



THE ROLE OF ISCHEMIC MYOCARDIAL WALL DAMAGE ON THE CLINICAL COURSE OF UNSTABLE ANGINA PECTORIS IN MEN OF WORKING AGE

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Article history:	Abstract:
Received: December 4 th 2023 Accepted: January 4 th 2024 Published: February 6 th 2024	In this work, the clinical features of the course of unstable angina pectoris were studied depending on ischemic myocardial damage in patients at a young age. 150 patients with unstable angina pectoris were examined on the basis of the Samarkand regional branch of the Republican Scientific and Practical Specialized Medical Center of Cardiology. All patients, depending on their age, were divided into 2 groups: the first main group consisted of 76 young patients. The second comparative group consisted of 74 elderly patients. The most common occurrence of angina attacks from 6 to 8 times during the day was observed in 55 (67.5%) patients of group 1, in 52 (78.8%) patients in group 2, which indicated the severity of the disease. According to ECG data, ischemic lesion of more than two walls was most often observed in young people, and scarring was most often observed in older men, this was due to a previous history of AMI.

Keywords: unstable angina pectoris, young age, old age, ischemia, anginal pain, etc.

INTRODUCTION:

Despite the existence of many strategies for the prevention and treatment of cardiovascular diseases, coronary heart disease (CHD) remains the leading cause of death worldwide [1, 3, 5, 20]. Coronary heart disease with its various manifestations (different forms of angina pectoris, acute myocardial infarction, its clinical and atypical variants and outcomes) often leads to permanent disability and death. Covering people of working age and mature age, cardiovascular diseases continue to be very common among the population of many countries, leading to premature disability and mortality, occupying a leading position among the most important modern medical problems. According to WHO, more than 9 million people die from coronary heart disease every year (WHO 2019).

Numerous clinical and epidemiological studies indicate a progressive decrease in the incidence of morbidity, disability and mortality from coronary heart disease among the world's population, which is especially alarming in young people [2, 4, 6, 21, 29]. The mortality rate from coronary heart disease in people aged 25-34 years is 10:100,000. Unfortunately, a percentage of these patients have a constant tendency to heal. The increase in these indicators among young people under 45 years of age affects society, their future [7, 9, 11, 22]. In the economic countries of the West, about 30% and in the USA

about 35% of the population with coronary heart disease die as a result of damage to the coronary arteries. According to prospective studies, about 5-8% of men aged 20 to 44 years suffer from coronary heart disease [8, 10, 12, 23, 30]. The incidence of coronary heart disease in men under 45 years of age is 1.4-1.5 times higher than in women of this age. Coronary heart disease, which manifested in men at a young age, differs from the elderly in clinical manifestations and prognosis of the disease [13, 15, 17, 24].

In young people, atypical pain behind the sternum is most common, which is due to a tendency to vasospasm, the presence of coronary insufficiency of the microvascular bed, vegetative vascular dystonia (VSD) without connection with coronary artery stenosis (CA). As a rule, in young patients, the occurrence of NS is preceded by a short ischemic history [24, 29, 34] and according to foreign studies, it was found that before the occurrence of a real coronary event, only 24% of young patients sought medical help for angina-related pain, 69% of patients younger than 45 years had previously had pain for there was no sternum [9, 28, 35]. In most of the young patients, the duration of the angina clinic was observed for several days, and signs of ischemic myocardial damage on an electrocardiogram (ECG) were detected immediately after a painful attack [33, 34].

The clinical course of coronary heart disease at a young age is variable and the disease can debut with



the so-called acute coronary syndrome (unstable angina and acute myocardial infarction) or sometimes the first (and probably the last) manifestation of coronary heart disease is the so-called sudden coronary death [13, 15, 18, 25]. One of the features of coronary heart disease in young patients is the long-term subclinical course of coronary pathology, and coronary heart disease debuts in the form of acute myocardial infarction (AMI) [16, 18, 20, 26, 31]. However, CHD often immediately assumes the character of a chronic disease, clinically manifesting stable angina pectoris. The remaining cases statistically account for sudden and non-sudden coronary death, and acute coronary insufficiency [16, 18, 20, 27, 32].

Unfortunately, people under the age of 45 are practically not represented in studies, despite the fact that their percentage in the population is growing [8, 11, 13, 28, 33]. Currently, there are only a few studies in our country that affect the prevalence of cardiovascular diseases (CVD) among the working-age population, and the issue of prognosis has been poorly studied, although it seems to be very interesting.

THE PURPOSE OF THE STUDY: to study the features of the clinical course and ischemic myocardial damage in patients with coronary heart disease of young age.

RESEARCH MATERIALS AND METHODS: 150 patients with unstable angina pectoris were examined on the basis of the Samarkand regional branch of the Republican Scientific and Practical Specialized Medical Center of Cardiology from 2021 to 2023, who were divided into 2 groups. The first main group consisted of 76 young patients. The second comparative group consisted of 74 elderly patients. The control group consisted of 110 practically healthy volunteers.

Clinical and anamnestic data and electrocardiography (ECG) data in 12 leads were evaluated in all patients. All patients underwent general clinical examination, electrocardiography, and echocardiography. ECG monitoring was carried out daily, ECHO-KG examination on the 1st, 8th day, laboratory parameters were examined on the 1st, 3rd, 8th day of the patient's stay in the Samarkand regional branch of the RSNPMC.

When collecting anamnesis in men, the presence of coronary heart disease (previously suffered myocardial infarction (MI), stable angina pectoris, unstable angina pectoris of tension or rest) was found out. When questioning the patient, attention was paid to the period preceding the development of coronary heart

disease, as well as to the factors that provoked the development of this disease (excessive physical exertion, infections, psychoemotional stress).

THE RESULTS OF THE STUDY: When studying the frequency of pain attacks during the day in the study groups, the following data were revealed. Angina attacks 3-5 times a day were observed in group 1 in 17 (23.5%) patients, in group 2 in 7 (16.7%), ($p < 0.0001$). Angina attacks 6-8 times a day were observed in 55 (67.5%) patients of group 1, in 52 (78.8%) patients in group 2 ($p = 0.001$). Seizures more than 9 times a day were observed in 24 (29%) patients of group 1, in 15 (24.4%) patients of group 2 ($p > 0.05$).

When questioning all patients with coronary heart disease, attention was paid to the time of occurrence of pain behind the sternum during the day. According to the occurrence of pain attacks during the day, the following data were revealed. Angina attacks that occurred from 01:00 to 06:00 hours were observed in group 1 in 7 patients, in group 2 in 4 ($p < 0.0001$). Angina attacks occurring from 06:00 to 12:00 hours were observed in 28 patients of the 1st group, in 23 patients in the 2nd group ($p = 0.001$). The occurrence of seizures during 12:00-18:00 hours was noted in 24 patients of the 1st group, in 16 (14.4%) patients of the 2nd group, ($p > 0.05$). Angina attacks that occurred from 18:00 to 24:00 hours were observed in group 1 in 16 patients, in group 2 in 12 ($p < 0.0001$).

The following data were revealed on the localization of ischemic changes on the ECG. Ischemic changes in the anterior wall were noted in group 1 in 17 (24.5%) patients, in group 2 in 14 (23.5%) patients ($p = 0.99$). Ischemia of the posterior wall of the left ventricle was noted in 28 (32%) patients of group 1, in group 2 it was detected in 19 (28.3%) patients ($p = 0.45$). Ischemic changes in the anterior septum wall were 2 times higher in patients of group 2 and were noted in 8 (17.7%) patients, in group 1 in 4 (13.2%) patients, respectively ($p = 0.14$). Lateral wall ischemia was detected in group 1 in 3 (2.4%) patients, in group 2 in 2 (10.9%) patients ($p = 0.81$). Ischemia of two or more walls was observed in group 1 in 52 (81.3%) patients, in group 2 in 42 (80.4%) patients ($p = 0.79$) (Fig. 3).

Despite the different causes and peculiar course of coronary artery disease, the process of myocardial ischemia is always individual, its features the currents are determined by a set of FR. When providing medical care in a timely manner and in full, the prognosis in patients with coronary heart disease at a young age is significantly better than in older patients.



CONCLUSION. Thus, the most frequent occurrence of angina attacks from 6 to 8 times during the day was observed in 45 (67.5%) patients of group 1, in 42 (78.8%) patients in group 2, which indicated the severity of the disease. According to ECG data, ischemic lesion of more than two walls was most often observed in young people, and scarring was most often observed in older men, this was due to a previous history of AMI.

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