



RESULTS OF EVALUATION OF CLINICAL AND INSTRUMENTAL FEATURES OF MYOCARDIAL INFARCTION IN PAROXYSMAL ATRIAL FIBRILLATION

Khasanjanova F.O.¹, Nazarova Z.Sh.², Isomiddinova Z.S.²

1. Samarkand State Medical University

2. Samarkand branch of the Republican Scientific Center for Emergency Medical Care, Samarkand, Uzbekistan

Article history:

Received: February 24th 2024

Accepted: March 26th 2024

Abstract:

In this scientific work, the clinical and instrumental features of the course of myocardial infarction in AF paroxysm were evaluated, thanks to the joint use of methods for evaluating troponin I, ECG, coronary angiography (CAG), transthoracic echocardiography. The study included 128 patients hospitalized in emergency departments No. 1 and 2 and cardiac intensive care units of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care. AF paroxysm can develop against the background of a more serious pathology, such as atherosclerotic damage to the coronary arteries or lead to secondary myocardial damage. The study of troponin levels in this group of patients seems justified.

Keywords: myocardial infarction, atrial fibrillation, troponin, coronary angiography, etc.

RELEVANCE

Atrial fibrillation (AF) is the most common cardiac arrhythmia among adults worldwide, despite the fact that the incidence rate increases by 15-20% in people over 80 years of age [2, 6]. There is a huge variety of clinical risk factors for AF that affect the course of this arrhythmia. The main risk factors are age, gender, presence of heart valve defects, obesity, sleep apnea, heart failure (HF) and arterial hypertension (AH) [1, 5]. It is believed that a significant increase in hemodynamic load on the left atrium during the development of acute left ventricular failure is the main factor contributing to the development of AF in myocardial infarction (MI) [3, 7].

Paroxysmal AF, which is characterized by a tendency to self-relief, varies in frequency and duration: from rare, rapidly passing episodes (from seconds to minutes) up to rare but prolonged (hours, days); frequent paroxysms can last from hours to days [4, 8, 11]. The persistent (stable) form of AF can last from 7 days to 1 year, and its relief is possible only with the help of pharmacological or electrical cardioversion [5, 9]. Thus, these forms of AF are heterogeneous in their manifestations and cannot be considered as a single violation. The prognosis also differs in different forms of paroxysmal AF [10, 12].

THE PURPOSE OF THE STUDY. To evaluate the clinical and instrumental features of the course of myocardial infarction (MI) in AF paroxysm, through the joint use of methods for evaluating troponin I, ECG,

coronary angiography (CAG), transthoracic echocardiography.

MATERIAL AND METHODS. The study included 128 patients hospitalized in emergency departments No. 1 and 2 and cardiac intensive care units of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care (SF RNCEMP). The study group included 64 patients with AF paroxysm and a significant increase in troponin levels (in accordance with the 4th universal definition of MI), whose average age was 69 ± 10.5 years. The control group consisted of 64 patients with AF paroxysm, with an average age of 70 years. All patients underwent clinical examination, ECG, Holter ECG, echocardiography (ECHO CG). The following factors were analyzed: diagnosis, chosen treatment tactics, antiarrhythmic drug (AAP) and its dose in accordance with the recommendations, the fact of hospitalization and its timing, oral anticoagulants (OAC).

RESULTS. Among all patients admitted with AF paroxysm, a significant increase in troponin levels was observed in 20% of cases. In the study group, 16 patients received a preliminary diagnosis of "Unstable angina pectoris", 13 — "AF paroxysm", 36 — "Acute MI". The number of patients diagnosed with Acute MI without ST segment elevation (STEMI) was 36 people, with a diagnosis of Acute MI with ST segment elevation (STEMI) — 29 people. According to the results of CAG, 56 patients (88%) had hemodynamically significant damage to the coronary bed, of which 12 patients had



a preliminary diagnosis of "AF paroxysm". Among 64 patients, according to CAG data, 8 had no significant coronary artery damage (STEMI 1 person, STEMI 7 people).

CONCLUSIONS. Taking into account the results obtained, it becomes obvious that AF paroxysm can develop against the background of a more serious pathology, such as atherosclerotic damage to the coronary arteries or lead to secondary myocardial damage. Thus, the study of troponin levels in this group of patients seems justified.

LIST OF LITERATURE:

1. Берестенникова, Л. Н., and Г. А. Чумакова. "Предикторы пароксизмальной формы тиреотоксической фибрилляции предсердий." *Кардиоваскулярная терапия и профилактика* 10.5 (2011): 63-67.
2. Боровков, Н. Н., et al. "Эффективность пропанорма в купировании пароксизмов фибрилляции предсердий." *Российский кардиологический журнал* 5 (2003): 65-67.
3. Дедов, Д., et al. "Пароксизмальная фибрилляция предсердий: суточная вариабельность сердечного ритма у мужчин и женщин." *Врач* 3 (2016): 59-61.
4. Низамов, Х. Ш., et al. "Оценить клинические и инструментальные особенности инфаркта миокарда при пароксизмальной форме фибрилляции предсердий." *Central Asian Journal of Medical and Natural Science* 4.5 (2023): 489-494.
5. Низамов, Х. Ш., Кушназаров, Р. С., Рахматуллаев, А. А., Джуракулова, Ф. Р., & Ярашева, З. Х. (2023). СРАВНИТЕЛЬНЫЙ АНАЛИЗ ЭФФЕКТИВНОСТИ ОРАЛЬНЫХ АНТИКОАГУЛЯНТОВ ПРИ НЕКЛАПАННОЙ ФОРМЕ ФИБРИЛЛЯЦИИ ПРЕДСЕРДИЙ. *European Journal of Interdisciplinary Research and Development*, 15, 244-247.
6. Раповец, В. А. "Пароксизмальная форма фибрилляции предсердий." (2011).
7. Саидов, М. А., et al. "Особенности линейных размеров левого и правого предсердия у больных с фибрилляцией предсердий на фоне артериальной гипертензии" *International Bulletin of Medical Sciences and Clinical Research*: 12.
8. Симонян, Алина Александровна, et al. "Прогрессирование пароксизмальной формы фибрилляции предсердий." *Медицинский альманах* 4 (44) (2016): 48-51.
9. Хасанжанова, Ф. О., et al. "Оценка Частоты Встречаемости Аритмий Сердца И Показателей Реполяризации Желудочков У Больных С Гипертоническим Кризом." *Central Asian Journal of Medical and Natural Science* 4.3 (2023): 455-460.
10. Хасанжанова, Ф. О., et al. "Течение клинических симптомов сердечной недостаточности у больных фибрилляцией предсердий с нестабильной стенокардией." *Молодежь и медицинская наука в XXI веке*. 2018.
11. Хасанжанова, Фарида Одыловна. "Клинические особенности фибрилляций предсердий при инфаркте миокарда различной локализации в условиях экстренной медицинской помощи" *Research Focus International Scientific Journal* 2.6 (2023): 331-335.
12. Яковенко, Т. В., et al. "Структура и динамика нозогенных психических реакции у больных с различными формами фибрилляции предсердий." *Вестник аритмологии* 44 (2006): 27-30.