

ISSN 2010-6947



# O'ZBEKISTON KARDIOLOGIYASI

2023 № 3 (69)



## КАРДИОЛОГИЯ УЗБЕКИСТАНА



O'zbekiston Respublikasi kardiologlar Assotsiatsiyasi  
Ассоциация кардиологов Республики Узбекистан



# O'ZBEKISTON KARDIOLOGIYASI

Ilmiy-amaliy jurnal  
2006-yilda tashkil etilgan

№ 3 / 2023  
(69)

# КАРДИОЛОГИЯ УЗБЕКИСТАНА

Научно-практический журнал  
Основан в 2006 г.

№ 3 / 2023  
(69)



## STUDY OF THE PREVALENCE OF SMOKING AND ARTERIAL HYPERTENSION IN RURAL AREAS

**NABIBULLAEVA SH.Z., SHUKURDJANOVA S.M., BOYNAZAROVA A., NURITDINOVA N.B.,  
MAKHMUDOVA M.S.**

*Tashkent Medical Academy, Tashkent, Uzbekistan*

**Introduction:** The main conditions for the prevention of death from myocardial infarction and stroke are considered to be early detection of arterial hypertension (AH), lowering and constant monitoring of blood pressure (BP) levels by correcting modifiable risk factors, in particular such significant ones as smoking.

**Purpose:** early detection of hypertension and the study of the prevalence of smoking in the rural population.

**Material and methods:** cross-sectional study of the rural population – screening for elevated BP followed by assessment of individuals with identified elevated levels of BP, as well as identifying the prevalence of smoking. The medical staff of 3 rural medical posts (SVPs) of the Syrdarya region took part in the screening. The survey involved 664 people over 20 years old. Data on age, place of work, smoking status were entered into the screening questionnaire, and blood pressure was measured. Individuals with smoking and/or elevated blood pressure levels were invited for further examination, where they were repeatedly, twice determined blood pressure in both arms, calculated the body mass index (BMI), and took an electrocardiogram.

**Results:** persons aged 20 to 50 participated in the screening – 412 (62%) people: the largest number were persons aged 20–29 years and 40–49 years. Among men, people working in agriculture predominated – 323 people (48.6%), and among women the majority were housewives – 152 people (22.9%). There were 24 (3.6%) pensioners, and 12 (1.8%) disabled due to illness. Smoking was detected

in 74 (11.1%). An increase in blood pressure above 140/90 mm Hg. 97 (14.6%) people were registered, of which 52 (53.6%) patients were on dispensary registration in SVPs for hypertension, and in 45 (46.4%) people, an increase in blood pressure was detected for the first time. Analysis of blood pressure figures showed that 34 out of 97 people (35.1%) people had systolic blood pressure in the range of 141–150, 27 people (27.8%) – 151–160, 15 – (15.5%) – 161–170, 10 – (10, 3%) – 171–180 and 11 (11.3%) people over 180 mm Hg. Most of the people with elevated blood pressure – 70 (72.2%) people had diastolic blood pressure up to 100 mm Hg. Art., 22 (22.6%) – within 101–110, and 5 (5.2%) patients – more than 110 mm Hg. Art. The risk of smoking affecting the occurrence of AH was 0.25, the risk of AH in the absence of smoking was 0.13. The relative risk was 1.92.

**Conclusions:** Smokers are 12% more likely to develop hypertension than non-smokers. Identification of smoking against the background of varying degrees of hypertension should be carried out to stratify the risk of cardiovascular complications and determine the appropriate tactics for managing these patients. It should be noted that patients with smoking in 15–20% of cases are expected to develop cardiovascular complications even with low blood pressure. Early detection of smoking and blood pressure levels is an important step in the management of hypertension, it allows you to objectively assess the patient's condition, start drug treatment in a timely manner, lower blood pressure and prevent the development of complications.

## STUDY OF ENDOTHELIAL DYSFUNCTION IN PATIENTS WITH ARTERIAL HYPERTENSION AND TYPE 2 DIABETES MELLITUS

*NABIBULLAEVA SH.Z., SHUKURDJANOVA S.M., MAKHMUDOVA M.S.*

*Tashkent Medical Academy, Tashkent, Uzbekistan*

**Purpose.** To study the features of endothelial function in patients with arterial hypertension (AH) with type 2 diabetes mellitus (DM).

**Materials and methods of research.** The study included 70 patients with hypertension. The patients' age ranged from 38 to 68 years, on average  $56.2 \pm 3.7$  years. The patients were divided into 2 groups: group 1 included 33 AH patients without diabetes mellitus, group 2 included 37 patients diagnosed with type 2 diabetes. The study included patients with arterial hypertension, confirmed by blood pressure monitoring. In the first group, the average SBP per day was  $141.9 \pm 2.69$  mmHg, the average DBP per day was  $93.4 \pm 1.93$  mmHg. In the second group, the average SBP per day was  $146.7 \pm 2.56$  mmHg, the average DBP per day was  $95.7 \pm 1.85$  mmHg. BMI, SBP and DBP did not differ significantly between the groups ( $p > 0.05$ ). Clinical groups are comparable in terms of sex, age of patients, duration and severity.

To identify endothelium-dependent dysfunction, a test with reactive hyperemia was performed, and for endothelium-independent dysfunction, a test with nitroglycerin was performed.

**Research results.** It was found that the diameter of the brachial artery was initially significantly different

in patients of the first and second groups. The mean value of the vessel diameter in AH patients without DM was  $3.87 \pm 0.07$  mm, in AH patients with DM it was significantly larger –  $4.19 \pm 0.08$  mm ( $p < 0.05$ ). At the peak of reactive hyperemia, the diameter of the brachial artery did not differ significantly between the two groups:  $4.40 \pm 0.08$  mm in the first group and  $4.43 \pm 0.07$  mm in the second ( $p < 0.05$ ).

According to the results of the test with reactive hyperemia, endothelium-dependent dysfunction in the first group was detected in 11 patients (33.3%), in the second group in 24 patients (64.9%). After the test with reactive hyperemia, the diameter of the brachial artery returned to its original state, because it did not significantly differ from the baseline ( $p > 0.05$ ). The test with nitroglycerin was positive in 27 patients from the first group (81.8%) and in 27 patients from the second group (73.0%).

**Conclusion.** Thus, in the first group, endothelial dysfunction was observed much less frequently than in patients in the second group. Endothelium-dependent vascular dysfunction was also more significant in the second group, which indicates more pronounced vascular damage in AH patients with DM and a greater risk of developing cardiovascular complications.

## ARTERIAL GIPERTONIYA BOR BEMORLARDA KOMORBIDLIK XUSUSIYATLARI

*TAIROV M.SH, JURAYEVA X.I.*

*Buxoro davlat tibbiyot instituti, Buxoro sh, O'zbekiston  
RIKIATM Buxoro viloyat mintaqaviy filiali, Buxoro sh, O'zbekiston*

**Tadqiqot maqsadi:** arterial gipertenziyasi bor bemorlarda komorbid patologiyaning strukturasini o'rganish.

**Material va tadqiqot usullari.** Tadqiqot ishlari Respublika ixtisoslashtirilgan kardiologiya ilmiy amaliy tibbiyot markazi Buxoro viloyat mintaqaviy filialida 2020–2021 yillarda davolangan 135 nafar arterial gipertoniyaning (AG) II-III bosqichlari bo'lgan, tasodifiy tanlab olish yo'li bilan tanlab olingan bemorlarning kasallik tarixi tahlil qilindi. Bemorlarning o'rtacha yoshi  $63,4 \pm 5,3$  yoshni tashkil etdi. Ularning 52,6% ayollar (71 nafar), 47,4% erkaklar (64 nafar). Tadqiqot arterial gipertoniya bor bemorlarda komorbid kasalliklarni baholashni va bemorlarning komorbid strukturasini va 10 yillik yashash darajasini aniqlash uchun Charlsson indeksini aniqlashni o'z ichiga oldi.

Ushbu indeks mavjud ba'zi qo'shimcha kasalliklarni ball tizimi (0 dan 40 gacha) bo'yicha baholash va o'lim prognozi uchun foydalanadi. Olingan ma'lumotlarning statistik tahlili Microsoft Office XP va Excel statistik dasturiy ta'minot to'plami yordamida amalga oshirildi.

**Tadqiqot natijalari.** Tadqiqot davomida arterial gipertoniyasi bor bemorlarning 100% da qo'shimcha kasalliklar borligi aniqlandi.

Bemorlarning 8,1% da 1 ta, 12,6% da 2 ta, 79,3% da esa 3 ta va undan ko'p kasallik mavjudligi aniqlandi. Tekshirilgan bemorlarda komorbidlik strukturasini asosan yurak-qon tomir patologiyasi tashkil qildi. Bemorlarning 85,2% da surunkali yurak etishmovchiligi (SYuE) qayd etilgan. Yurak ishemiya kasalligidan 82 bemorda (60,7%) zo'riqishdagi



## АРТЕРИАЛЬНАЯ ГИПЕРТЕНЗИЯ

STUDY OF THE PREVALENCE OF SMOKING AND ARTERIAL HYPERTENSION IN RURAL AREAS Nabibullaeva Sh.Z., Shukurdjanova S.M.,Boynazarova A.,Nuritdinova N.B., Makhmudova M.S. Tashkent Medical Academy, Tashkent, Uzbekistan.....	44
STUDY OF ENDOTHELIAL DYSFUNCTION IN PATIENTS WITH ARTERIAL HYPERTENSION AND TYPE 2 DIABETES MELLITUS Nabibullaeva Sh.Z., Shukurdjanova S.M.,Makhmudova M.S. Tashkent Medical Academy, Tashkent, Uzbekistan.....	45
ARTERIAL GIPERTONIYA BOR BEMORLARDA KOMORBIDLIK XUSUSIYATLARI Tairov M.Sh, Jurayeva X.I. Buxoro davlat tibbiyot instituti, Buxoro sh, O'zbekiston RIKIATM Buxoro viloyat mintaqaviy filiali, Buxoro sh, O'zbekiston .....	45
АССОЦИАЦИЯ G894Т ПОЛИМОРФИЗМА ГЕНА NOS3 С ФИБРИЛЛЯЦИЕЙ ПРЕДСЕРДИЙ У БОЛЬНЫХ АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИЕЙ В УЗБЕКСКОЙ ПОПУЛЯЦИИ Абдуллаева Г.Ж., Раджапова Г.М., Пулатова М., Шербадалова Н., Закирова Д.В., Ибрагимова И.А., Шукурова Д.Ю., Машкурова З.Т. Абдуллаев А.А. Республиканский специализированный научно-практический медицинский центр кардиологии, Ташкент, Узбекистан Центр передовых технологий, Ташкент, Узбекистан .....	46
ВЗАИМОСВЯЗЬ T786С ПОЛИМОРФИЗМА ГЕНА NOS3 С ФИБРИЛЛЯЦИЕЙ ПРЕДСЕРДИЙ У БОЛЬНЫХ АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИЕЙ В УЗБЕКСКОЙ ПОПУЛЯЦИИ Абдуллаева Г.Ж., Раджапова Г.М., Пулатова М., Шербадалова Н., Закирова Д.В., Ибрагимова И.А., Шукурова Д.Ю., Машкурова З.Т. Абдуллаев А.А. Республиканский специализированный научно-практический медицинский центр кардиологии, Ташкент, Узбекистан; Центр передовых технологий, Ташкент, Узбекистан .....	47
БИРЛАМЧИ ТИББИЙ-САННИТАРИЯ ЁРДАМИ МУАССАСАЛАРИ ФАОЛИЯТИДА ГИПЕРТОНИЯ КАСАЛЛИГИНИНГ КЕЧИШИ Атаниязов Х.Х., Хамидуллаева Г.А Республика ихтисослаштирилган кардиология илмий-амалий тиббиёт маркази Қорақалпоғистон Республикаси ҳудудий филиали, Нукус, Ўзбекистон; Республика ихтисослаштирилган кардиология илмий-амалий тиббиёт маркази, Тошкент, Ўзбекистон .....	48
ГИПЕРТОНИЯ КАСАЛЛИГИНИНГ КЕЧИШИДА ХАВФ ОМИЛЛАР ВА НИШОН АЪЗОЛАР ШИКАСТЛАНИШИНИНГ ЎЗАРО БОҒЛИҚЛИГИ Атаниязов Х.Х., Хамидуллаева Г.А Республика ихтисослаштирилган кардиология илмий-амалий тиббиёт маркази Қорақалпоғистон Республикаси ҳудудий филиали, Республика ихтисослаштирилган кардиология илмий-амалий тиббиёт маркази .....	49
ГИПЕРТОНИЯ КАСАЛЛИГИНИНГ КРИЗЛИ КЕЧИШИНИНГ КЕЛИБ ЧИҚИШИНИ АНИҚЛАШДА СКРИНИНГНИНГ АҲАМИЯТИ Атаниязов Х.Х., Хамидуллаева Г.А Республика ихтисослаштирилган кардиология илмий-амалий тиббиёт маркази Қорақалпоғистон Республикаси ҳудудий филиали, Республика ихтисослаштирилган кардиология илмий-амалий тиббиёт маркази .....	49
КЛИНИЧЕСКАЯ ЭФФЕКТИВНОСТЬ УРАПИДИЛА В ЛЕЧЕНИИ ГИПЕРТОНИЧЕСКИХ КРИЗОВ У ЖИТЕЛЕЙ ПРИАРАЛЬЯ Атаниязов Х.Х., Хамидуллаева Г.А. ГУ «Республиканский Специализированный научно-практический медицинский центр кардиологии» МЗ РУз, г. Ташкент.....	50
ИЗУЧЕНИЕ ТЕЧЕНИЯ АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИИ У ПОДРОСТКОВ Газиева Х.Ш., Турсунбаев Р.С. Ташкентский педиатрический медицинский институт, Ташкент, Узбекистан. ....	51
КЛИНИЧЕСКОЕ ЗНАЧЕНИЕ ДИАСТОЛИЧЕСКОЙ ДИСФУНКЦИИ ЛЕВОГО ЖЕЛУДОЧКА У МОЛОДЫХ ЛИЦ С АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИЕЙ Жемуратова Р. Е. Каракалпакстанский Республиканский территориальный филиал Республиканского специализированного научно-практического медицинского центра кардиологии. г. Нукус Республика Каракалпакстан ,Узбекистан.....	52