



STUDIES IN THE DEVELOPMENT OF HIGH AND LOW RISK HYPERTENSIVE DISORDERS IN PREGNANCY

Gozieva Sh.S.

Andijan state medical institute, Uzbekistan

<https://doi.org/10.5281/zenodo.7679784>

Annotation. Hypertensive disorders during pregnancy occur in 6-8% of cases. One of the alleged causes of loss in the world and in 20-25% of cases - the reason perinatal death. A special place is occupied by preeclampsia, the frequency of which ranges from 2 to 8%. 10-15% of all unbearable deaths in the world coverage with preeclampsia or eclampsia, accounting for at least 70,000 deaths per year. In Latin America and the Caribbean, hypertension disorders. As a result, almost 26% of deaths, while in the case of them they account for 9% of deaths.

Key words: Arterial hypertension, pregnancy, preeclampsia.

1. Introduction. Arterial hypertension (AH) in pregnant women occupies a place among the topical issues of modern medicine. It is an integral part of at least two features of acute medical and social problems today: hypertension in general and in women of reproductive age. This article examines the results of studies of risk factors for the development of hypertension in pregnant women.

Hypertensive disorders during pregnancy (HRD) occupy a leading position among the problems of modern obstetrics. This is due to the fact that this pathology has a significant impact on both maternal and perinatal morbidity and mortality. The frequency of HRB varies over a wide range - from 5% to 22%. This indicator depends on many factors, primarily on the level of socio-economic development of the country, ethnicity, an increase in the overall incidence among women, an increase in the number of pregnant women of late reproductive age, as well as the quality and availability of medical care. Early onset of preeclampsia is a major factor leading to maternal and perinatal mortality. In addition, hypertensive disorders during pregnancy are the cause of severe morbidity and disability of mothers and their children. However, at proper interdisciplinary management, most cases of adverse outcomes are preventable. Since the consequences of severe hypertensive disorders reduce the quality of a woman's subsequent life (high frequency of atherosclerosis, diabetes mellitus, cardiovascular diseases), and the frequency of violations of the physical, psychosomatic development of prematurely born children is quite high, as well as the risk of developing somatic diseases in the future, this the problem is significant in social and medical terms. It has been established that in developed countries, the growth rate of HRP does not tend to decrease, although the frequency of MS is somewhat reduced due to the widespread use of magnesia therapy and improved antenatal care. It has been proven that the treatment of preeclampsia (PE) and its complications is currently ineffective, so preclinical diagnosis, prognosis and prevention of this pathology are considered to be the main reserves for reducing maternal and perinatal mortality. Despite a large number of hypotheses regarding the development of PE, none of them reveals its final cause. At the same time, there is no doubt that the basis for the development of PE is laid already at the initial stages of pregnancy.

After summarizing the data of numerous studies by foreign authors, the most common clinical and anamnestic factors of HRH have been established. Among them are the first pregnancy, the presence of PE and eclampsia in history, the age of pregnant women under 18 and over 35 years, the interval between births up to 2 years and over 10 years, a burdened family history of PE, multiple pregnancy, extragenital diseases of the mother, etc. However, it is necessary. It should be noted that HRDs complicate the course of pregnancy also in women without risk factors. I would like to note that in the Republic of Uzbekistan the problem of GRP is constantly in the center of attention of obstetricians and gynecologists. It must be said that information on the frequency, course and outcomes of pregnancy for the mother and fetus with hypertensive disorders in the republic is scarce. There are no scientific data on the significance of various clinical, anamnestic and immunological risk factors for the development of this pathology. All this predetermined the relevance and purpose of this study.

2. Material and methods examined 120 women with various HRDs (main group I), the control group consisted of 50 women with a normal pregnancy without hypertension.

The analysis of the obtained data showed that the most significant risk factors for HRD are the first pregnancy, the presence of extragenital pathology in a pregnant woman, as well as the presence of PE and eclampsia in history. Moreover, in chronic hepatitis, the leading role belongs to such risk factors as aggravated somatic status (96.3%), first pregnancy (55.6%) and obesity of varying degrees (48.1%). With PE, such risk factors as the first pregnancy (58.4%) and the presence of PE and eclampsia in history (39.3%) came to the fore, and HH was most common among primigravida women (83.6%). Ultrasound signs of FPI in hypertensive disorders in the stage of subcompensation are a decrease in the thickness of the placenta (18.0%) and its premature aging (51.4%). Late ultrasonic criteria for HRD are a decrease in the amniotic index - in 67.5% and IUGR of the fetus according to biometric data (48.1%), which indicates decompensation of the fetoplacental complex and the irreversibility of the pathological process. Thus, changes in the placenta (thickening and cystic dilatations) are relatively early ultrasound signs of the risk of developing HRH; in terms of other parameters, ultrasound criteria cannot be attributed to early preclinical markers of this pathology, which can prevent the development of FPI and improve the course of the gestational process.

3. Results from the implementation of developments based on the data obtained from the study:

- the detection of hypertensive disorders in pregnant women increases by at least 50%;
- awareness of GH in pregnant women also increases by 50% or more; the number of pregnant women effectively controlling blood pressure increases to 70-90%; the risk of developing cardiovascular complications of hypertension in pregnant women (cerebrovascular accident, myocardial infarction) is reduced by 56% or more;

4. Discussions. The following risk factors for hypertension will be studied and assessed: smoking, dyslipidemia, hyperglycemia, obesity (BMI>30kg/mg), abdominal obesity (circumference >8.8 cm), family history of early CVD (<55 years in men, <65 years in women), low consumption of vegetables and fruits (< 400g/day) and low physical activity. WHO criteria and recommendations will be used to identify risk factors (WHO, 2014). Hypertensive target organ damage will be studied using the PRO (2018) and ACC/ANA (2017) diagnostic criteria.

5.Conclusion.The results of the conducted studies allowed us to identify a number of anamnestic, clinical, immunological and instrumental risk factors for the development of PE. High risk factors for the development of PE and severe forms of pathology:

Clinical and anamnestic prognostic markers (I trimester)

- first pregnancy
- the presence of chronic hypertension,
- the presence of extragenital pathology in a pregnant woman,
- the presence of PE and eclampsia in history,
- a combination of three or more clinical and anamnestic risk factors.

Instrumental prognostic markers (II trimester)

- a decrease in uteroplacental blood flow with more pronounced changes in the left uterine artery and the presence of a dirotic notch.
- IR up to 0.60 and the presence of a dirotic notch in both uterine arteries, IR in the range of 0.61-0.70 and the presence of a dirotic notch in one of the uterine arteries, IR more than 0.70 and the absence of a dirotic notch in the uterine arteries.
- cystic expansion and thickening of the placenta on ultrasound.

Since 1998, the International Society for the Study of Hypertension in Pregnancy (ISSHP) has been actively studying approaches of various societies to the problem of hypertension in pregnant women. There are still discrepancies in the rules for measuring blood pressure, criteria for proteinuria and even the terminology used to classify hypertensive disorders in pregnancy. All this reflects the need for further research before the consensus on approaches to the diagnosis and treatment of various forms of hypertension in pregnant women. Despite differences in the recommendations of various international communities, in general, there is a consensus regarding the approaches to managing pregnant women with severe AH and moderate (non-severe) AH with signs of organ dysfunction. However, BP targets in pregnant women remain the subject of debate. In addition to direct comparison studies various antihypertensive drugs, it is necessary to develop targeted personalized strategies for the management of pregnant women with various forms of hypertension.

6.Acknowledgement. The importance of a comprehensive clinical and epidemiological assessment of pregnant patients with hypertensive disorders is shown, which forms a personalized approach to the dynamic control of hypertension and early prevention. The importance of conducting a pharmacoepidemiological study to ensure the safety and adequacy of AHT in pregnant women was evaluated. The role of the developed personalized approach to the prevention of hypertensive disorders, their risk factors for complications in the population of pregnant women in the Ferghana Valley has been demonstrated.

7.References. Early detection of the disease often depends on the awareness of the population of childbearing age. Timely diagnosis is the key to preserving the quality of life of a woman and the birth of a healthy generation.

References:

1. Hypertensive Disorders in Pregnancy (HDP) Guideline Summary, NY State Department of Health, 2013.



2. Lo JO, Mission JF, Caughey AB. Hypertensive disease of pregnancy and maternal mortality. *Obstet Gynecol.* 2013; 25 (2): 124-32. DOI: 10.1097/GCO.0b013e32835e0ef5
3. Ghulmiyah L, Sibai B. Maternal mortality from preeclampsia/eclampsia. *Semin Perinatol.* 2012; 36 (1): 56-9. DOI: 10.1053/j.semperi.2011.09.011.
4. Say L, Chou D, Gemmill A, et al. Global Causes of Maternal Death: A WHO Systematic Analysis. *The Lancet Global Health* 2014; 2 (6): 323-33. DOI: : 10.1016/S2214-109X(14)70227-X.
5. Sidorova IS, Phillippe OS, Nikitina NA, et al. Causes of maternal deaths from preeclampsia and eclampsia in 2013. *Obstet Gynecol* 2015; 4: 11-18. (In Russ.) Сидорова И. С., Филиппов О. С., Никитина Н. А. и др. Причины материнской смертности от преэклампсии и эклампсии в 2013 году. *Акуш и гинек* 2015, 4: 11-18.
6. Vuurma AJ, Turner RJ, Driessen JH, et al. Genetic variants in preeclampsia: a metaanalysis. *Human Reproduction Update* 2013; 3 (19): 289-303.
7. Vettorazzi J, Torres FV, De Avila TT, et al. Serum S100 B in pregnancy complicated by preeclampsia: case-control study. *Pregnancy Hypertens* 2012; 2: 101-5.
8. Wu P, van den Berg C, Alfirevic Z, et al. Early pregnancy biomarkers in preeclampsia: a systematic review and meta-analysis. *Int J Mol Sci* 2015; 16: 23035-56. DOI: 10.3390/
9. Arislanbaevich, A. R. (2022). PROBLEMS OF EVALUATION OF MODERN MEDIA CENTERS: INNOVATIVE RESEARCH AND DEVELOPMENT. *EPRA International Journal of Research and Development (IJRD)*, 7(10), 152-154.
10. Arislanbaevich, A. R. (2022). PHILOSOPHICAL ANALYSIS OF SOCIO-DEMOCRATIC FUNCTIONS OF PUBLIC AND MEDIA CENTERS. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 8(10), 348-355.
11. Арзиев, Р. А. (2022). СИНЕРГЕТИК ТАЪЛИМ ПАРАДИГМАЛАРИНИНГ МАЗМУНИ ВА МОҲИЯТИ. *Academic research in educational sciences*, 3(NUU Conference 2), 247-251.
12. Arziev, R. A. (2019). THE HISTORY OF APPEARANCE OF THE PRESS IN KARAKALPAKSTAN. *European Journal of Humanities and Social Sciences*, (5), 3-5.
13. Arziev, R. A. (2015). The problems of development of genres in publisher of Karakalpakstan. In *The Seventh European Conference on Languages, Literature and Linguistics* (pp. 45-51).
14. АРЗИЕВ, Р. ВЕРБАЛ (ОҒЗАКИ, СЎЗ, ФИКР БИЛДИРИШ) ДЕМОКРАТИЯ БОСҚИЧИ ВА УНИНГ ИЖТИМОЙ МОҲИЯТИ. *Social sciences*.
15. Raximov, R., G'ulomova, Z., & G'ulomov, I. (2023). SHISHA ISHLAB CHIQRISH VA UNI KLASIFIKATSIYASI. *Yangi O'zbekiston talabalari axborotnomasi*, 1(2), 9-15.
16. ўғли Раҳимов, Р. Р. (2022). ТАШИШДА ТРАНСПОРТ ВОСИТАЛАРИНИНГ СИФАТ КЎРСАТКИЧЛАРИНИ БАҲОЛАШ. *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI*, 2(14), 656-663.
17. Rahimov, R. R. (2022). Iste'molchiga dori vositalarini tashuv uchun TOPTAL TURNI TANLASH JARAYONINI SIMULATIRISH. *Yangi asr innovatsiyalari jurnali*, 18 (5), 109-120.
18. Rafuqjon o'g'li, R. R. (2022, December). TIRSAKLI VALLARNI TAMIRLASH ISTIQBOLLARI. In *Conference Zone* (pp. 333-342).
19. угли Рахимов, Р. Р. (2022). МОДЕЛИРОВАНИЕ ПРОЦЕССА ВЫБОРА ОПТИМАЛЬНОГО ТИПА ПОДВИЖНОГО СОСТАВА ДЛЯ ПЕРЕВОЗКИ МЕДИКАМЕНТОВ ПОТРЕБИТЕЛЮ. *Journal of new century innovations*, 18(5), 109-120.

Rahmatullo Rafuqjon, O. G. Li Rahimov (2022). Avtomobil Transportida Tashuv Ishlarini Amalga Oshirishda Harakat Xavfsizligini Ta'minlash Uslublarini Takomillashtirish Yo'llari. *Образование И Наука В Хxi Веке*, 750-754.

