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Postervorträge - Vorhofflimmerablation

P1515 - Efficacy of pulmonary vein isolation by cryoballoon ablation in patients with paroxysmal atrial fibrillation

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Aim: Radiofrequency ablation of pulmonary veins (PV) emerged as an effective treatment for patients with paroxysmal atrial fibrillation (AF). In terms of safety cryoenergy has substantial advantages compared with radiofrequency. A new cryoenergy balloon catheter has recently been developed to make AF ablation shorter and safer. Thus, we performed a study to test the 6 months efficacy and safety of this new device for ablation of paroxysmal AF.

Methods: 21 patients with highly-symptomatic paroxysmal AF, normal left atrial size, with frequent episodes of AF were included. All PVs were targeted during cryoballoon ablation. Patients received 24h Holter ECGs and event recorder during routine follow-up after 1, 3 and 6 months.

Results: 81/85 (95%) PVs could be completely isolated with a single-balloon technique. Procedure time was 165±35min. and fluoroscopy time was 39±9min. After 6 months 86% of the patients were free of symptomatic AF. In 2 of 3 patients with recurrence of AF complete pulmonary vein isolation has initially not been achieved. After a second procedure (1,04 procedures per patient) 90% of the patients were free of symptomatic AF. 3 phrenic nerve palsies occurred during ablation of the right superior PV, two completely resolved after 6 and 9 months, one is still persisting after 2 months.

Conclusion: This is the first study reporting results of the new cryoballoon AF-ablation approach after 6 months. Cryoballoon ablation of pulmonary veins promises to be fast, safe and effective for patients with paroxysmal AF.