



LITERATURE ANALYSIS OF CHOLESTEROL LEVEL DETERMINATION VIEWS AND STEPS

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Abstract: In this article, the manifestations of cholesterol levels in the population of the world, stages, as well as risk factors and comorbidity, formed and developed myocardial infarction, diagnosis of its non-traditional types, use of modern methods used in epidemiology, prediction and prevention, its antecedent condition, theoretical basis of the systematic procedure for early diagnosis of complication processes are presented in this article. explained by its creation.

Also, the results obtained during the research were analyzed in depth. The results of the analysis are presented during the coverage of the topic.

Keywords: cholesterol level, climax, retrospective study, retrospective study, stress, hypodynamia, smoking, alcohol abuse, drug addiction, drug addiction, poor diet, Internet addiction, monogolism, mental, overeating, low material condition, low level of cultural education, drugs uncontrolled intake.

Аннотация: В данной статье представлены проявления уровня холестерина у населения мира, стадии, а также факторы риска и коморбидность, сформировавшийся и развившийся инфаркт миокарда, диагностика его нетрадиционных видов, использование современных методов, применяемых в эпидемиологии,



прогнозирование и профилактика, его предвестниковое состояние, теоретические основы системной процедуры ранней диагностики осложненных процессов. пояснено ее созданием.

Также были глубоко проанализированы полученные в ходе исследования результаты. Результаты анализа представлены в ходе освещения темы.

Ключевые слова: уровень холестерина, климакс, ретроспективное исследование, стресс, гиподинамия, курение, злоупотребление алкоголем, наркомания, наркомания, неправильное питание, интернет-зависимость, моноголизм, психическое, переизбыток, низкое материальное положение, низкий уровень культурного образования, неконтролируемый прием наркотиков.

Today, myocardial infarction is one of the main causes of disability and death of the population in many countries of the world.

This process causes the "peak" incidence of MI in women to occur at age 65 and older, but MI is beginning to affect much younger women as well. For example, a multicenter registry of ST-elevation myocardial infarction (STEMI) was established in Paris with 6707 subjects and studied women. In this study, women under 60 years of age had a doubling of the frequency of detection of STKBMI[3].

When analyzing the literature, V.V. Cherepanova, V.G. Putnyaga (2016) presented an important conclusion based on their research: women are under the protection of estrogens, and despite this, modern UIK, including MI, spared women with preserved menstrual activity. To express this situation, L.A. Emelyanova and co-authors 11 (2000) put into practice the phenomenon of "Fairy YuIK" [24]. However, the causes and



characteristics of the clinical course of this phenomenon have not been sufficiently studied in women.

From this point of view, the study by D.M.Seliverstovar and co-authors (2019) devoted to the study of the clinical picture of MI in women with preserved menstrual activity attracts attention.

The authors retrospectively analyzed 31 cases of MI in women, of which 66 were menstruating women. In both of these groups, arterial hypertension and excess body weight were the most common risk factors. At the same time, genetic predisposition and smoking were also more common in menstruating patients. Again, equally Q-positive (QpMI) and anterior-site lesions were noted in both groups of women. In menstruating women, the majority of MIs were the first manifestation of UIC and were often complicated by morning retrospective study, but at the same time, subclinical "convulsions" were reported to be rare[45].

1 – table

**The frequency of detection of cholesterol level in the population of Azerbaijan
(males in tempo, females in denominator)**

Youth group s	The numbe r of subject s	Frequency of XS levels							
		<5.0 mmol/l		5.0-6.4 mmol/l		6.5-7.8 mmol/l		≥ 7, 8mmol/l	
		Mu t	%	Mu t	%	Mu t	%	Mu t	%
<20	97	26	26.8 ± 4.5	30	37.1 ± 4.9	21	21.6 ± 4.2	14	14.4 ± 3.6
	133	32	24.1 ± 3.7	35	26.3 ± 3.8	42	31.6 ± 4.0	24	18.0 ± 3.3
20-29	128	34	26.6 ± 3.9	47	36.7 ± 4.3	29	22.7 ± 3.7	18	14.1 ± 3.1
	158	37	23.4 ± 3.4	40	25.3 ± 3.5	50	31.61 ± 3.7	31	19.6 ± 3.2



30-39	$\frac{147}{168}$	$\frac{37}{35}$	$\frac{25.2 \pm 3.6}{20.8 \pm 3.1}$	$\frac{49}{41}$	$\frac{33.3 \pm 3.9}{24.4 \pm 3.3}$	$\frac{38}{59}$	$\frac{25.9 \pm 3.6}{35.1 \pm 3.7}$	$\frac{23}{33}$	$\frac{15.6 \pm 3.0}{19.6 \pm 3.1}$
40-49	$\frac{145}{182}$	$\frac{33}{35}$	$\frac{24.1 \pm 3.6}{19.2 \pm 2.9}$	$\frac{47}{47}$	$\frac{32.4 \pm 3.9}{25.8 \pm 3.3}$	$\frac{39}{62}$	$\frac{26.9 \pm 3.7}{34.1 \pm 3.5}$	$\frac{24}{38}$	$\frac{16.6 \pm 3.1}{20.9 \pm 3.0}$
50-59	$\frac{137}{177}$	$\frac{31}{31}$	$\frac{22.6 \pm 3.6}{17.5 \pm 2.9}$	$\frac{46}{41}$	$\frac{33.6 \pm 4.1}{23.2 \pm 3.2}$	$\frac{37}{62}$	$\frac{27.0 \pm 3.8}{35.0 \pm 3.6}$	$\frac{23}{43}$	$\frac{16.0 \pm 3.2}{24.3 \pm 3.2}$
60-69	$\frac{131}{172}$	$\frac{29}{26}$	$\frac{22.01 \pm 3.6}{15.1 \pm 2.7}$	$\frac{41}{40}$	$\frac{31.3 \pm 4.1}{23.3 \pm 3.2}$	$\frac{62}{61}$	$\frac{35.0 \pm 3.6}{35.5 \pm 3.7}$	$\frac{25}{45}$	$\frac{19.1 \pm 3.4}{26.2 \pm 3.4}$
≥ 70	$\frac{102}{136}$	$\frac{2}{20}$	$\frac{21.6 \pm 4.1}{14.7 \pm 3.0}$	$\frac{31}{29}$	$\frac{36.4 \pm 4.6}{21.3 \pm 3.5}$	$\frac{29}{51}$	$\frac{28.4 \pm 4.5}{37.5 \pm 4.2}$	$\frac{20}{36}$	$\frac{19.6 \pm 3.9}{25.5 \pm 3.8}$
Total	$\frac{887}{1126}$	$\frac{214}{216}$	$\frac{24.1 \pm 1.4}{19.2 \pm 1.2}$	$\frac{297}{273}$	$\frac{33.5 \pm 1.6}{24.2 \pm 1.3}$	$\frac{229}{387}$	$\frac{30.6 \pm 1.0}{34.4 \pm 1.4}$	$\frac{147}{250}$	$\frac{16.6 \pm 1.3}{22.2 \pm 41}$

Hudzi KB et al. (2017) found the frequency of detection of comorbidity in myocardial infarction - 94% [92;7], Worrall - Carter h. et al. (2016) and in the study - 82% prevalence is given [132]. In general, a certain degree of uncertainty remains in the issue of MI and comorbidity, and the need to clarify the conflicting data presented, especially by conducting epidemiological studies, is evident. A similar conclusion can be made regarding the risk factors of MI, or their roles in the origin, progression and complications of MI, as well as the literature review confirms that studies have interpreted them differently.

Based on the review of the literature, it became known to us that in the population of Azerbaijan it is observed with a high frequency of distribution (Table 1— presents these current data, cited from Ya.G. Gadzhieva)

According to modern studies, it is crucial to create and introduce preventive technologies (primary prevention, secondary and tertiary prevention) in solving the problem



of MI. Because two groups of risk factors play the main role in the origin, development, and complications of the disease ("power" that ensures the success or failure of treatment):

1) factors that always occur in a person's life: stress, hypodynamia, smoking, alcohol abuse, drug addiction, toxic addiction, unhealthy diet, Internet addiction, monogolism, mental, overeating, low material condition, low level of cultural education, uncontrolled intake of drugs make arbitrary treatment;

2) factors affecting the collective group: unfavorable conditions of the environment (air, water, soil, radiation background), high risk of infectious diseases, low quality of food products, unsatisfactory performance of the employees of medical institutions, low level of material well-being of the population, natural and man-made are disasters[38,29].

MI is becoming more and more problematic in relation to the epidemic burden of HIV/AIDS. In the last years, the UIC has created an unacceptable epidemiological situation with the following aspects:

1) According to the Global Burden (2020) study, 126 million people (1.72% of the world's population) are affected by CKD;

2) In Europe, the prevalence of IUD is confirmed by the prevalence of 3547 people per 100 thousand people, 2929 people per 100 thousand people in the USA, and 4198 people per 100 thousand people in Russia[101].

According to the data obtained from the epidemiological study "ESSE-RF-prospective" carried out in Russia, the prevalence of MI in this country is much higher than in other countries, and the pre-MI condition is formed in the absence of this disease, mainly under the influence of biological and modifiable risk factors.

Reducing atherogenic lipids to target levels is a key factor in the prevention of CHD/MI[67]. Statins mainly play an important role in this purpose, however, in contrast to



them, the reduction of lipids to the normal level is observed in practice only from 12% to 35% [37,122,103,75].

The reason for such results is the inaction of physicians to increase hypolipidemic therapy, patients' insufficient compliance and often undiagnosed cases of familial hypercholesterolemia [75].

It can be concluded from them that the average prevalence of MI in the observation years is 12.0%. It is confirmed by the frequency of detection in different years as follows: 2001 - 29.6%, 2010 - 15.2%, 2011 - 10.3%, 2012 - 8.9%, 2013 - 20.7%, 2014 14.6% in 2015, 8.3% in 2015, 2016 - 9.4%, 2017 - 9.4%, 2018 - 13.6%, 2019 - 16.4%, 2020 - 10.5% and 2021 - 7.6%.

A general characteristic trend - a statistically reliable decrease of MI in 21 years of monitoring is confirmed: the overall detection frequency of the disease in the study years - from 29.6% to 7.0%, that is, it is characterized by a decrease of 22.6% or 3.2 times ($R < 0.001$).

2 - table

Epidemiology of myocardial infarction in the elderly population of Andijan

MI species	N	Q MI		N	Without you MI		N	MI ST(+)		N	MI ST(-)		N	MI load		N	Total MIa	
		n	%		n	%		n	%		n	%		n	%		n	%
2001	71	51	71.8	71	18	25.4	71	9	12.7	71	1	1.41	71	0	0.0	71	21	29.6
2010	151	101	66.9	151	44	29.1	151	15	9.9	151	0	0.00	151	0	0.0	151	23	15.2
2011	204	146	71.6	204	58	28.4	204	29	14.2	204	0	0.00	204	1	0.5	204	21	10.3



2012	246	171	69.5	246	75	30.5	246	36	14.6	246	2	0.81	246	0	0.0	246	22	8.9
2013	92	68	73.9	92	24	26.1	92	9	9.8	92	1	1.09	92	0	0.0	92	19	20.7
2014	144	102	70.8	144	42	29.2	144	18	12.5	144	0	0.00	144	3	2.1	144	21	14.6
2015	228	164	71.9	228	64	28.1	228	45	19.7	228	2	0.88	228	0	0.0	228	19	8.3
2016	224	156	69.6	224	68	30.4	224	35	15.6	224	1	0.45	224	0	0.0	224	21	9.4
2017	128	91	71.1	128	37	28.9	128	25	19.5	128	0	0.00	128	0	0.0	128	12	9.4
2018	132	92	69.7	132	40	30.3	132	22	16.7	132	0	0.00	132	2	1.5	132	18	13.6
2019	195	128	65.6	195	67	34.4	195	24	12.3	195	1	0.51	195	5	2.6	195	32	16.4
2020	209	161	77.0	209	48	23.0	209	31	14.8	209	2	0.96	209	0	0.0	209	22	10.5
2021	198	142	71.7	198	56	28.3	198	40	20.2	198	1	0.51	198	0	0.0	198	15	7.6
2001-2021 years	2222	1573	70.8	2222	649	29.2	2222	338	15.2	2222	11	0.50	2222	11	0.5	2222	266	12.0

The average detection frequency of Q-type myocardial infarction (MI - Q) is confirmed at the level of 70.8% in total MI. In the years of investigation, the frequency of distribution is almost unchanged (71.8% and 71.7% with detection, $R > 0.05$).

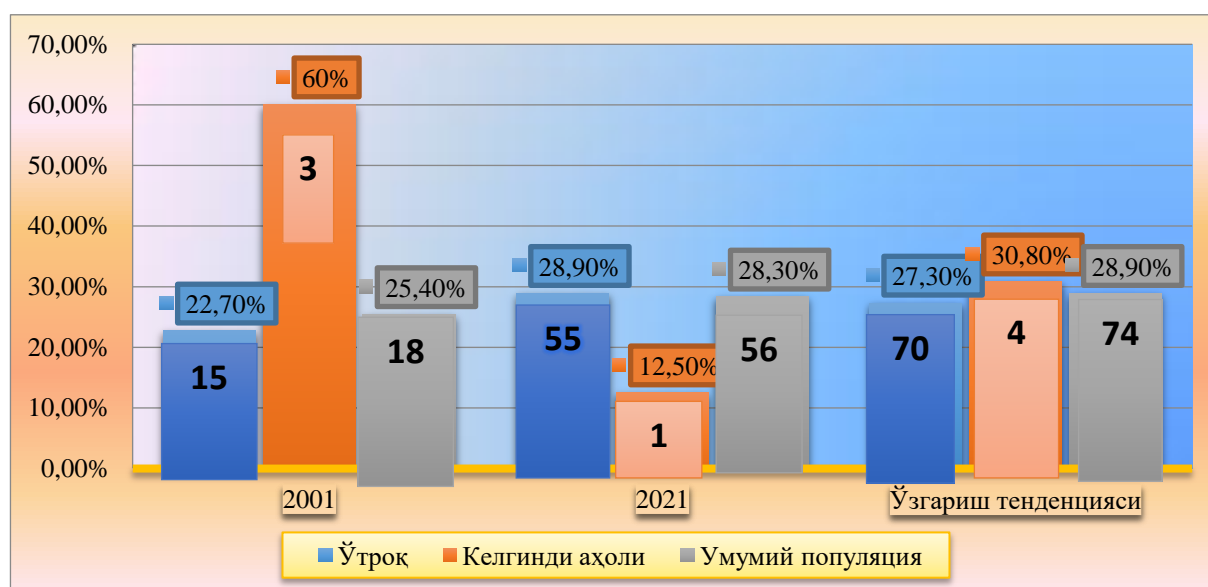


Research data confirmed that (Table 2), the prevalence of MI with ST segment elevation (MI - ST) is 14.5% higher than that with ST segment depression (MI - ST): 15.2% and is proved by a frequency of detection of 0.5% ($R < 0.0001$).

MI-ST is detected with a prevalence of 12.7% in the first survey year (2001) and 20.7% in the final survey year (2021) and/or confirmed by a 1.6-fold increase to 7.5% ($R < 0.05$).

MI – ST you the frequency of the spread is confirmed by the spread of very low frequencies in the total years of the examination. During the 21-year monitoring period, this type of MI is recorded with a detection frequency of 1.4% (2001) and 0.5% (2021), that is, an increase of 0.9% ($R < 0.05$).

Figure 1 summarizes the results of the 21-year analysis of the prevalence of Q-myocardial infarction in Aboriginal (settled) and non-settled (immigrant) populations.



1- picture. Characteristics of detection of Q-MI in the resident and immigrant population of Andijan in a prospective epidemiological study



The analytical conclusion was that during the 21-year monitoring period, Q – MI is almost unchanged - 71.8% (in 2001) and 31.7% (in 2021) prevalence is recorded ($R>0.05$). The average detection frequency is 71.7%.

According to the analysis, Q-you MI 2001-2021 is observed with a prevalence of 22.7% and 28.9% in the settled population. The tendency to increase the disease by 6.2% is characteristic ($R>0.05$). Overall, during 21 years of monitoring, the average prevalence of Q-you MI is 27.3% in the settled population. In the immigrant population, the disease is recorded with a frequency of detection of 60.0% (in 2001) and 12.5% (in 2021) or is characterized by a 47.5% decrease in 21-year evolution, i.e. 4.1 times. ($R<0.001$).

Therefore, QMI is characterized depending on the place of residence and with a significant difference it is possible to predict whether it will increase or decrease in urban residents ($XN=0.99$; 95% II =0.78-1.27 ; $\chi^2=0.04$; $P<0.83$).

Analytical results of Q-siz myocardial infarction (MIQ siz) confirmed the opposite of this conclusion.

REFERENCES USED:

1. Asfandiyarova, N.S. Multiple chronic pain / N.S. Asfandiyarova // Clinical gerontology. - 2018. - T. 24, No. 3-4. - S. 58-64.
2. Beylina, N.I. Komorbidnost patsientov terapevticheskogo statsionara / N.I. Beylina, A.O. Pozdnyak // Practical medicine. - 2018. - No. 9. - S. 74-77.
3. Mamasaliev, N.S. Acute coronary syndrome in Uzbekistan: specific features in diagnosis, treatment and prevention, treatment and prevention, and registration in Andijan and comparison with data from other countries / N.S. Mamasaliev,
4. M.A. Kachkovsky, Z.N. Mamasaliev [i dr.] // Vestnik meditsinskogo instituta "Reaviz": rehabilitation, vrach i zdorove. - 2018. - T. 35, No. 5. - S. 32-40.