

# NO NEED FOR COLD FEET

## Efficacy of cryoablation versus other ablation techniques

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### 1. INTRODUCTION

- Atrial fibrillation (AF) ablation procedures are increasing.
- One-shot techniques for AF ablation (**cryoablation**), have proved to **perform pulmonary vein isolation (PVI) faster** than the traditional point-to-point (PtP) ablation with irrigated catheter and 3D electroanatomic mapping.
- Data on the efficacy and safety profiles of cryoablation is lacking.

### 2. AIM

To evaluate the efficacy and safety profile of cryoablation and compare it with other AF ablation techniques as PVAC and PtP.

### 3. METHODS

Single center study of AF patients refractory to antiarrhythmic therapy who performed 1<sup>st</sup> AF ablation procedure.

**Strategy:** PVI (cryoablation, PtP or PVAC), and ablation of the cavo-tricuspid if history of flutter.

Patients were monitored with Holter/7-day event loop recorder (3, 6, 12 months and annually up to 5 years).

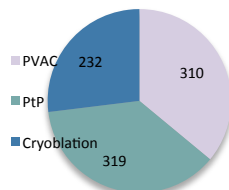
**Success:** assessed from the 90th day after ablation, with the absence of recurrences of any sustained atrial arrhythmias (>30 sec).

**Statistic analysis:** Cox regression and Kaplan-Meier survival curves were used to compare the success of ablation.

### 4. RESULTS

	Female sex	Mean age	Paroxysmal AF
PtP	35.4%	58.03 ± 9	34,2%
PVAC	30%	58.83 ± 8	35,3%
Cryoablation	31,9%	58.57±11	30,5%

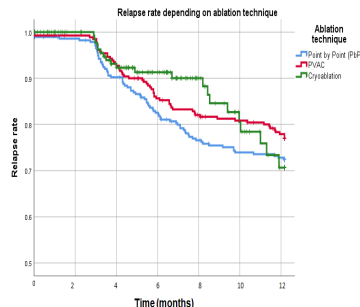
Table 1: Baseline characteristics of patients submitted to ablation



Graphic 1: Ablation techniques

- PVAC group:** higher prevalence of structural cardiopathy ( $p= 0.013$ ), and dyslipidemia ( $p=0.021$ )
- Cryoablation group:** higher prevalence of hypertension ( $p=0.013$ )

•Better results with cryoablation in paroxysmal AF

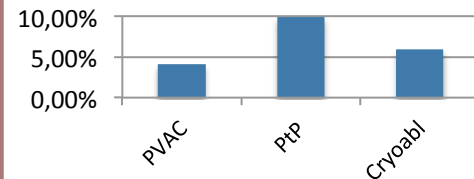


Graphic 2: Relapse rate depending on ablation technique

- No differences in the rate of supraventricular tachycardia (SVT) relapse at 3th year, when comparing the 3 techniques ( $p=0.313$ )**

### 4. RESULTS

Significant differences ( $p=0.018$ ) between the rate of post-procedure complications



Graphic 3: Complications of AF ablation

- Cardiac tamponade:** the most frequent complication of PtP procedure (3.4%,  $n=11$ ); only one after cryoablation (0.4%,  $n=1$ ).

### 5. CONCLUSION

- Cryoablation is a safe and effective procedure, with similar relapse rates at 3 years as the other techniques.**
- Cryoablation can represent an added value in AF ablation with a better safety profile than the PtP ablation technique.**