

Initial Experience with Very High-Power Short Duration Ablation for Atrial Fibrillation

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Background:

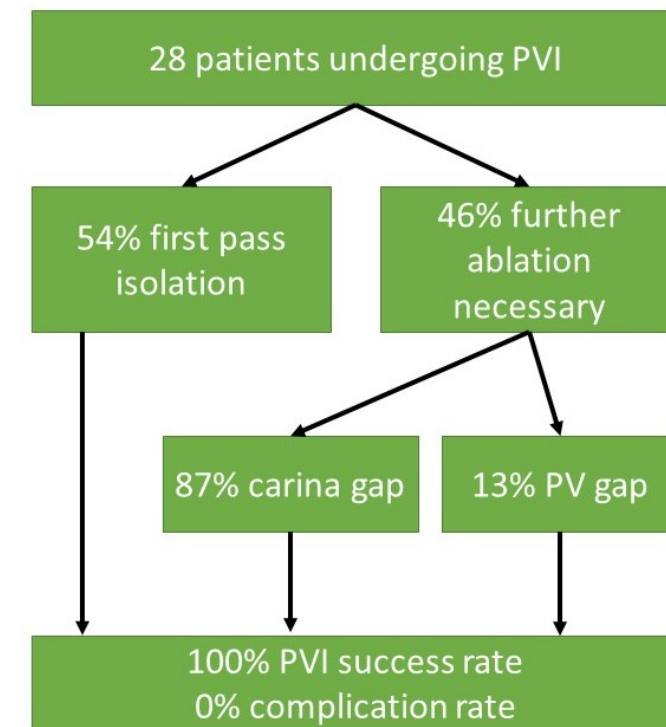
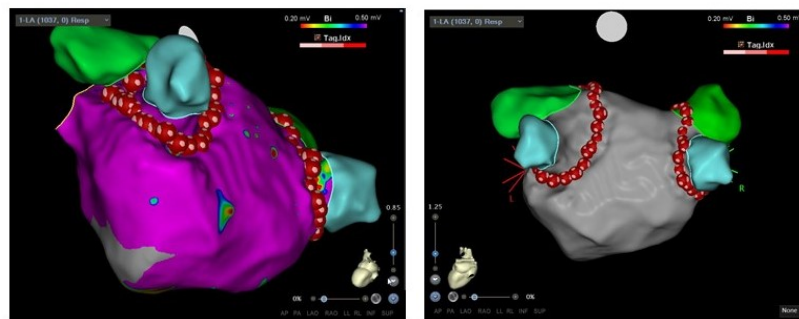
Catheter ablation of atrial fibrillation (AF) is an established therapy for patients with symptomatic paroxysmal (PAF) and persistent AF (persAF). Novel catheters using thermocouples to regulate irrigation during ablation allow safe radiofrequency application with very high power during pulmonary vein isolation (PVI). Real life procedural data using these novel technologies is scarce.

Methods:

We report a single centre experience of the first 28 consecutive patients undergoing PVI using QMODE+ (90W, 4s) by three different operators. Target inter-lesion distance was 6mm on the posterior wall and 4-5mm on the anterior wall. Pulmonary vein entrance and exit block were checked after 20min waiting time. In case of documented typical right atrial flutter, ablation of the cavotricuspid isthmus (CTI) was performed in the same session using the CLOSE protocol (target ablation index 500, inter-lesion distance ≤ 6 mm).

Results:

n	28
age	61 \pm 19
female	32%
CHADS-VASc-Score	2 (0-5)
AF type	paroxysmal: 50% persistent: 43% long standing persistent: 7%
CTI ablation	36%
first pass isolation rate	54%
skin-to-skin procedure time	1h 12min (PVI only) 1h 39min (PVI+CTI)
RF time	4min 32s
procedure related complications	0%



Conclusion:

Very high-power short duration ablation using QMODE+ is safe and allows quick PVI. However, further ablation of the carina is often necessary which might be overcome by peanut-shaped ablation lines.

Conflict of interest

The authors declare, that they have no conflict of interest.