Concomitant Ablation of Atrial Fibrillation: Are Results Associated With Surgeon's Experience?


Background and aim of the study
Atrial fibrillation (AF) ablation has become an effective concomitant procedure, which is increasingly used. We questioned whether results are related to surgeon's experience.

Methods
Patients (n = 141) with persistent AF (pAF) underwent concomitant left atrial (LA) endocardial ablation, performed by six surgeons. Follow-up (FU) was after 3, 6, and 12 months (mean 8 ± 4.1 months). FU was 97% complete. Results were analyzed according to surgeon's volume: >20 (group A, n = 85) and <20 (group B, n = 56) ablations per year.

Results
Baseline data of groups A and B were similar regarding age (70 ± 9.0 vs. 70 ± 8.1 years, n.s.), NYHA class (3.0 ± 0.84 vs. 2.9 ± 0.95, n.s.), AF duration (58 ± 83.4 vs. 63 ± 69.4 months, n.s.), LA diameter [50 ± 8.5 vs. 48 ± 7.3 mm, n.s.], and LVEF (50 ± 12.0 vs. 50 ± 13.0%, n.s.). Overall mortality (30 days) was 7.1% (six and four in groups A and B, n.s.). Ablation caused no injury or death. At FU sinus rhythm (SR) conversion rate was 68.1% in each group. Atrial contraction was demonstrated in 86.0 and 90.3% of SR patients in groups A and B (n.s.). NYHA functional class improved and was similar in both groups (A: 2.1 ± 0.56, B: 2.1 ± 0.48, n.s.). Compared to non-SR, SR was associated with better NYHA class (A: 2.0 ± 0.57 vs. 2.3 ± 0.46, p < 0.05; B: 2.0 ± 0.44 vs. 2.3 ± 0.47, p < 0.05) and smaller LA diameter (A: 42 ± 5.5 vs. 46 ± 8.4 mm, p < 0.05; B: 40 ± 5.5 vs. 45 ± 5.8 mm, p < 0.05).

Conclusions
We found no association between surgeon's experience and results of AF ablation, neither in SR conversion rate nor in morbidity and mortality.


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