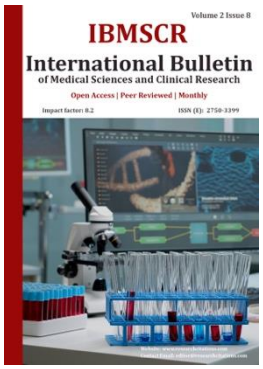

CHANGES IN INSTRUMENTAL TESTS AT DIFFERENT LEVELS OF TRIMETHYLAMINE-N-OXIDE IN PATIENTS WITH ISCHEMIC HEART DISEASE.

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Abstract

Metabolic indicators of patients with heart disease are being analyzed in different countries, and trimethylamine-N-oxide is found to be in high concentration in people with high cardiovascular risk factors.

In the course of the study, the results of instrumental examinations were studied in 90 patients with ischemic heart disease and 30 healthy people.

Key words: trimethylamine-N oxide(TMAO), arterial pressure, ultrasound examination, electrocardiography, hepatosis, cholecystitis, arrhythmia

АННОТАЦИЯ

В ходе исследования изучены результаты инструментального обследования у 90 больных ишемической болезнью сердца и 30 здоровых людей.

Метаболические показатели пациентов с сердечно-сосудистыми заболеваниями анализируются в разных странах, и обнаружено, что триметиламин-N-оксид находится в высокой концентрации у людей с высокими сердечно-сосудистыми факторами риска.

Ключевые слова: триметиламин-N-оксид (TMAO), артериальное давление, ультразвуковое исследование, электрокардиография, гепатоз, холецистит, аритмия

The purpose of the study; development of preventive measures for assessment, treatment and prevention, taking into account that the change of intestinal microbiota affects the production of proatherogenic metabolite trimethylamine-N-oxide in patients with ischemic heart disease.

The object of the study; Research consists of clinical work. Clinical studies are conducted in 90 patients with ischemic heart disease. 30 of them were allocated to a healthy control group that did not suffer from ischemic heart disease.

Research subject; It consists of analyzing the results of clinical examination of patients treated in the therapeutic departments of the Andijan State Medical Institute, who are being treated for ischemic heart disease with angina pectoris. All of them underwent arterial pressure, ultrasound examination, and electrocardiography examination

1 - Table. Changes in instrumental tests at different levels of trimethylamine-N-oxide in patients with ischemic heart disease.

Variables		**TMAO increased**	**TMAO decreased**	**P**	**Total**
		(N=90)	(N=30)		(N=120)
Arterial pressure	1-stage	19 (21,1%)	6 (20,0%)	<0.001	25 (20,9%)
	2- stage	40 (44,4%)	2 (6,7%)		42 (35,0%)
	3- stage	21 (23,4%)	1 (3,3%)		22 (18,3%)

	In norm	10 (11,1%)	21 (70,0%)		31 (25,8%)
Ultrasound examination	Hepatosis 1-st degree	6 (6,6%)	3(10,0%)	0.224	9 (7.5%)
	Hepatosis 2-nd degree	9 (9.9%)	0 (0%)		9 (7.5%)
	Hepatosis 3 -rd degree	4 (4.4%)	0 (0%)		4 (3.3%)
	Cholecystitis, gallbladder dyskinesia	70 (76.9%)	16 (53.3%)		86 (71.7%)
	unchanged	1(1.1%)	11(36.7%)		12(10%)
Electrocardiography	Arrhythmias	10 (11,1%)	2 (6,7%)	<0.001	12 (10%)
	Hypertrophy	55 (61,1%)	10 (33,3%)		65 (54,2%)
	Hypoxia	2 (2,2%)	3 (10,0%)		5 (4,2%)
	Ischemia	17 (18.9%)	2 (6,7%)		19 (15,8%)
	In norm	6 (6,7%)	13(43,3%)		19(15,8%)

As shown in the table, normal blood pressure with TMAO increased in 10 patients (11.0%), stage 1 in 19 patients (21.1%), stage 2 in 40 patients (44.4%) and stage 3 in 21 patients (23 .4%) was observed. However, no changes in target organs were observed in 6 (20.0%) patients with normal TMAO, 2-stage hypertension was observed in 2 (6.7%), and 3-stage hypertension was observed in 1 (3.3%). In 21 of them, indicators were noted to be normal.

Fatty hepatosis symptoms were less common in our observation patients and in patients with higher TMAO blood levels. Of the 90 patients in the TMAO increased group, 6 (6.6%) had grade 1 hepatosis, 9 (9.9%) had grade 2 hepatosis, and 4 (4.4%) had grade 3 hepatosis. 70 of them (76.9%) had cholecystitis and gallbladder dyskinesia.

In ECG analysis, 10 (11.1%) patients with increased TMAO had arrhythmias, 55 (61.1%) had left ventricular hypertrophy, 2 (2.2%) had hypoxia, 17 (18.9%) had ischemia, and 6 changes in the norm were observed in one (6.7%).

In the group without increased TMAO, these changes were arrhythmias in 2 (6.7%), left ventricular hypertrophy in 10 (33.3%), hypoxia in 3 (10.0%), signs of ischemia in 2 (6.7), remaining 13 (43.3%) normal indicators were observed.

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