

Objective. To assess the role of the improvement of potentially modifiable risk factors (RF) for the primary development of atrial fibrillation (AF) in comorbid patients with abdominal obesity (AO) and atrial premature complexes (APCs) with high risk of the development of this arrhythmia.

Materials and methods. The study included 489 patients with AO and APCs aged from 58 to 72 years (67,9 ± 0,7 years on average). After the examination, a 3-year prognostic time range for the development of AF was established for all patients. All study participants underwent the correction of potentially modifiable risk factors of AF (body mass, blood pressure, glucose and blood lipid levels, etc.) until target values have been reached, as well as smoking cessation, physical activity, etc. The study endpoint was the sinus rhythm preservation or AF manifestation.

Results. All study participants were divided into two groups. Group 1 included 278 (56,85 %) patients with insufficient RF correction, group 2 included 95 (19,43 %) patients who achieved target values of all potentially modifiable RFs of AF. Patients without RF correction were included into the control group. Studied groups did not differ significantly by sex, age, comorbid diseases, risk factors for the development of AF.

Patients from all groups did not differ significantly by the incidence of AF (paroxysmal and persistent forms) during the first year of follow-up, and had AF in 92.68 %, 85.29 % and 93.54 % of cases, respectively. Patients from group 2, who maintained the achieved target values of potentially modifiable RFs for 2 years or more, had 57.58 % and 14.29 % actual and predicted AF development ratio during the 2nd and 3rd year of observation, respectively.

Conclusion. The decrease of actual AF compared to predicted AF was observed only in patients with AO and APCs with complex correction of all potentially modifiable AF RFs who reached RF's target values and maintained them for over 2 years.