Internal atrial defibrillation (IAD) is an effective tool for termination of atrial fibrillation (AF) during electrophysiological procedures. Moreover, this technique can be used to unmask a consistent ectopic focus as trigger for paroxysmal AF. Internal atrial defibrillation (IAD) was introduced by a superior approach. The distal set of 10 ring electrodes (anode, platinum/iridium, 6 cm length) was placed along the right atrial free wall. Monophasic shocks were synchronized to the R-wave and delivered from an external defibrillator via a switchbox. In case of failure shock polarity was falling, nor serious bradycardia during the monitoring time (2 hours in ICU), as you can see in table 1.

Results: 22 selected pts (12 men/10 female, mean age 66±3 years) with a history of known coronary heart disease (CHD), underwent an outpatient cardiac procedure and they appear AF with a rapid ventricular response (HR 140±10 bpm). The mean systolic blood pressure was 115±10 mmHg. The pts received with a consequence iv infusion of D (0,25 mg/kg bolus administration, followed by infusion of 100 mg) or iv infusion of A (4 mg/kg rapid iv infusion, followed by infusion of about 400 mg).

Results: We observed relatively rapid control of ventricular response of AF with both above drugs. There were neither serious problems in blood pressure falling, nor serious bradycardia during the monitoring time (2 hours in ICU), as you can see in table 1.

Conclusions: D and A are effective and safe drugs for the management of rapid ventricular response of AF in CHD pts during an out cardiac surgery.

**P-297** INTERNAL ATRIAL Defibrillation and Early Reinitiation of Atrial Fibrillation Guiding Ablation of Focal Atrial Fibrillation

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Internal atrial defibrillation (IAD) is an effective tool for termination of atrial fibrillation (AF) during electrophysiological procedures. Moreover, this technique can be used to unmask a consistent ectopic focus as trigger for paroxysmal AF following IAD. Early reinitiation of atrial fibrillation (ERAF) may be helpful for identification of an arrhythmogenic pulmonary vein (PV). Methods: A laminar Response™ CV Catheter (7F, 65 cm, DAIG) was introduced by a superior approach. The distal set of 10 ring electrodes (anode, spacing 2.8-2.5mm) was positioned in the coronary sinus, the proximal coronary (cathode, platinum/iridium, 6 cm length) was placed along the right atrial free wall. Monophasic shocks were synchronized to the R-wave and delivered from an external defibrillator via a switchbox. In case of failure shock polarity was falling, nor serious bradycardia during the monitoring time (2 hours in ICU), as you can see in table 1.

Results: A total of 34 IADs (range 4-16) were delivered after adrenergic stimulation or rapid atrial pacing in three male patients (mean age 59 y). 23 shocks (68%) resulted in successful internal cardioversion with a mean effective energy of 16±3,7J (range 7-30 J). ERAF was triggered reproducibly by focal atrial ectopic activity 17 times (74%), mean time to reinitiation was 30±20,7 sec (range 5-65 sec). After identification of the arrhythmogenic PV segmental ablation was guided by centrifugal PV mapping in order to disconnect PV potentials completely. In average, 15 RF-impulses were delivered to one of the superior PVS. Favorable clinical outcome suggested that isolation of all four PVS may not be necessary in highly selected cases for long-term success.

Conclusion: (1) IAD may be useful to guide limited ablation of paroxysmal AF secondary to a focal mechanism arising from a single vein. (2) IAD is not able to suppress focal atrial activity. Successful ablation is linked to the disappearance of ERAF. (3) Despite considerable limitations, this selective approach may help reducing the serious risks of more extensive ablation in younger patients.

**P-298** COMPARISON OF THREE DIMENSIONAL AND BIATRIAL MAPPING OF SPONTANEOUS ATRIAL FIBRILLATION IN PATIENTS WITH AND WITHOUT CARDIOVASCULAR DISEASE

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We evaluated the mechanisms of initiation of spontaneous atrial fibrillation (AF) in 50 pts (mean age 63±11 yrs) with refriatory AF and compared pts with cardiovascular (CV) disease (Group 1 = 39 pts) to pts without CV disease (Group 2 = 11 pts).

Methods: Spontaneous atrial premature beats (APBs) and atrial tachyarrhythmias (ATs) were mapped by simultaneous right (RA) and left (LA) catheter mapping combined with 3-dimensional non-contact mapping (NCM) of the right atrium (RA). Regional origin was classified as superior LA or pulmonary vein (SLA), infero-lateral LA, proximal coronary sinus, sepal, para-Hisian, lateral RA, posterior RA, or superior vena cava.

Results: 35 (60%) GP 1 pts and 10 (91%) GP 2 pts demonstrated APBs (nons). Regional distribution of APBs in GP 1 (RA=9, LA=4, Both)=12 and GP 2 (RA=5, LA=2, Both)=3 was similar. Multiple triggers arising in different atria occurred in 12 (34%) of GP 1 pts and 3 (30%) of GP 2 pts. 25 pts (64%) in Gr. 1 and 9 pts (82%) in Gr. 2 had ATs. Regional distribution of ATs was more extensive in GP 1 (RA=14, LA=5, Both=6) compared to GP 2 (RA=5, LA=4). ATs in both RA & LA (biatrial) were observed only in Gr. 1.

Conclusions: 1. In pts without CV disease, only SLA tachycardias & RA flutter were observed whereas a wider range of AT types is seen in CV disease. With similar trigger profiles, substrate disparities may exist in the 2 groups. 2. Regional ablative interventions limited to specific SLA and RA locations are more likely to be effective in pts without CV disease. More extensive compartmentalization procedures may be preferable in pts with CV disease.

**P-299** MANAGEMENT OF RAPID RATE ATRIAL FIBRILLATION IN NON CARDIAC SURGERY PATIENTS

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The aim of this study was to evaluate and compare the efficacy and the safety of two common anti-arrhythmic agents (diltiazem – D, amiodarone – A) in the management of a rapid rate atrial fibrillation (AF) in non cardiac surgery patients (pts).

Methods: 22 selected pts (12 men/10 female, mean age 66±3 years) with a history of known coronary heart disease (CHD), underwent an outpatient cardiac procedure and they appear AF with a rapid ventricular response (HR 140±10 bpm). The mean systolic blood pressure was 115±10 mmHg. The pts received with a consequence iv infusion of D (0,25 mg/kg bolus administration, followed by infusion of 100 mg) or iv infusion of A (4 mg/kg rapid iv infusion, followed by infusion of about 400 mg).

Results: We observed relatively rapid control of ventricular response of AF with both above drugs. There were neither serious problems in blood pressure falling, nor serious bradycardia during the monitoring time (2 hours in ICU), as you can see in table 1.

Conclusions: D and A are effective and safe drugs for the management of rapid ventricular response of AF in CHD pts during an out cardiac surgery.

**P-300** DISABILITY AND MORTALITY AFTER STROKE IN PATIENTS WITH ATRIAL FIBRILLATION

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Purpose: One third of patients with acute stroke have atrial fibrillation (AF). Embolism from the heart may be associated with greater cerebral infarctions than other types of stroke. In order to assess the clinical impact of stroke associated with AF, the distribution of stroke subtypes, the degree of neurological