Surgical Ablation of Lone Atrial Fibrillation

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Background: Surgical ablation of atrial fibrillation (AF) is widely used concomitant procedure with mitral and other surgical interventions. The place of AF surgery as a stand-alone procedure remains to be determined.

Methods: Between 2004 and 2011 authors performed surgical ablation of lone AF in 15 patients. Patients were 57 ± 8 years. 5 patients had permanent and 4 persistent atrial fibrillation. 3 patients had left atrial volume >200 cc.

Results: All patients were operated on with cardiopulmonary bypass. 9 patients underwent left atrial ablation and 6 biatrial ablation. 12 patients were operated on with bipolar radiofrequency and cryo ablators and 3 patients underwent cut-and-sew Maze procedure. One patient underwent right minithoracotomy and others midsternotomy. All patients survived. One patient suffered from stroke with complete neurologic recovery and another with right phrenic nerve paralysis. Both complications were related to performed or attempted minithoracotomy. Mean follow up was 29 months (range 1 -72 moths). Sinus rhythm was found at 11 patients of 13 (85%) at 6 month and 1year after the ablation. All patients with sinus rhythm were free from antiarrhythmic medications. Warfarin was discontinued after 6 months in all sinus rhythm patients. Conclusions: Surgical ablation of lone atrial fibrillation gives excellent freedom from AF, antiarrhythmic medications and Warfarin at mid-term follow up with acceptable operative morbidity.