Abstract: P950

Comparison of the efficacy and safety of injectable propafenone and amiodarone for elimination of paroxysmal atrial fibrillation in patients without organic heart disease.

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Introduction: One of the common reasons for calling an ambulance is a paroxysmal form of atrial fibrillation (AF). The main purpose of the treatment in this case is the elimination of an arrhythmia attack. At the prehospital stage, medicament cardioversion is often performed, which should be safe and effective with regard of limited time.

Purpose: The purpose of the study to evaluate the efficacy and safety of antiarrhythmic drugs (AAD): propafenone and amiodarone in injectable forms for elimination the AF paroxysm in patients without organic heart disease.

Methods: The research is a multicenter (9 medical centers), prospective, comparative, open, randomized on the stage of the prehospital medical care. The main criterion for inclusion in the research is the presence of paroxysm of AF of any genesis, confirmed by electrocardiogram (ECG), in men and women over 18 years old without organic heart disease. The duration of paroxysm is up to 7 days while taking an anticoagulant or up to 48 hours without anticoagulant therapy. ECG was recorded before drug administration, then after 60 minutes, after 120 minutes, and after 24 hours. Blood pressure (BP) and heart rate (HR) were also measured.

Results: The study involved 388 patients, 228 (58.8%) men and 160 (41.2%) women with AF paroxysm, lasting on average 195 minutes (3.25 hours). The group 1 (120 patients) was treated with amiodarone, 5–7 mg / kg body weight, intravenous (IV) bolus. The group 2 (268 patients) was treated with propafenone 2 mg / kg body weight, IV bolus. There were no significant statistical differences in the main characteristics between groups. For 24 hours of observation in group 1, the efficiency was 61.7% (n=74), in group 2 – 77.6% (n=208), p=0.0012. The recovery time in group 1 is 110 minutes, in group 2 – 22 minutes, p=0.0001. The elimination of paroxysm of AF up to 60 minutes was 25.8% in group 1 (n=31), and 64.5% in group 2 (n=173). A number of side effects were observed. Hemodynamic disorders (decrease in BP with symptomatic disorders): in group 1 – 5.8% (n=7), in group 2 – 4.1% (n=11), p=0.12. Bradycardia (significant reduction in HR): in group 1 – 7.5% (n=9), in group 2 – 5.6% (n=15), p=0.21. Conversion of AF to atrial flutter: in group 1 – 1.7% (n=2), in group 2 – 3.3% (n=9), p=0.08. Last, the development of subjective complaints on the administration of the drug (pain in the region of the heart, headache, dizziness or dyspeptic symptoms): in group 1 – 1.7% (n=2), in group 2 – 2.2% (n=6), p=0.45. No significant elongation of the P-Q, QRS and Q-T intervals was observed.

Conclusion: As can be seen from the obtained results, AAD propafenone showed reliable efficacy in comparison with amiodarone in the elimination of paroxysmal AF with a satisfactory safety profile and a rapid effect.