

## 256

**Efficacy of biventricular cardiac resynchronization therapy in patients with heart failure and permanent atrial fibrillation**

Julien Delobelle [Orateur] Hugues Blangy  
ILCV Louis Mathieu, Cardiologie, Nancy, France

**Objectives:** A minority of studies have focused on cardiac resynchronization therapy in patients with permanent atrial fibrillation. Our goal is to evaluate this technique in these patients.

**Methods:** Our study included retrospectively 60 consecutive patients (age  $69.8 \pm 7.5$  yo, 50% of ischemic heart disease, LVEF  $0.26 \pm 0.06$ ) in permanent atrial fibrillation patients implanted between January 2005 and June 2010 at the University Hospital of Nancy with a system of bi-ventricular resynchronization (32 defibrillators and 28 pacemakers).

**Results:** After a mean follow up of  $20.7 \pm 13$  months functional improvement was observed in 57.6% of patients and a significant increase in LVEF of 5.7% ( $p=0.003$ ) was noticed. Fifty percent of patients were ablated of the His bundle and 80% of non-ablated patients had a preexistent complete atrio-ventricular block. For similar age and LVEF patients with a system of bi-ventricular resynchronization with a pacemaker die sooner than patients with a system of bi-ventricular resynchronization with a defibrillator ( $p=0.02$ ) and experience less functional improvement ( $p=0.03$ ). Finally we have found no difference in terms of underlying heart disease and procedure (primoinplantation or upgrading).

**Conclusions:** Biventricular resynchronization therapy improves symptoms and LVEF in patients with permanent atrial fibrillation if capture is permanent.

## 257

**Feasibility, safety and cost effectiveness of same-day discharge after common atrial flutter radiofrequency catheter ablation**

Alexandre Schatz [Orateur] Babe Bakouboula, Francois Bronner, Michel Chauvin  
Nouvel Hôpital Civil, Strasbourg, France

**Rationale:** Commonly performed during an overnight hospital stay, radiofrequency Catheter Ablation (RCA) of cavotricuspid isthmus is the curative treatment of common atrial flutter (FLA). The low complication rate of such procedures previously reported, points at their feasibility in same-day discharge patients.

**Objectives:** The present study aims at evaluating the feasibility and the safety of same day discharge RCA (ambulatory, Amb), and at examining the cost-effectiveness of RCA during same-day discharge or overnight hospital stay (OH) in french health care system.

**Methods:** 100 consecutive patients with FLA referred to the catheter laboratory for RCA were included in this prospective, monocenter study from July

2008 to October 2009 (OH:  $n=57$ ; Amb:  $n=43$ ). The economic approach was based on the analysis of hospital charges.

**Results:** The clinical characteristics (age, sex ratio, body mass index) were similar in the two subgroups except for the left ejection fraction. A 90% success rate assessed by bidirectional isthmus block (OH: 87.7% and Amb: 93%) was achieved by the procedure. 64% of the patients showed an atrial flutter pattern at the beginning of RCA among which 84% were presented a cavotricuspid isthmus-dependant mechanism. After a mean follow-up of 295 days, an ECG-documented FLA recurrence was evidenced in 8 patients (OH:  $n=5$ ; Amb:  $n=3$ ). No major vascular complication was noticed. We observed 5 minor local haematoma that did not delayed patient's discharge (OH:  $n=3$ ; Amb:  $n=2$ ). On the economic point of view and with respect to the health care quotation, the cost of the same day discharge appeared less expansive than that of the overnight hospital stay.

**Conclusion:** Ambulatory RCA is feasible, safe with a high success rate and few complications and may reduce the cost of medical care. The same-day discharge could be viewed as a medical alternative to hospitalization taking into account the management of the hospital accommodation capacities and patients' wishes.

## 258

**Nightmare regularity of ventricular tachycardia RR intervals in ICD treated patients**

Athanasios G Manolis [Orateur], Kostas Kouvelas, George Nikitas, George Manolis  
Hellenic Red Cross Hospital of Athens, Cardiology, Athens, Greece

**Introduction:** Ventricular tachycardia cycle length (VTCL) is usually stabilized after a few cycles from its onset.

The aim of the study was to evaluate the possible existence of a nightmare modulation of VTCL stability in ICD recipients suffered from DCM, low LVEF and clinical episodes of VT.

**Method:** We retrospectively evaluated 15 pts with VT episodes occurred both at day and night time, treated by ICD. In a FU period of  $5 \pm 3$  years, we studied 84 VT episodes (60 at the day and 24 at the night time). As an index of VTCL stability we considered the coefficient of variance ( $CV=SD/Mean\ RR \times 100$ ) of the first 10 consecutive RR intervals stored in the ICD device during day and night time.

**Results:** The mean VTCL was  $340 \pm 29$  ms and  $352 \pm 45$  ms ( $p=NS$ ) during day and night time, respectively. The mean CVRR was  $2.83 \pm 0.52$  and  $3.36 \pm 0.68$  ( $p=0.017$ ) during day and night time, respectively.

**Conclusions:** The VTCL is less stable during night compared to the day time, in pts with DCM. A possible explanation is that, the nightmare alteration of the sympathovagal balance modifies the electrophysiological properties of the arrhythmogenic substrate. The clinical significance of this study is towards programming the detection parameters of the ICD (e.g. stability criterion), as well as programming the schemes of antitachycardia pacing.