Impact Factor: 4.9

ISSN: 2181-0664
DOI: 10.26739/2181-0664
tadqiqot.uz/uzbek-medikal-journal

UZBEK MEDICAL JOURNAL

Special Issue 4

2021

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ
УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ | UZBEK MEDICAL JOURNAL
№SI-4 (2021) DOI http://dx.doi.org/10.26739/2181-0664-2021-SI-4

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МУНДАРИЖА / СОДЕРЖАНИЕ / CONTENT

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IMPROVEMENT OF TREATMENT OF ARRHYTHMIA IN PATIENTS WITH ACUTE CORONARY SYNDROME

http://dx.doi.org/10.26739/2181-0664-2021-SI-4-1

ABSTRACT

Arrhythmic complications have been studied in patients with acute coronary syndrome depending on the drugs used in cardiovascular disease. The study involved 110 patients with recurrent compartmental fibrillation of acute coronary syndrome. The difference between P wave and QT interval was studied in patients with left ventricular remodulation, constrictive and eccentric left ventricular hypertrophy. Efficacy of treatment with APF-inhibitors, angiotensin blockers, preductal and B-blockers in reducing the risk of developing ventricular arrhythmias and ventricular fibrillation.
Keywords: acute coronary syndrome, risk of arrhythmic complications, ventricular fibrillation, ventricular arrhythmias, coronary syndrome, arrhythmic complications, ventricular modulation, angiotensin blockers, preductal.

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СОВЕРШЕНСТВОВАНИЕ ЛЕЧЕНИЯ АРИТМИИ У ПАЦИЕНТОВ С ОСТРЫМ КОРОНАРНЫМ СИНДРОМОМ

АННОТАЦИЯ

Изучены аритмические осложнения у пациентов с острым коронарным синдромом в зависимости от лекарств, применяемых при сердечно-сосудистых заболеваниях. В исследовании приняли участие 110 пациентов с рецидивирующей компартментальной фибрилляцией при остром коронарном синдроме. Изучена разница между зубцом Р и интервалом QT у пациентов с ремодилизацией левого желудочка, констриктивной и эксцентрической гипертрофией левого желудочка. Показано, что эффективность лечения ингибиторами АПФ, блокаторами ангиотензина, предукталом и В-блокаторами снижает риск развития желудочковых аритмий и фибрилляции желудочков.

Ключевые слова: острый коронарный синдром, риск аритмических осложнений, фибрилляция желудочков, желудочковые аритмии, коронарный синдром, аритмические осложнения, желудочковая модуляция, блокаторы ангиотензина, предуктал.

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Respublika shoshilinch tibbiy
yordam ilmiy markazi, Buxoro filiali

O‘TKIR KORONAR SINDROMLI BEMORLARDA ARITMIYANI DAVOLASHNI TAKOMILLASHTIRISH

ANNOTATSIYA

O‘tkir koronar sindrom bilan og‘rigan bemorlarda aritmik asoratlar yurak-qon tomir kasalligida qo'llaniladigan dorilarga qarab o‘rganilgan. O‘rganish o‘tkir koronar sindromi davriy bo‘lmalarni fibrilasyon bilan 110 bemor ishtirok etdi. Chap qorincha modulyatsiyasi, konstriktiv va eksantrik chap qorincha gipertrofiyasi bo‘lgan bemorlarda R to‘lqini va QT oralig‘i o‘rtasidagi farq o‘rganildi. Qorincha aritmiyalari va qorincha fibrillatsiyasi rivojlanish xavfini kamaytirishda APF-ingibitorlari, angiotenzin blokerlari, preduktal va B-blokerlari bilan davolash samaradorligi.

Kalit so‘zlar: o‘tkir koronar sindrom, aritmik asoratlar xavfi, qorincha fibrillatsiyasi, qorincha aritmiyalari, koronar sindromi, aritmik asoratlar, qorincha modulyatsiyasi, angiotenzin blokerlari, preduktal.

INTRODUCTION: The role of acute coronary syndrome in left ventricular (LV) remodulation in patients with acute coronary syndrome is well studied. [1] .The main components of this process are hypertrophy and disruption of the geometric properties of the ventricles, the development of their systolic and diastolic dysfunction. Clinically, this is associated with the onset of heart failure, deterioration in quality of life in patients, and risk of sudden death. In recent years, the study of cardiac remodulation has shifted from tissue to cellular, from cellular to molecular levels. [2, 3].

According to the Framingham study, the maximum duration of the P wave measured on a standard ECG and the increase in variance may be predictors of remodulation of the left ventricle. Anisotropy of the myocardium and heterogeneity of the compartments occur. There will be conditions for the emergence of a re-entry mechanism and the re-emergence of atrial fibrillation (AF). left ventricle hypertrophy increases the risk of subfibrillation by 3-4 times. [4]. The independent prognostic significance of QT extension. His dispersion for torsade de pointes-type ventricular arrhythmias and ventricular fibrillation

The results of the study are presented . Despite a clear study of the problem, the authors emphasize the multifactorial nature of the pathogenesis of arrhythmias and conclude that, depending on the therapy, it is necessary to study the factors that indicate these processes. The data presented in the literature are not always accurate and probably require further study of treatment issues and the risk of arrhythmic complications in patients with acute coronary syndrome. [4-8]. The aim of the study was to reduce the risk of arrhythmias depending on the drugs used in cardiovascular disease used in patients with hypertension.

Materials and Methods: The study involved 110 patients. (average age 58.4 ± 8.6 years) Yes) From 2015 to 2018 he was examined and treated in the cardio resuscitation department. consisted of 62 patients without arterial hypertension and ventricular fibrillation. Depending on the type of myocardial remodulation, 3 comparison groups were formed from patients with arterial hypertension: 53 concentric left ventricular remodulation (LVR) with persistent ventricular fibrillation, heart failure, coronary heart disease, thyrotoxicosis, diabetes mellitus, WPW syndrome cerebrovascular diseases.During the follow-up period (24 months) the subclinics were recorded on electrocardiography when calling an ambulance in fibrillation attacks (on average 2-6 times a month). The duration of recurrent arrhythmias ranged from 2 to 12 hours. According to the class III

antiarrhythmic drugs, no groups of hypertensive patients were differentiated in the initial and prospective study. The patient was prescribed B-blockers, APF inhibitors, and angiotensin receptor blockers (AR) to control blood pressure. It is also prescribed preductively from 20 mg 3 times a day 3 times a day, 2 times a year (spring and autumn). In a prospective follow-up, the combined endpoint of the onset of arrhythmic complications was recorded in the ambulance call and paroxysmal fibrillation of the ventricles on the ECG, paired and grouped ventricular extrasystoles, tachyarrhythmias, and ventricular tachycardias. In 67.9% of patients, seizure fibrillation attacks were stopped in an outpatient setting, while 32.1% of patients required hospitalization because they could not stop the arrhythmia at home. Patients with cerebrovascular disease were excluded from the study.According to the prescribed class III antiarrhythmic drugs, the groups of hypertensive patients did not differ in the initial and prospective study. Patients in group 2 included 38 concentric left ventricular hypertrophies (LVG), and group 3 included men and women.32 were examined with eccentric left ventricular hypertrophy.

In one-dimensional (M) and two-dimensional (B) scanning modes. From the parasternal position along the longitudinal axis of L, the thickness of the interventricular septum , posterior left ventricular wall thickness , left ventricular end-diastolic size , and left ventricular end-systolic size were assessed in the M-mode.

For normal measurements, the final diastolic pressure is less than 5.2 cm, and the final systolic pressure is less than 4.3 cm [2]. normalized: Left ventricular myocardial mass and myocardial surface size and left ventricular myocardial mass index were calculated.

In patients with acute coronary syndrome, the left ventricular myocardial mass also did not exceed normal values, but the relative thickness of the left ventricle exceeded 0.45. They are included in the 1st comparison group. Patients with left ventricular hypertrophy were identified based on the criteria presented in [2]. Based on the criterion of relative thickness of myocardial walls in patients with left ventricular hypertrophy, comparison was performed with group 2 with left ventricular hypertrophy (greater than NQ -0.45) and group 3 with left ventricular eccentric hypertrophy (LVG) with NQ 0.45 of myocardial walls. less). On the background of sinus rhythm in the ECG apparatus was performed 3 times with the analysis of the P tooth and QT interval in 12 standard networks: initially after 12 and 24 months. The indices of the subunit complex were studied: Pmax and Pmin - the maximum and minimum duration of the P tooth (in milliseconds), measured in all directions with the detected P wave; Pdis is the wave dispersion calculated in the formula (in milliseconds): Pdis = Pmax - Pmin. Similarly, the QT interval was calculated: from the starting point of the QRS complex [P - from the transition point of the isoelectric line of the Q (R) segment to the Q (R) wave at the latest point of the T wave to the transition point of its isoelectric line - P tooth). Maximum (QTmax) and minimum (QTmin) values of interval duration (in milliseconds) were found. The Q - T variance (QTdis) (in milliseconds) was calculated using the following formula: QTdis = QTmax - QTmin [11]. Analysis of the data obtained was performed using a statistical software package.Using the Wilcoxon T-test for pairwise comparison, the indices were compared with the initial and prospective (after 12 and 24 months) outcomes. The differences are statistically significant at <0.05.

Discussions: Patients received the drug initially and prospectively. In the first year of follow-up, a small number of patients received concor, enalapril, and preductal routines (16.6, 12.8, and 33.3%, respectively). However, seizures of ventricular fibrillation and ventricular tachycardia continued, with 32.1% of cases calling for ambulance crews and hospitalization. years later, patients reported a decrease in arrhythmia attacks or a much easier relief from experiencing it.

The role of APF inhibitors, ARA, B-blockers, and preductals in the treatment of arrhythmic complications in patients with acute coronary syndrome is currently under active discussion, but data from different authors are not always the same. [14, 15], others - only atenolol [7], others point to the effectiveness of irbesartan. [8], the fourth - the effectiveness of valsartan and ramipril.

It is known that remodulation of the myocardium in patients with acute coronary syndrome is accompanied by changes in its bioelectrical activity. The authors suggest that the Pmax and Pdis indices can be used as non-invasive signs of left ventricular hypertrophy and left ventricular liastolic dysfunction. [17] There are a number of clinical studies proving the role of ventricular hypertrophy.

[1], on the other hand, the results of the Framingham study show that an increase in wall thickness of 4 mm increases the risk of compartmental fibrillation by 28%. [1].

The authors note that normalization of blood pressure in patients with acute coronary syndrome reduces the risk of developing fibrillation , and APF inhibitors not only improve the electromechanical properties of the myocardium, but also reduce Pmax, Pdis values [19]. The efficacy of APF inhibitors is associated with a decrease in the risk of arrhythmic complications by ventricular myocardial remodulation and a decrease in Pmax, Pdis, QTmax, and QTdis values. [14, 20, 21]. However, the development of ventricular fibrillation in hypertensive patients who have developed the process of electromechanical reconstruction of the ventricles and ventricles is correlated with an increase in the frequency of ventricular arrhythmias. Prolongation of the QT interval was found to be prognostically unfavorable. With QTmax greater than 450 ms, paroxysmal ventricular tachycardia, such as pirouette (torsade de pointes), may occur, in some cases leading to ventricular fibrillation. The change in QT interval reflects focal differences during ventricular reopolarization.

In our opinion, effective control of blood pressure prevents remodulation of not only the ventricular myocardium but also the ventricular myocardium and reduces the risk of arrhythmic complications in hypertensive patients.

Conclusion:

1. Prolonged use of V-blockers, APF-inhibitors (angiotensin-converting enzyme), angiotensin receptor blockers and preductal in patients with acute coronary syndrome reduces the risk of developing ventricular fibrillation and ventricular arrhythmias.
2. Low arrhythmic complications in patients with acute coronary syndrome and concentric hypertrophy of the left ventricle Ptishcha dispersion and QT dispersion can be shown on the ECG in patients with concentric left ventricular hypertrophy with 26.8 and 24.5 ms, respectively - 38.4 and Changes were observed at 27.5 ms, with eccentric left ventricular hypertrophy - 24.8 and 41.6 ms.
3. In most cases, the effect of the duration of prophylactic treatment with V-blockers, APF inhibitors, angiotensin receptors and preductal is pronounced in patients with left ventricular concentric remodulation and left ventricular hypertrophy.

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ISSN 2181-0664

Doi Journal 10.26739/2181-0664

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