapies were superior to placebo and equivalent to each other. A total of 756 pts. reached the primary endpoint within 106 ± 9 d (mean ± SEM) under placebo, vs. Q+V tid: 150 ± 10 d (p = 0.0061), vs. Q+V bid: 149 ± 11 d (p = 0.0061), vs. Sotalol: 146 ± 9 d (p = 0.0007). Burden of sAF, determined as the relative number of days with sAF, was significantly reduced in all treatment groups compared to placebo (mean ± SD: 6.1 ± 13.0s, Q+V tid (3.4 ± 12, p<0.0001), Q+V bid (4.5 ± 12.3, p<0.008), and Sotalol (2.9 ± 6.5, p=0.026). A total of 6 deaths, 18 syncopes, and 1 ventricular tachycardia occurred with a comparable risk profile for all treatment groups.

In conclusion, treatment with Q+V is equivalent to sotalol in reducing the recurrence rate of symptomatic AF with a low risk of life-threatening events in pts. with lone AF or minimal cardiovascular risk. However, the long term risk of cerebral embolism under this new treatment is unknown. The aim of the study was to evaluate the long-term risk of cerebral embolism by serial cerebral MRI scanning.

Methods: 20 Patients with contraindications to warfarin or bleeding complications under oral anticoagulation were enrolled in the study. Serial neurological and echocardiographic examinations were undertaken prior to and during the procedure and in addition at 1 month, 3 months, 6 and 12 months. Cerebral MRI including diffusion weighted sequences was performed prior to the procedure, 48 hours after and 6 and 12 months after the procedure to assess for cerebral microembolism.

Results: Cerebral MRI performed prior to the occlusion procedure detected the presence of former cerebral embolism in 8 out of the 20 patients. Follow-up MRI studies excluded the presence of new cerebral microembolism in all patients. TTE and TEE examinations did not reveal de novo thrombus formation in the LA or thrombotic apsitions on the surface of the occlusion device.

Conclusions: Long term follow-up of patients with occlusion of the left atrial appendage did not reveal cerebral thromboembolism on serial cerebral MRI. Percutaneous left atrial appendage occlusion is an alternative treatment in patients at high risk of thromboembolism and contraindications to oral anticoagulation therapy.

9:30 a.m.

875-5

Randomized Trial of Two Antiarrhythmic Agents (Amiodarone and Sotalol) in Patients With Atrial Fibrillation for Whom Direct Current Cardioversion Is Planned
Kuradian Vissayalakshmi, Michael J. Stewart, James A. Hall, Adrian Davies, Mark A. de Belder, The James Cook University Hospital, Middlesbrough, United Kingdom

Anti-arrhythmic agents enhance maintenance of sinus rhythm (SR) following direct current cardioversion (DCC) for atrial fibrillation (AF) but there are few comparative trials. Aims: (1) To establish whether taking amiodarone or sotalol (at standard clinical doses) is better at achieving chemical cardioversion within the 6 weeks prior to planned DCC, and (2) to establish whether DCC is more likely to be successful on an anti-arrhythmic agent and (3) to establish whether patients successfully cardioverted to SR are more likely to stay in SR over 6 months if taking a drug and if so to establish whether one agent is better than the other.

Methods: Randomised, prospective, non-blinded, controlled study of treatment with either amiodarone, sotalol or no anti-arrhythmic agent to start 6 weeks prior to DCC, and treatment to continue for a further 6 months. Patients with time of onset of AF within the last 1 year were included. 94 patients were enrolled in the study (nil group n=31, sotalol n=36 and amiodarone n=27). Follow-up visits were at 6 weeks and 6 months post DCC.

Results: A total of 7 (25%) patients in the amiodarone group (A), 7 (19%) patients in the sotalol group (S) were chemically cardioverted to SR, compared to none (0%) in the no anti-arrhythmic group (N) (p=0.002 (AvN), 0.01 (SvN), 0.5 (AvS) respectively). A total of 26/29 (90%) patients in the sotalol group were successfully cardioverted to SR compared to 15/20 (75%) patients in the amiodarone group and 23/31 (74%) patients in the no anti-arrhythmic group (p=0.03 (SvA), 0.05 (SvN), 0.9 (AvN) respectively). At 6 month review 17 (62%) patients in the amiodarone group were in SR compared to 14 (38%) patients in sotalol group and only 5 (16%) patients in the no anti-arrhythmic group (p=0.05 (AvS), <0.05 (AvN) respectively). Intention to treat and actually treated analysis gave similar results.

Conclusion: Treatment with either amiodarone or sotalol for 6 weeks had equal efficacy in achieving chemical cardioversion before planned DCC. Sotalol significantly increased the chance of DCC producing SR. After successful cardioversion, amiodarone significantly reduced the rate of reversion to AF and increased the chance of being in SR at 6 months

9:45 a.m.

875-6

Early Recurrence of Arrhythmia Is Common in Patients Taking Amiodarone or Type IC Agents for Treatment of Atrial Fibrillation or Atrial Flutter
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Background: Amiodarone use for the prevention of recurrent atrial fibrillation or flutter requires drug loading over several weeks. The rate of recurrent arrhythmia during amiodarone loading has not been investigated. We compared the rates of recurrent arrhythmia in patients treated with amiodarone and type IC agents, which do not require drug loading.

Methods: We prospectively monitored a cohort of patients with ambulatory loop recorders during outpatient drug loading after spontaneous or electrical cardioversion to sinus rhythm.

Results: The study cohort comprised 339 patients who were treated with amiodarone (212), propafenone (64) or flecainide (63). Patients taking amiodarone were older (74 ± 11 vs. 59 ± 12, p <0.001) and more likely to have left ventricular dysfunction (80 [39%] vs. 6 [7%], p <0.001). Arrhythmia recurred in 106 (31.3%) and was persistent in 44 (13.0%).

Conclusion: Recurrent arrhythmia is common and frequently asymptomatic during drug loading with both amiodarone and type IC agents but is usually not persistent. The incidence of recurrent arrhythmia during drug loading is much less with amiodarone compared to type IC agents.