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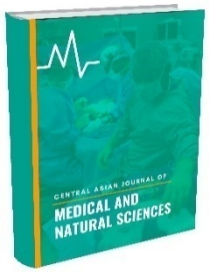

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ASSESSMENT OF RISK FACTORS FOR ARTERIAL HYPERTENSION HYPERTENSION IN PREGNANT WOMEN

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ABSTRACT: *To date, arterial hypertension (AH) occupies a leading position among all extragenital diseases in pregnant women. In Russia, the frequency of occurrence of this pathology according to various data is from 4 to 30%, in Europe this indicator is 4-15%, and according to the World Health Organization – up to 20%. Despite the urgency, this problem is far from being solved, since hypertension of pregnant women occupies a special ("intermediate") position between two such different disciplines-obstetrics and therapy. In this respect, it is a typical example of a borderline problem, which has important theoretical and practical significance. The lack of full-fledged standards for the diagnosis and treatment of pregnant women with hypertension not only causes high maternal mortality, but also increases the number of adverse perinatal outcomes. Against the background of increased arterial pressure, pregnant women are significantly more likely to experience such dangerous complications as: progressive placental insufficiency, fetal hypoxia, and in severe cases, asphyxia and death of the child. Therefore, at the present stage, it is necessary to be able to predict and prevent the development of the disease in time. But at the moment, there are many inconsistent positions in the approaches to the examination, follow-up, and treatment of pregnant women with hypertension, which requires additional research in this area.*

Keywords: arterial hypertension, pregnant women, progressive placental insufficiency, fetal hypoxia, body mass index

Goal. To identify risk factors for hypertension in pregnant women.

Materials and methods. A retrospective analysis of the individual medical records of 125 pregnant women who were treated in the maternity ward 1-Sammi clinic in the period from January to

December 2020 was conducted. The average age of the patients was 26±2.5 years. The gestation period of the patients ranged from 37 to 40 weeks.

When analyzing medical documents, such indicators as the age of the pregnant woman, the number of pregnancies and births, the body mass index before pregnancy, weight gain during pregnancy, the presence of hypertension, single-multiple pregnancy, concomitant somatic pathology were evaluated. The criteria for the diagnosis of hypertension were the level of systolic blood pressure (SBP) of 140 mm Hg and more or diastolic blood pressure (DBP) of 90 mm Hg and more, or an increase in SBP of 25 mm Hg and more or DBP of 15 mm Hg compared to the levels of blood pressure before pregnancy or in the first trimester of pregnancy. To compare the groups, one-way analysis of variance (ANOVA) was used in the case of a normal data distribution, as well as the Kruskal-Wallace criteria in the case of an abnormal data distribution. The data is presented as an average±standard deviation. The difference between the groups was considered statistically significant at a significance level of $p<0.05$.

Results. First of all, the frequency of arterial hypertension among pregnant women was evaluated. At the same time, out of 125 pregnant women were found to have arterial hypertension in 21 women out of the total number of subjects, which was 20.8%.

Assessing the influence of women's age on the occurrence of arterial hypertension, it was found that the average age of women with arterial hypertension (AH) was 28.1±6.2, while the average age of pregnant women without AH was 26.2±7.5 ($p=0.008$). It should be noted that arterial hypertension was found in pregnant women among all age groups. Thus, the maximum age of a woman with hypertension was 43 years, while the youngest pregnant woman who was diagnosed with hypertension was only 16 years old.

We also evaluated the differences in the frequency of hypertension among women with single and multiple pregnancies. For this purpose, the women were divided into two groups, the first being women with a single pregnancy, and the second, respectively, women with multiple pregnancies. At the same time, significant differences between these groups were observed in the estimated parameters. It was found that in the first group of women, hypertension was diagnosed in 19%. In the second group of patients, the incidence of hypertension was much higher than 70% ($p=0.000$).

When studying the effect of a woman's BMI before pregnancy on the development of arterial hypertension, the following results were obtained. The average BMI of a woman without hypertension was 23.7±2.7 while the average BMI of a pregnant woman who was diagnosed with hypertension was 29±3.9 ($p=0.000$).

We also evaluated the relationship between weight gain during pregnancy and the occurrence of hypertension. It was reliably established that the average weight gain in women with hypertension was 16.3±2.6, while the average weight gain in women without hypertension was 13.6±3.7 ($p=0.000$).

To assess the impact of the number of pregnancies on the development of hypertension, women were divided into groups according to the number of pregnancies. The first group – women with 1 or 2 pregnancies, the 2nd group 3-4 pregnancies, the 3rd group-5 or more pregnancies. When analyzing the data obtained, there were no significant differences between the compared groups ($p>0.05$).

Conclusions.

1. The prevalence of hypertension among pregnant women was more than 20%, which indicates that at least every fifth pregnancy is accompanied by the development of arterial hypertension, which in turn serves as a predictor of other dangerous complications.
2. In the course of our study, we identified some factors that affect the development of hypertension in pregnant women. They were the following indicators such as the age of the expectant mother, excessive

body weight. Also, the study showed that multiple pregnancies increase the risk of hypertension by 3.5 times. Thus, women at risk of developing the disease should be under the strict supervision of specialists, both during pregnancy and at the stage of its planning. Only competent joint work of a general practitioner, an obstetrician-gynecologist and a future mother will help prevent the development of the disease and avoid dangerous complications.

LITERATURE:

1. Daily monitoring of arterial pressure: methodological issues., A. N. Rogoza [et al.]; edited by G. G. Arabidze, O. Yu. Atkova. M., 1997; P 37.
2. Agarwal R. Systolic hypertension in hemodialysis patients. Semin. Dial. 2003; Vol.16., P 208-231
3. M.F. Canesin., et al., Ambulatory blood pressure monitoring of patients with heart failure. A new prognosis marker; Arq. Bras. Cardiol. 2002; Vol. 78(1). P 83-89.
4. C.K. Farmer., et al. An investigation of the effect of advancing ureamia, renal replacement therapy and renal transplantation on blood pressure diurnal variability; Nephrol. Dial. Transplant. 1997; №12; P 2301-2307.
5. J. Shin., et al. Association of diurnal blood pressure pattern with risk of hospitalization or death in men with heart failure; J. Card. Fail. 2007; Vol.13(8). P 656-662.
6. M.B. Davidson. et al., Association of impaired diurnal blood pressure variation with a subsequent decline in glomerular filtration rate; Arch. Intern. Med. 2006; Vol. 166. P 846-852.
7. S. Hoshide. et al., Associations between non-dipper of nocturnal blood pressure decrease and cardiovascular target organ damage in strictly selected community-dwelling normotensives; Am. J. Hypertens. 2003. Vol. 16(6). P 434-438.
8. J. Ishikawa, et al., Cardiovascular risks of dipping status and chronic kidney disease in elderly Japanese hypertensive patients; J.Clin. Hypertens. 2008. Vol. 10(10). P 787-794.
9. M. Kanbay, et al., Causes and mechanisms of nondippering hypertension; Clin. Exp. Hypertens. 2008; Vol. 30(7). P 585-597.
10. N. Goto, et al., Circadian blood pressure rhythm is disturbed by nephrectomy; Hypertens. Res. 2005; Vol. 28(4). P 301-306.
11. E. Ingelson, et al., Diurnal blood pressure pattern and risk of congestive heart failure; JAMA. 2006. Vol. 295 (24). P 2859-2866.
12. A.S. Go, et al. Hemoglobin level, chronic kidney disease, and the risks of death and hospitalization in adults with chronic heart failure: the Anemia in Chronic Heart Failure: Outcome and Resource Utilization (ANCHOR) Study; Circulation. 2006. Vol. 113(23). P 2713-2723.
13. Khusainova M., Nazarov F. FEATURES OF THE CIRCADIAN RHYTHM BLOOD PRESSURE IN PATIENTS HEART FAILURE AND IMPAIRED RENAL FUNCTION //InterConf. – 2021.
14. Tairov D. R., Yarmukhamedova S. K., Khusainova M. A. Characteristics of Metabolic Syndrome and Cardiovascular Injuries in Gout.

15. Alisherovna M. K. 24-Hour Abp Monitoring Of Blood Pressure In Patients With Chronic Heart Failure And The State Of Kidney Function //CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. – 2021. – Т. 2. – №. 1. – С. 197-204.

16. E.L. Knight, et al. Predictors of decreased renal function with heart failure during converting enzyme inhibitor therapy: results from studies of left ventricular dysfunction. Am. Heart J. 1999. №138. P 849-855.

17. A.de la Sierra,et al. Prevalence and factors associated with circadian blood pressure patterns in hypertensive patients. Hypertension. 2009. Vol. 53(3). P 466-472

18. K. Dimopoulos, et al. Prevalence, predictors, and prognostic value of renal dysfunction in adults with congenital heart disease. Circulation. 2008. Vol. 117(18). P 2320-2328.

19. L.M. Prisant. Blunted nocturnal decline in blood pressure. J. Clin. Hypertens (Greenwich). 2004. Vol. 6(10). P 594-597.