

Heart Rhythm Early After Surgical Ablation of Atrial Fibrillation

Leonid Sternik, Alexander Kogan, David Luria, Michael Glikson, Ateret Malachy,
Shany Levin, Ehud Raanani

Department of Cardiac Surgery and Cardiology, Sheba Medical Center, Israel

Objective:

Surgical ablation of atrial fibrillation (AF) is currently the well established procedure, but several issues remain unsolved. One of these issues is a heart rhythm in the first days after surgical ablation.

Methods:

Between February 2004 and December 2009 we performed AF ablation with the same technique using bipolar radiofrequency ablator and cryoprobe as a part of another cardiac surgery in 212 patients. 88 patients were in sinus rhythm and 60 patients were in nodal rhythm during first 3 days after the procedure. Patients in both groups were 63 ± 11 years of age. 79 (39%) patients had permanent and 86 (42%) persistent atrial fibrillation. 25 (14%) had left atrial volume 200 cc. 75% of patients underwent mitral valve surgery. 79% had left atrial ablation and 21% biatrial ablation.

Results:

Mean follow up was 39 months (range 26-70 months). The follow up was performed by electrophysiologists and surgeons. Type and length of AF before surgery was the same in both groups, as left atrial size and left ventricle function. But patients with nodal rhythm were older ($p=0.002$) and were in lower functional class ($p=0.044$). At 6 months, 1, 3 and 5 years after ablation there was no statistical difference between groups in results of ablation concerning sinus rhythm, antiarrhythmic drugs use and anticoagulation.

Conclusions:

Patients in nodal rhythm during first 3 days after ablation were older and had lower functional class than patients in sinus rhythm, but results, concerning sinus rhythm, antiarrhythmic drugs use and anticoagulation, were similar in both groups.