

DUTY-CYCLED CIRCULAR MULTI-POLAR CATHETER vs CONVENTIONAL CATHETER POINT-TO-POINT RADIOFREQUENCY ABLATION

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INTRODUCTION

- Duty-cycled circular multi-pole catheter PVAC allows linear application of radiofrequency energy, producing circumferential lesions.
- A simpler and faster ablation in patients with favorable anatomy.

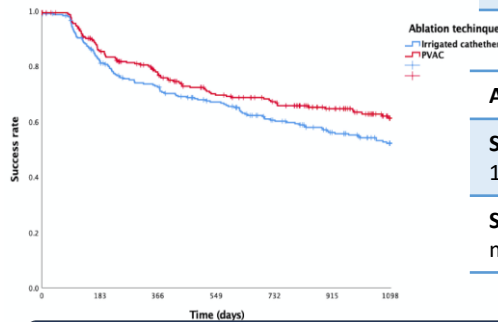
PURPOSE

- Evaluate the safety and efficacy of ablation with PVAC and compare it with the conventional technique (TCv, point-to-point with irrigated catheter).

METHODS

Single-center retrospective study of consecutive AF patients (pts) refractory to antiarrhythmic therapy, submitted to ablation with PVAC or TCv. Monitoring: 7-day event recorder at 3, 6 and 12 months and annually from the 2nd year. Success: AF-free survival or any maintained supraventricular tachycardia.

629 patients
Sex: 67.2% males
Age: 60 ± 12 years
Mean follow-up: 1224 days



RESULTS

	PVAC (310)	TCv (319)	p
Complication rate	4.1%	9.9%	0.006
hemopericardium rate	0%	3.4%	0.01
stroke	1%	0.9%	0.972
Procedure duration (min)	120 (90-155)	225 (180-250)	<0.001
Fluoroscopy (min)	20 (12-29)	25.5 (14.0-35.6)	<0.001
Acute success rate	99.7%	99	NS
Success rate 36months – 1st ablation	66.4%	56.7%	0.56
Success rate 36months – multiple procedures	85.3%	83.5%	0.49

CONCLUSIONS

The multipolar PVAC catheter can represent an added value in AF ablation, making the procedure simpler and safer ensuring similar efficacy to the conventional technique.