Long-Term Results of Surgical Treatment of Atrial Fibrillation in Patients with Coronary Heart Disease: One Center Experience

Authors: Emil Sakharov, Alex Zotov, Ilkin Osmanov, Oleg Shelest, Aleksander Troitskiy, Robert Khabazov

Abstract: Objective: Since 2015, our center has been actively implementing methods of surgical correction of atrial fibrillation, in particular, in patients with coronary heart disease. The study presents a comparative analysis of the late postoperative period in patients with coronary artery bypass grafting and atrial fibrillation. Methods: The study included 150 patients with ischemic heart disease and atrial fibrillation for the period from 2015 to 2021. Patients were divided into 2 groups. The first group is represented by patients with ischemic heart disease and atrial fibrillation who underwent coronary bypass surgery and surgical correction of atrial fibrillation (N=50). The second group is represented by patients with ischemic heart disease and atrial fibrillation who underwent only myocardial revascularization (N=100). Patients were comparable in age, gender, and initial severity of the condition. Among the patients in group 1 there were 82% were men, while in the second group, their number was 75%. Among the patients of the first group, there were 36% with persistent atrial fibrillation, 20% with long-term persistent atrial fibrillation. In the second group, 10% with persistent atrial fibrillation and 17% with long-term persistent atrial fibrillation. Results: Average follow-up for groups 1 and 2 amounted to 47 months. There were no complications in group 1, such as bleeding and stroke. There was only 1 patient in group 1, who had died from cardiovascular disease. Freedom of atrial fibrillation was in 82% without AADs therapy. In group 2 there were 8 patients who had died from cardiovascular diseases and total freedom of atrial fibrillation was in 35% of patients, among which 42.8% had additional AADs therapy. Follow-up data are presented in Table 2. Progression of heart failure was observed in 3% in group 1 and 7% in group 2. Combined endpoints (recurrence of AF, stroke, progression of heart failure, myocardial infarction) were achieved in 16% in group 1 and 34% in group 2, respectively. Freedom from atrial fibrillation without antiarrhythmic therapy was 82% for group 1 and 35% for group 2. In the first group, there is a more pronounced decrease in heart failure rates. Deaths from cardiovascular causes were recorded in 2% for group 1 and 7% for group 2. Conclusion: Surgical treatment of atrial fibrillation helps to reduce adverse complications in the late postoperative period and contributes to the regression of heart failure.

Keywords: atrial fibrillation, coronary artery bypass grafting, ischaemic heart disease, heart failure **Conference Title:** ICCCS 2022: International Conference on Cardiology and Cardiac Surgery

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