MYOCARDIAL INFARCTION IN YOUNG WOMEN IN ANDIJAN

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Annotation.

Diagnosis of myocardial infarction (MI) in young people is a problem of doctors and patients due to low alertness, low frequency of myocardial infarction in this age group, as well as often atypical clinical presentation, small number of patients. obstructive narrowing of coronary arteries. According to local researchers, the incidence of acute MI in women aged 30-40 in Uzbekistan in 2022 was 0.15%. According to the world literature, the frequency of detection of typical chest pain syndrome is more than half of the cases in young patients with ST-segment elevation MI. Our clinical observations revealed the difficulties of diagnosing MI in young women, as well as the influence of gender-related and independent risk factors for its development. The presented observations show that MI in young women can be severe and lead to the development of severe complications such as cardiac aneurysm and chronic heart failure.

Key words: heart aneurysm, myocardial infarction myocardial infarction, young women, chronic heart failure,

Actuality of the theme.

Despite the encouraging results of the implementation of primary and secondary prevention programs, as well as treatment of atherothrombosis, cardiovascular diseases (CVD) remain the leading cause of death and disability worldwide. The contribution of CVD to mortality will continue to increase, mainly due to the impact of the novel coronavirus pandemic, as well as lower coverage of

preventive programs in low- and middle-income countries. Acute forms of coronary heart disease (CHD), including myocardial infarction (MI), remain a significant cause of CVD morbidity and mortality in developed countries. It has been proven that cardiovascular continuum diseases have a multifactorial nature with a significant genetic component, including hereditary risk of MI. CVDs are characterized by a complex genetic structure with different combinations of single nucleotide polymorphisms (SNPs). Previously conducted studies by domestic and foreign authors have shown an association of various acute cerebrovascular accidents with the risk of developing and unfavorable course of myocardial infarction. First of all, we are talking about hereditary disorders of lipid metabolism, regulation of vascular tone, hyperaggregation and hypercoagulation states [1].

Aim of the research

In addition to the traditional risk factors for MI in women, there are sex-specific risk factors, including those associated with pregnancy. MI can develop during pregnancy, most often in the third trimester. In 40% of cases, this is type 1 AMI, in 27% of cases spontaneous coronary artery dissection, in 8% of cases - thrombosis of coronary arteries without atherosclerosis. Coronary artery dissection is the main cause of MI in the postpartum period (50%) and is more common in the prenatal period (34% vs. 11%) [7, 8]. Spontaneous coronary artery dissection is a very rare cause of ACS in the general population. It mainly occurs in young and middle-aged women during or after pregnancy. Its frequency, according to different authors, ranges from 3.2 to 14.6% in STEMI and 20.5% in NSTEMI [2, 6]. If endoprosthesis replacement is required, bare stents are preferred because the safety of drug-eluting stents in pregnant women has not been studied [7]. During pregnancy, multivessel dissection involving the left coronary artery trunk, STEMI development and a higher percentage of complications are noted [8].

Clinical observation 1

Kodirova K., 30 years old, was admitted to the emergency hospital on the 3rd day after the accident. It was carried out by cesarean section at the 30th week in the regional perinatal mother and child health protection clinical center. pregnancy due to the development of preeclampsia. The surgical intervention was uncomplicated. After birth, the child was transferred to intensive care unit in critical condition. Against this background, the patient was in a state of severe emotional stress, he developed a typical anginal condition, relieved by tramadol. In the ECG: sinus rhythm, heart beats 72 per minute, the electrical axis of the heart is normal, ST segment elevation in leads I, aVL, V1-4 is up to 3-4 mm. Changes in the form of depression of the ST segment in leads II, III, aVF up to 3 mm, regression of the R wave from V1 to V4, qr in aVL, extrasystole of one ventricle with elevation of the ST segment took into account the diagnosis of ACS In this case, the patient was given a loading dose of antiplatelet agents (ticagrelor 180 mg, acetylsalicylic acid 250 mg), as well as sodium heparin 5000 ED subcutaneously. The patient was taken to the cardiology center within 1 hour after the onset of pain. Upon admission to the cardiology center, the pain syndrome disappeared, hemodynamics was stable. Urgent coronary angiography was performed, the results of which revealed: the correct type of blood circulation, spontaneous dissection of type B passing from the upper third of the left coronary artery to the anterior interventricular artery, the diameter of the left coronary artery trunk 5.2 mm, the anterior interventricular artery had a type D dissection into the distal third of the artery, which is occluded, and the circumflex and right coronary arteries were intact. Recanalization of the anterior interventricular artery was performed, percutaneous transluminal coronary angioplasty with a 2.7 mm diameter balloon catheter in the occlusion of the anterior interventricular artery, exposure 6 minutes. Antegrade blood flow was obtained in the apical part of the anterior interventricular artery. Later, repeated recanalization was performed to the apical part of the anterior interventricular artery, 3 stents with the size of 2.5×22 , 3.0×10^{-2} $26, 3.5 \times 30$, mm were placed with zotarolimus from the distal third of the anterior

interventricular artery. installed. into his mouth. Follow-up coronary angiography showed restoration of antegrade blood flow through the anterior interventricular artery, TIMI III, with no signs of dissection (Figure 2B). Type B left coronary artery trunk dissection remained, which did not restrict blood flow, and therefore the decision was made not to replace the left coronary artery with an endoprosthesis. The patient's condition is stable, he was admitted to the intensive care unit.

Summary

Clinical observations show the importance and difficulty of timely diagnosis of myocardial infarction in young women. According to the world literature, non-obstructive lesions of coronary arteries are detected more often in women than in men, which complicates the diagnosis of myocardial infarction in the absence of a typical clinical picture and non-specific changes in the ECG. Another feature of the course of myocardial infarction in this category of patients is its severe course and the development of serious complications such as heart rhythm disturbances, LV aneurysm and chronic heart failure in a very large percentage, which require additional therapeutic measures to stabilize the condition. the condition of the patients. The above clinical observations confirm this position once again.

References

- 1. Makssudov O.M., Teshaboev M.G. The role of the gene system of natriuretic peptide and antioxidant protection in the formation of the risk of myocardial infarction (Journal of modern medicine) OOO "Publishing house" 1 (1) 20-28
- 2. Kharkov EI, Tsibulskaya N.Yu., Ryabkov EI, Karaev EB. Myocardial infarction in young women. RMJ. 2024;8(1):37-41. DOI: 10.32364/2587-6821-2024-8-1-110.32364/2587-6821-2024-8-1-6.
- 3. Shalnova WITH . A. , Drapkina ABOUT . M. , Kutsenko IN . A. And etc. Myocardial infarction and its prognostic value in the population of some regions of Russia. Russian Journal of Cardiology. 2022;27(6):4952. DOI: 10.15829/1560-4071-2022-4952. [Shalnova SA, Drapkina OM, Kutsenko VA and others al .

- Myocardial infarction in the population of some regions of Russia and its prognostic value. Russian Journal of Cardiology. 2022;27 (6):4952 (in Russian)]. DOI: 10.15829/1560-4071-2022-4952.
- 5. Abe T., Olanipekun T., Adedinsewo D. et al. Trends and outcomes of ST-segment-elevation myocardial infarction among young women in the United States . J Am Heart Assoc. 2023;12 (5):e026811. DOI: 10.1161/JAHA.122.026811.
- 6. Manzo-Silberman S., Vautrin E., Bellemain-Appaix A. et al. A prospective study in young women with acute myocardial infarction in France: Clinical, morphological and biological descriptive analysis: the WAMIF study. Archives of cardiovascular diseases supplements. 2021;13 (1):153. DOI: 10.1016/j.acvdsp.2020.10.324.
- 7. Roth A., Elkayam U. Acute myocardial infarction associated with pregnancy. J Am Coll Kardiol . 2008;52 (3):171–180. DOI: 10.1016/j.jacc.2008.03.049.
- 8. Zhukova N.S., Shakhnovich RM, Merkulova AND. N. Va etc. Spontaneous rupture of coronary arteries. Cardiology. 2019;59(9):52–60. DOI:
- 10.18087/cardio.2019. 9.10269. [Zhukova NS, Shakhnovich RM, Merkulova IN and others Spontaneous Coronary Artery Dissection. Cardiology. 2019;59(9):52–63 (in Russ.)] .DOI: 10.18087/cardio.2019.9.10269.