

Efficacy of Concomitant Surgical Ablation of Atrial Fibrillation in Cases of Non-Mitral Pathology

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Background: Atrial fibrillation (AF) ablation is widely used as a concomitant procedure in mitral valve surgery, its effect on non-mitral patients remains controversial. We describe a comparison of surgical ablation using the same technique in mitral versus non-mitral patients.

Methods: Between 2004 and 2010 we performed AF ablation with the same technique using bipolar radiofrequency ablator and cryoprobe as a part of another cardiac surgery in 245 patients. 66 (27%) patients had ablation concomitant with non-mitral procedure, and 179 (73%) patients underwent ablation with mitral valve surgery. All patients were followed prospectively.

Results: There were two peri-operative deaths. At mean follow-up of 29±21 months. At 6 months, 1 and 5 years after ablation 94%, 91% and 70% patients were in sinus rhythm in mitral procedure group and 96%, 93% and 71% patients were in sinus in non-mitral group respectively. In regression analysis, non-mitral procedure did not turn to be a predictor of ablation failure. The only ablation failure risk factors was pre-operative permanent AF ($p=0.03$).

Conclusions: The efficacy of AF ablation proved similar in mitral and non-mitral patients, providing the similar rate of pre-operative permanent AF. Left atrial size and duration of preoperative AF did not influence ablation results.