

CORRECTION OF BLOOD RHEOLOGY DISTURBANCES IN PATIENT WITH PAROXYSMAL AND PERSISTENT ATRIAL FIBRILLATION AND IMPLANTED DDD OR OR CRT-P PACEMAKERS

Uzun D.Yu.

V.K. Gusak institute of urgent and recovery surgery NAMS of Ukraine, Donetsk

Blood rheology parameters was studied in patient with paroxysmal atrial fibrillation which appeared after implantation dual chambers pacemaker. Increase quantity aggregated and adhered thrombocytes. The use of liposomal preparation decrease blood thrombogenesis

Key words: atrial fibrillation, blood rheology, liposomal preparations

5-17% of elderly patients with an implanted dual chambers pacemaker begin paroxysmal atrial fibrillation (AF) to appear [2, 4], which defines the increase the risk of cardioembolic complications, which are based on the pathological processes of blood rheology [1, 3].

The aim of the study was to conduct correction rheological disorders in patients with paroxysmal AF form in the background triple implanted pacemaker.

Materials and methods

The study included 29 patients with an implanted bicameral pacemaker. The criteria for inclusion in the study: recurrence of AF in patients with implanted pacemaker with mode DDD, the absence of coronary artery disease, hypertension 1-2 stage, chronic heart failure I-III functional class to NYHA (1964), offset comorbidities.

Patients are divided into two are similar in age, sex, underlying disease, duration of AF group supervision. Measurements of platelet aggregation explored

using coagulometers «Hymacloot duo» (Germany). «Optic K-3002» (Poland) and laser alreometr «Biola» (Russia).

By the 1st group included 14 (48.3%) patients who received only standard antiarrhythmic, antihypertensive and antiplatelet therapy. The second group included 15 (51.7%) patients who were added to the same treatment liposomal form fosfatydilholin and quercetin, which have complex antiarrhythmic and antiplatelet properties. "Lipin" was administered at 0.5 g. to 50 ml. physiological sodium chloride solution intravenously in the morning, and "Lipoflavon" - intravenous at the evening (production association " Biolak ", Kharkov, Ukraine) for 10 days.

Statistical analysis of the material was performed by using software for statistical analysis «Statistica 6".

Results and discussion

Initial percentage of platelets that are able hyperaggregation group was $27,4 \pm 1,23$ and $27,7 \pm 1,40\%$ properly, which is statistically distinguishes them from similar parameters in relatively healthy people ($18,2 \pm 0,54\%$). After 10 days of treatment in the second study received statistically significant differences $25,6 \pm 1,15$ in the first and $17,3 \pm 1,22\%$ in the second group. The initial platelet count, which were in a state hyperadhesion was in the first group $62,0 \pm 1,75$, and the second - $63,6 \pm 2,80\%$, also statistically higher than the same period in healthy ($53,9 \pm 0,87\%$). The value of this parameter in the observation group after treatment was $58,9 \pm 2,34$ and $53,3 \pm 2,48\%$ properly. The number of platelets in hyperadhesion second group after treatment was statistically authentically by the initial results.

Conclusions

1. In patients with paroxysmal atrial fibrillation after bicameral pacemaker implantation formed complex rheological disorders manifested syndrome hiperadhesion - hyperaggregation platelets, which creates additional conditions (except for age, vascular stiffness, asymptomatic atheromatous process) for cardioembolic complications.

2. The inclusion of a comprehensive treatment program liposomal forms of fosfatydilholin and quercetin reduce danger thrombosis and can be seen as complementary preventive measures embolic complications of atrial fibrillation.

Literature

1. Atrial platelet reactivity in patients with atrial fibrillation / S. R. Willoughby, R. L. Roberts-Thomson, H. S. Lim et al. // Heart Rhythm. – 2010. – Vol. 7 (9). – P. 1178–1183.
2. Cannon C. Applying antithrombotic therapies to improve outcomes in patients with atrial fibrillation / C. Cannon, M. D. Ezekowitz, C. Granger // Am. J. Cardiol. – 2013. – Vol. 15, № 112 (4). – S3.
3. Gjesdal G. Does bipolar pacemaker current activate blood platelets? / G. Gjesdal, A. B. Hansen, A. Brandes // Pacing. clin electrophysiol. – 2009. – Vol. 32 (5). – P. 627–631.
4. Gouda P. Do anticoagulants or antiplatelet drugs have a role in treating heart failure in the absence of atrial fibrillation? / P. Gouda, J. A. Ezekowitz // Clin. Pharmacol. Ther. – 2013. – Vol. 94 (4). – P. 435–438.

КОРЕКЦІЯ ПОРУШЕНЬ РЕОЛОГІЇ КРОВІ ПРИ РЕЦИДИВУЮЧОМУ ПЕРЕБІГУ ФІБРИЛЯЦІЇ ПЕРЕДСЕРДЬ У ХВОРИХ З ІМПЛАНТОВАНИМ КАРДІОСТИМУЛЯТОРОМ У РЕЖИМІ DDD

Узун Д.Ю.

В роботі досліджено реологічні параметри крові у хворих на пароксизмальну форму фібриляції передсердь, що виникли після імплантації двокамерного кардіостимулятора. Встановлена збільшений вміст агрегованих і адгезованих тромбоцитів, а використання ліпосомальних препаратів зменшує тромбогенність крові.

Ключові слова: *фібриляція передсердь, реологія крові, ліпосомальні препарати.*

КОРРЕКЦИЯ НАРУШЕНИЙ РЕОЛОГИИ КРОВИ ПРИ РЕЦИДИВИРУЮЩЕМ ТЕЧЕНИИ ФИБРИЛЛЯЦИИ ПРЕДСЕРДИЙ У БОЛЬНЫХ С ИМПЛАНТИРОВАННЫМ КАРДИОСТИМУЛЯТОРОМ В РЕЖИМЕ DDD

Узун Д.Ю.

В работе исследованы реологические параметры крови у больных пароксизмальной формой фибрилляции предсердий, возникшие после имплантации двухкамерного кардиостимулятора. Установлено повышенное содержание агрегированных и адгезированных тромбоцитов, а использование липосомальных препаратов уменьшает тромбогенность крови.

Ключевые слова: *фибрилляция предсердий, реология крови, липосомальные препараты*