EARLY EXPERIENCE WITH CIRCUMFERENTIAL PULMONARY VEIN ABLATION FOR ATRIAL FIBRILLATION

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Objective This study is to report out early experience with circumferential pulmonary vein ablation (CPVA) for atrial fibrillation (AF).

Methods 22 patients with drug-refractory paroxysmal (n=14) and persistent (n=8) atrial fibrillation were enrolled. Circular
plus linear ablation lesions were created around the left and right pulmonary veins, between the two circles, and from the left circle to the mitral annulus, using the electroanatomic mapping system. In all patients, antiarrhythmic drug treatment was advised for the first 3 months after ablation.

**Results** 22 patients received the treatment of CPVA and all the designed ablation lines were accomplished in eight cases. The procedure duration and fluoroscopic time were (145±56) min and (25±8) min, respectively. Among 8 patients with persistent AF at the beginning of the procedure, 4 patients (50%) had sinus rhythm restoration during ablation. A vagal response was observed in 1 patients. Up to now, among them 18 patients (81.6%) were AF-free.

**Conclusion** CPVA using electroanatomic mapping, which is a purely anatomic approach, is technically feasible and safe. The main mechanisms of treatment may be atrial substrate modification.