



CARDIO TYUMEN

2024

XIV МЕЖДУНАРОДНЫЙ КОНГРЕСС  
«КАРДИОЛОГИЯ  
НА ПЕРЕКРЕСТКЕ НАУК»

# СБОРНИК ТЕЗИСОВ



ФИЛИАЛ ТОМСКОГО НИИЦ  
ТЮМЕНСКИЙ  
КАРДИОЛОГИЧЕСКИЙ  
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ТОМСКИЙ НАЦИОНАЛЬНЫЙ  
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РОССИЙСКОЕ ОТДЕЛЕНИЕ  
МЕЖДУНАРОДНОГО ОБЩЕСТВА  
ПО СЕРДЕЧНО-СОСУДИСТОМУ  
УЛЬТРАЗВУКУ



МИНИСТЕРСТВО НАУКИ  
И ВЫСШЕГО ОБРАЗОВАНИЯ  
РОССИЙСКОЙ ФЕДЕРАЦИИ

23-24 мая 2024 | г. Тюмень, Россия

Министерство науки и высшего образования РФ  
Российская академия наук  
Российское кардиологическое общество  
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Российское отделение Международного общества  
по сердечно-сосудистому ультразвуку  
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Центр восстановительного лечения и реабилитации Санаторий Сибирь

# **СБОРНИК ТЕЗИСОВ**

## **XIV МЕЖДУНАРОДНОГО КОНГРЕССА «КАРДИОЛОГИЯ НА ПЕРЕКРЕСТКЕ НАУК»**

совместно с

XVIII Международным симпозиумом по  
эхокардиографии и сосудистому ультразвуку  
XXX Ежегодной научно-практической конференцией  
«Актуальные вопросы кардиологии»

Тюмень  
2024

УДК 616.1  
ББК 54.10  
К 21

К 21 Кардиология на перекрестке наук: сборник тезисов XIV Международного конгресса «Кардиология на перекрестке наук» совместно с XVIII Международным симпозиумом по эхокардиографии и сосудистому ультразвуку, XXX Ежегодной научно-практической конференцией «Актуальные вопросы кардиологии» (Тюмень, 23-24 мая 2024г.)/Под. общ. ред. д.м.н., вед.н.с. В.В. Тодосийчука. – Тюмень, 2024. – 246с.

Настоящий сборник составлен по материалам международного научно - практического конгресса, посвящённого актуальным вопросам диагностики, лечения и профилактики сердечно-сосудистых заболеваний в сочетании со смежной патологией на современном этапе.

Сборник предназначен для специалистов, преподавателей школ и вузов, студентов, ординаторов, аспирантов.

УДК 616.1  
ББК 54.10

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# ASSESSING THE FREQUENCY OF CORONARY HEART DISEASE IN THE CONTEXT OF METABOLIC DYSFUNCTION AND PREDICTING DISEASE PROGRESSION

Makhkamova M.M., Nurillaeva N.M.

Tashkent Medical Academy, Tashkent, Uzbekistan

**Relevance.** The relevance of the topic lies in its intersection between two increasingly prevalent health conditions: metabolic dysfunction-associated steatotic liver disease (MASLD) and coronary heart disease (CHD) [5]. Both MASLD and CHD are on the rise globally, driven primarily by the increasing prevalence of obesity, sedentary lifestyles, and unhealthy dietary habits. Understanding the relationship between these two conditions is crucial for addressing their growing burden on healthcare systems. MASLD and CHD share common risk factors, such as obesity, insulin resistance, dyslipidemia, and hypertension [2]. Investigating their association can provide insights into shared pathophysiological mechanisms and potential avenues for intervention. Patients with MASLD often present with multiple metabolic risk factors, predisposing them to cardiovascular complications, including CHD [7]. Identifying MASLD in patients with CHD can influence clinical management, treatment strategies, and prognosis [1,4]. Studying the prevalence of MASLD in patients with stable angina pectoris 1-2 FC of IHD and predicting disease progression can help healthcare providers identify individuals at higher risk of adverse cardiovascular events. Early detection and intervention may mitigate the progression of both MASLD and CHD, improving patient outcomes. Given the significant morbidity, mortality, and economic burden associated with MASLD and CHD, research in this area has important public health implications [6]. Findings from studies examining the relationship between these conditions can inform preventive strategies, healthcare policies, and resource allocation. In summary, investigating the prevalence of MASLD in patients with stable angina pectoris and its impact on the progression of CHD is relevant due to the rising prevalence of these conditions, shared risk factors, clinical implications, predictive value, and public health impact [3]. It represents an important area of research with the potential to improve patient care and outcomes.

**Purpose of the study.** The study aimed to investigate the prevalence of metabolic dysfunction-associated steatotic liver disease (MASLD) in patients with stable angina pectoris 1-2 FC (functional class) of ischemic heart disease (IHD) and predict disease progression.

**Materials and Methods.** The study included 86 patients aged 45-59 diagnosed with stable angina pectoris 1-2 FC, who visited the reception department of the Multidisciplinary Clinic of the Tashkent Medical Academy and met the criteria for MASLD. Various verification methods were employed, including anthropometric screening (body mass index (BMI), waist circumference (BA), hip circumference (SA), BA/SA ratio), clinical and biochemical blood analysis, coagulogram, aminotransferase index (AST/ALT – de Ritis coefficient), alkaline phosphatase (IF), gamma-glutamyltransferase (GGT), bilirubin, standard lipid profile control methods, glucose indicator in plasma, calculation of visceral adiposity index (VAI), homeostasis model assessment of insulin resistance (HOMA-IR) index, liver ultrasound examination (UTT), and exercise tests (treadmill-test and cycle ergometry) to confirm the diagnosis of CHD. Patients were followed up for 1 year.

**Results.** Preliminary results indicated that steatosis of the liver, a key criterion for MASLD, was confirmed in all patients through liver ultrasound examination. The meeting of sub-criteria revealed several indicators: BMI  $\geq 25$  kg/m<sup>2</sup> in 78 (90.6%) patients, fasting glucose level  $\geq 5.6$  mmol/l in 37 (43%) patients, triglyceride level  $\geq 1.70$  mmol/l in 65 (75.6%) patients, HDL level  $\leq 1.0$  mmol/l in 67 (78%) patients, and arterial hypertension in 61 (71%) patients. A varying number of positive disease criteria were determined among patients: 39 (45.3%) had 1 criterion, 48 (55.8%) had 2, 32 (37.2%) had 3, and 14 (16%) had 4. During the 1-year follow-up, patients with 1 criterion showed no significant change with standard treatment, while disease progression was observed in patients with 2 or more positive symptoms. Complications such

as acute myocardial infarction were reported in patients with 2 FC.

**Conclusion.** The study highlights the widespread occurrence of steatosis of the liver associated with metabolic dysfunction in conjunction with cardiometabolic criteria. MASLD significantly influences the development and progression of ischemic heart disease, with higher numbers of positive criteria correlating with increased disease severity and risk of complications. These findings emphasize the importance of early detection and comprehensive management of MASLD to mitigate its impact on cardiovascular health. Additionally, the results suggest a need for further research on the association between MASLD and other cardiovascular conditions, such as acute myocardial infarction.

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