



EFFICIENCY AND SAFETY OF ELECTRIC CARDIOVERSION IN PERSISTENT FORM OF ATRIAL FIBRILLATION

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✓ Resume

Atrial fibrillation (AF) remains one of the most urgent problems of modern cardiology. This is the most common heart rhythm disorder with a frequency of 1-2% in the general population. The analysis is based on the conclusions about the safety and efficacy of electrical cardioversion against the background of a heart rate control strategy in patients with AF and adequate antithrombotic therapy. The most important threat to AF is thromboembolic complications, for example, the risk of stroke increases by 5 times. Thromboembolic complications associated with AF recur and often result in disability or death. Only adequate antithrombotic therapy can reduce mortality from AF.

Key words: electrical cardioversion, atrial fibrillation, antithrombotic therapy, heart rate.

ЭФФЕКТИВНОСТЬ И БЕЗОПАСНОСТЬ ЭЛЕКТРОКАРДИОВЕРСИИ ПРИ ПЕРСИСТЕНТНОЙ ФОРМЕ ФИБРИЛЛЯЦИИ ПРЕДСЕРДИЙ

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✓ Резюме

Фибрилляция предсердий (ФП) остается одной из самых актуальных проблем современной кардиологии. Это наиболее распространенное нарушение сердечного ритма с частотой 1-2% в общей популяции. Анализ основан на выводах о безопасности и эффективности электрической кардиоверсии на фоне стратегии контроля сердечного ритма у больных с ФП и адекватной анти тромботической терапии. Наиболее важной угрозой ФП являются тромбозмболические осложнения, например, риск инсульта увеличивается в 5 раз. Тромбозмболические осложнения, связанные с ФП, рецидивируют и часто приводят к инвалидности или смерти. И только адекватная анти тромботическая терапия может снизить смертность от ФП.

Ключевые слова: электрическая кардиоверсия, фибрилляция предсердий, анти тромботическая терапия, частота сердечных сокращений.

ATRIAL FIBRILLASYONNING PERSTENT SHAKLIDAGI ELEKTR KARDIOVERSIYANI SAMARALI VA XAVFSIZLIGI

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Atriyal fibrilatsiya (AF) zamonaviy kardiologiyaning eng dolzarb muammolaridan biri bo'lib qolmoqda. Bu yurak ritmining eng keng tarqalgan buzilishi bo'lib, uning umumiy populyatsiyada chastotasi 1-2% ni tashkil qiladi. Tahlil AF bilan og'rigan bemorlarda yurak urish tezligini nazorat qilish strategiyasini afzal ko'rish va etarli antitrombotik terapiya fonida elektr kardioversiyasining xavfsizligi va samaradorligi to'g'risidagi xulosalarga asoslanadi. AFning eng muhim tahdidi tromboembolik asoratlardir, masalan, insult xavfi 5 baravar ortadi. AF bilan bog'liq tromboembolik asoratlarda tez-tez takrorlanadi va ko'pincha nogironlik yoki o'limga olib keladi. Va faqat etarli antitrombotik terapiya AF bilan bog'liq o'limni kamaytirishi mumkin.

Kalit so'zlar: elektr kardioversiya, atriyal fibrilatsiya, antitrombotik terapiya, yurak urish tezligi.

Relevance

In patients with AF, the quality of life deteriorates and exercise tolerance decreases. The quality of life is significantly worse than in healthy people or patients with coronary heart disease and sinus rhythm [3]. Accordingly, the question arises about the tactics of managing a patient with AF: control of heart rate or restoration of sinus rhythm. The AFFIRM [2], RACE [3], and AF-CHF [4] studies showed comparable mortality with both strategies, but not everything is so clear in terms of the prognosis of chronic heart failure (CHF) and quality of life. As part of the RACE study, a worsening of the contractility of the left ventricle (LV) in patients on the background of rate control compared with patients for whom rhythm control tactics was chosen, moreover, cases of improvement in contractility were recorded in patients with restored sinus rhythm [5, 6]. The data of frequent visits of patients with late recurrences of AF for repeated cardioversion additionally indicate a better quality of life while maintaining sinus rhythm.

AF is the most common arrhythmia encountered in clinical practice and accounts for approximately one third of hospitalizations for cardiac arrhythmias. Cardiac dysfunction may result from myocardial ischemia, rhythm disturbances, valve dysfunction, pericardial damage, increased filling pressure or systemic resistance. The development of decompensation of chronic heart failure is facilitated by low adherence to treatment, fluid overload, infections, alcohol consumption.

Acute heart failure is usually accompanied by congestion of flood in the lungs, although in some patients the clinical picture is dominated by signs of decreases cardiac output and tissue hypoperfusion [8]. Ultrasound examination of the heart (EKHO), Doppler examination in M- and V-mode. The fraction of the left ventricle of the heart is FV left ventricular, and its final systolic measurement (FSM) and final diastolic measurement [9].

Frequently, AF can be detected by determining the heart rate and finding that heartbeats occur at irregular intervals. The final diagnosis is made by ECG signs: the absence of P waves, which are present at a normal rhythm of the heart and characterize electrical activity with atrial contraction. In this case, there are many waves f, the difference in the intervals R-R, by alteration of the ventricular complexes, which indicates atrial fibrillation.

AF is believed to be an independent risk factor for cardiovascular disease. Based on the material presented, international recommendations for the management of patients with AF were taken, as well as data from a number of modern studies and our own clinical experience in the treatment of arrhythmias. The article also deals with the issues of emergency treatment of AF and expresses the author's point of view on the results of a number of studies in this area of arrhythmology.

The tactics of treatment of emergency treatment of AF are based on the choice of the method of cardioversion: electrical cardioversion - electric pulse therapy or pharmacological cardioversion. The alternative to the cardioversion strategy is determined mainly by the severity and duration of the tachyarrhythmia, taking into account the technical capabilities of its implementation. At the same time, it is inappropriate to stop continuously recurrent AF paroxysms, as well as AF paroxysms (in the absence of urgent indications) in patients with a high risk of their recurrence. Moreover, short-term asymptomatic (low-symptom) AF attacks do not require cardioversion.

Our tactics for relieving AF is to choose the EIT method, antiarrhythmic drug and the method of its administration.

To begin with, we have to admit the imperfection of modern methods for assessing the effectiveness of antiarrhythmic therapy based on electrocardiographic criteria (with the exception of implantable loop recorders), as well as their low information content.

Objective: To evaluate the efficacy and safety of electrical cardioversion in persistent atrial fibrillation using adequate antithrombotic therapy.

Materials and Methods

To the Department of Cardiotherapeutic Resuscitation of the RCEMC of the Bukhara branch for a period of 24 months. (2018-2019) 150 patients with AF were admitted to decide on the possibility of

cardioversion. Considering the above clinical and echocardiographic criteria, cardioversion was performed in 100 of them (81.5%). EIT prevailed in the cardioversion technique: 100 versus 50 pharmacological (94.5 and 5.5%, respectively). As antithrombotic therapy for EIT, non-fractional heparin was used in 128 cases (60.9%) (with a further transition to oral anticoagulant), rivaroxaban in 14 cases (3.9%) and warfarin in 8 cases (2.2%). Based on the presented material, international recommendations for the management of patients with AF were taken, as well as data from a number of modern studies and our own clinical experience in the treatment of arrhythmias. The article also discusses the issues of emergency treatment of AF and expresses the author's point of view on the results of a number of studies in this area of arrhythmology.

Results and discussions

After EIT, AF relapses are divided into immediate (within a few minutes), there were 1 (1.0%); early (within 5 days) - 1 (1.0%) and late (within more than 5 days) - they were estimated approximately by repeated hospitalizations, 3 cases (3.7% per year). After EIT, 3 cases of latent sick sinus syndrome (SSS) were observed, which stopped on their own. During this period, there was 1 ischemic stroke and 1 episode of thromboembolism in the brachycephalic artery. All of these complications occurred during warfarin therapy, despite the fact that anticoagulation parameters were in the target range according to INR values in all cases of complications that occurred. In all of the above cases, therapy was not required to be discontinued, only the doses of drugs were reduced - rivaroxaban from 20 to 15 mg / day, in the case of warfarin, it was decided to reduce the target INR to 1.6-2.5 units. (considering that these values have a sufficient protective effect to be recommended, in particular, for elderly patients) [8].

Conclusions

1. Analysis of the obtained results showed high efficiency and safety of electrical cardioversion.
2. Considering the clinical experience, the results of the AFFIRM sub-analysis [3] and the international GARFIELD registry [7], it can be recommended to consider more widely the possibility of choosing a rhythm control strategy
3. The advantages of restoration and maintenance of normal sinus rhythm with the help of electropulse therapy are higher efficiency than with medical restoration when using adequate antithrombotic protection.

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