Mid-term outcome after ablation of paroxysmal and persistent atrial fibrillation using the CLOSE protocol

Gallob F., Rohrer U., Jenny D., Manninger M., Zweiker D., Bisping E., Lercher P., Prenner G., Sereinigg M., Geczy T., Pratl B., Trummer S., Andrecs L., Zirlik A., Scherr D.

Medical University of Graz, Department of Medicine, Division of Cardiology

Background

Catheter ablation of atrial fibrillation is (AF) an established first line therapy for patients with symptomatic paroxysmal (PAF) and persistent AF (persAF). Standardized pulmonary vein isolations (PVI) using the CLOSE protocol have shown to increase procedural outcome in single centre studies. We aimed to describe mid-term outcome of CLOSE protocol guided ablation.

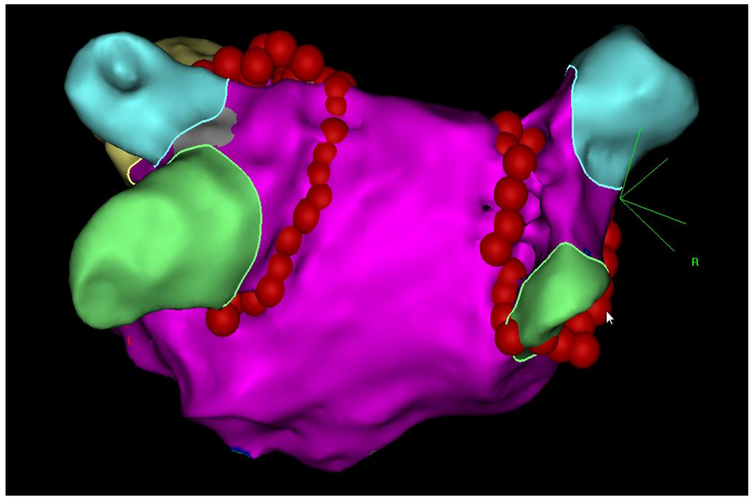

Figure 1: 3D map of PVI, posterior view on left atrium

Methods

324 consecutive patients (233 PAF and 91 persAF) underwent PVI using a contact force sensing catheter targeting an ILD ≤6 mm and AI ≥380 at the posterior and ≥500 at the anterior wall.

Results

I) Baseline characteristics

	PAF (n=233)	persAF (n=91)	P-value
Female patients	32%	24%	n.s.
Age	59±11	60±10	n.s.
LVEF	60±7 %	55±9 %	<0,001
BMI	27±4 kg/m²	28±5 kg/m²	<0,05
AF duration (months)	28 [2;444]	24 [2;204]	n.s.
CHA2DS2-Vasc	1 [0;6]	2 [0;6]	n.s.
HAS-BLED	1 [0;3]	1 [0;2]	n.s.

II) Success rates, Complications

	PAF (n=233)	persAF (n=91)	P-value
Primary success rate	100%	100%	n.s.
Arrhythmia free	86% (n=201)	86% (n=78)	n.s.
Complications	0	0	n.s.

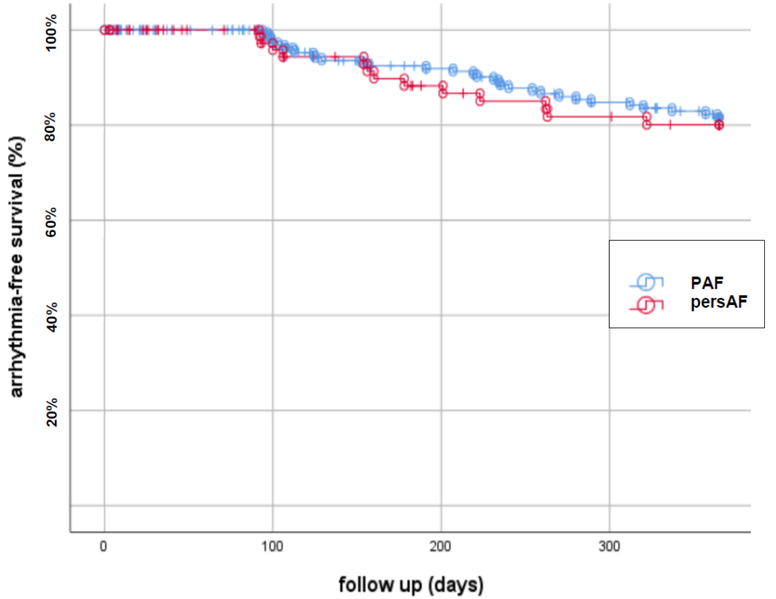

Table 1: Arrhythmia free survival of PAF versus persAF

Conclusion

Strict application of criteria for contiguity and ablation index using the CLOSE protocol is safe and results in a high success rate after PVI. A randomized controlled multicentre trial is needed to compare outcome to conventional PVI approaches.

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

Medical University of Graz