

## ABSTRACT

The most common cardiac arrhythmia is atrial fibrillation. In most patients it is not the only heart disease. The main goal of therapy is to maintain a normal heart rhythm. This can be achieved by restoring the sinus rhythm or by controlling the ventricle response. The anticoagulation therapy may be needed to reduce the risk of thromboembolism. Several arrhythmias, including atrial fibrillation can be treated by a catheter ablation. This method is highly successful in treatment of supraventricular arrhythmias. The long-term treatment of ventricular arrhythmias may require implantation of a cardioverter-defibrillator. Serious bradycardias are treated by permanent cardiac stimulation. The efficacy of pharmacologic treatment can be proved only in a clinical trial. Methods of preclinical identification of proarrhythmogenic substances are quite limited. Electrophysiology, drug effects, effects of genetic polymorphism can be studied mostly on models and preparations. Use of antiarrhythmics from groups IA and IB of the Vaughan Williams classification is now limited. Besides the beta blockers used in various indications, the antiarrhythmics from group III are most often used. It is likely that a new drug, dronedarone will be approved for treatment of atrial fibrillation. Positive effect on mortality, and in comparison to amiodarone also lower risk of adverse effects is expected. This work also contains the descriptions of the effects on heart of the following groups of medicaments: macrolide antibiotics, fluoroquinolone antibiotics, antimycotics, antimalarials, antidepressants, antipsychotics, anthracycline cytostatics, cocaine.