

Severe Pre-Eclampsia with Extragenital Disease

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Abstract: The paper analyses the data on the course of pregnancy in women with pre-eclampsia on the background of extragenital pathologies. The factors influencing the occurrence of pre-eclampsia, the course of pregnancy and its complications are studied.

Keywords: extragenital pathologies, pre-eclampsia, risk groups, BMI, NCD, chronic pyelonephritis.

Relevance. Preeclampsia is a new onset or worsening of existing arterial hypertension with proteinuria after 20 weeks of gestation. Eclampsia is unexplained generalised seizures in patients with pre-eclampsia[2]. Diagnosis is made by measuring blood pressure and urine protein content, and by tests to assess target organ damage (e.g. pulmonary oedema, liver or renal dysfunction). Treatment usually consists of intravenous magnesium sulphate and delivery at term or earlier in case of maternal or fetal complications[3].

The etiology of pre-eclampsia is unknown.

However, high and moderate risk factors have been identified[1]

High risk factors include

Previous pregnancy with pre-eclampsia

Multiple pregnancies

Renal disease

Autoimmune diseases

Type 1 or 2 diabetes mellitus

Chronic hypertension

Moderate risk factors include:

First pregnancy

Maternal age ≥ 35 years

Body mass index before pregnancy > 30

Family history of pre-eclampsia (in a first-degree relative).

Low income

Preeclampsia occurs in 4.6% of cases and eclampsia in 1.4% of births worldwide[4]. Preeclampsia and eclampsia develop after 20 weeks of gestation, although most cases occur after 34 weeks [5]. Some cases develop after delivery, most commonly within the first 4 days, but sometimes up to 6 weeks postpartum.

Untreated pre-eclampsia is present for varying lengths of time and then may suddenly develop into eclampsia. Untreated eclampsia is usually fatal [6]. Hypertensive disorders during pregnancy are one of the most severe complications of pregnancy and still remain an unsolved mystery overshadowing the birth of a new human being. This complication is characterised by a high frequency, especially in recent years and accounts for 17-24% of the total number of pregnant and postpartum women [8]. Delivery, eliminating the cause of the disease, does not eliminate the mechanisms of progression of changes in organs and systems associated with the main links in the pathogenesis of hypertensive conditions. Women with this complication of pregnancy develop chronic kidney disease and hypertension, leading to disability and reduced quality of life.

Literature sources indicate that the treatment of hypertensive disorders during pregnancy remains largely symptomatic [2]. Opinions on the timing and method of delivery of such pregnant women also remain contradictory. The need to develop and implement optimal methods of examination, treatment regimens, methods and timing of delivery of severe pre-eclampsia remains obvious.

Purpose of the study. To study the peculiarities of pregnancy course in women with pre-eclampsia and to reveal clinical and pathogenic mechanisms of pre-eclampsia and its connection with extragenital diseases.

Materials and Methods of the Study. Sixty pregnant women at early and late gestational periods, who were in the obstetric department of the clinic №1 of SamMI, as well as in the maternity complex №2, were examined. The pregnant women were divided into 3 groups: Group I 20 women whose pregnancy was complicated by pre-eclampsia at 22 to 34 weeks gestation. Group II 20 women whose pregnancy was complicated by pre-eclampsia at 34 weeks and more. Group III 20 women with normal pregnancy. The mean age of the patients was 27.8 ± 5.5 years.

General clinical and functional, laboratory methods of investigation, results of additional methods of investigation (ultrasound feto- and placentometry, Dopplerometry, CTG, morphological and morphometric studies of placenta) were used for examination of pregnant women, which were entered into individual charts of the examined.

Results: In all groups, pregnant women presented complaints of nausea, vomiting 1 -2 times a day, general weakness, fatigue. 10% of the patients in the first and 40% in the second groups were overweight of varying degrees of severity, and in the second group BMI was statistically significantly higher ($p < 0.01$). As a result of anamnesis data analysis, the closest relatives of the examined women (50.0%) had cardiovascular (hypertension, NCD, myocardial infarction, etc.), urinary (ICH, pyelonephritis, renal failure, etc.), endocrine (DM) systems, as well as complications during pregnancy. Among the patients of groups I and III there were no diseases against which severe PE could develop. In group II, a large share in the structure of extragenital pathology had disorders of the cardiovascular system in the form of CHD. Only 8 (3.8%) patients with pregnancy complicated by SORP had a late menstrual cycle. The average duration of menstrual bleeding was 5.2 ± 1.0 days ($p > 0.05$). There were 34 (56.6%) first-time pregnant women and 26 (43.3%) repeat pregnant women. The course of the present pregnancy in the general group was complicated by vomiting in 20% of the patients, threat of abortion in 45% of the patients, and anaemia in 65.0%. Zangemeister's triad occurred in only 28.3% of pregnant women with PE. Two symptoms of PE were more often expressed (61.7%), sometimes only one symptom (monosymptomatic PE), which was predominantly observed in pregnant women with PE with NCD (10% of cases). Analysing the results of ultrasound biometry, we found that in most cases (80.8%) the fetal size corresponded to the gestational age. It is noteworthy that in subgroups without SORP, a large number of studies showed a lag in fetal size-biometry: 8.3% in group I and 9.5% in group II ($p > 0.05$). At ultrasound placentography, 56 (93.3%) had placenta located on the anterior and lateral uterine walls, and 16 (28.5%) of them had low placentation. The placenta was located on the posterior uterine wall in 4 (6.67%) of the pregnant women examined. The placenta thickness was within normal limits and only 5 (8.33%) cases had thin placenta. On assessment of placenta maturity, premature placenta maturation was noted in 12 (20%) of the subjects. We found placental cysts in 3 (5%) studies and a single umbilical artery in 1 (1.6%). Hyperechogenic inclusions

were found in the placenta in 10 (16.6%) patients (they were considered as petrificates). The high frequency of low birth weight in groups I and II (30% and 20%, respectively) is noteworthy.

Conclusions. Thus, such extragenital diseases as NCD and chronic pyelonephritis contributed most often to the development of severe pre-eclampsia and eclampsia. Violation of umbilical cord development and fetal parameters by ultrasound was detected to a greater extent in patients of the second group.

List of literature used

1. Ageeva M.I. Dopplerometric investigations in obstetric practice. - Moscow: Vidar-M Publishing House, 2000. - 112 c.
2. Voskresensky C.JI. Estimation of the foetus condition. Cardiotocography. Dopplerometry. Biophysical profile: Textbook. - Moscow: Book House, 2004. - 304 c.
3. Mashkovsky M. D. Medicines: Manual for doctors. - 14th ed. - M., 2000.
4. Sidorova I.S., Skosyreva N.V. Changes in cerebral haemodynamics in gestosis // *Akush. i gynek.* - 2005. - №4. - C. 3-6.
5. Brown M., Hague W.M., Higgins J., et al. The detection, investigation and management of hypertension in pregnancy: executive summary. // *Aust. N. Z. J. Obstet. Gynaecol.*, 2000; 40(2):133-138.
6. Ihomovna K. M., Kadyrovich K. N., Eryigitovich I. S. Patient Demographics in Haemorrhagic and Ischaemic Stroke // *Central Asian Journal of Medical and Natural Science.* – 2021. – T. 2. – №. 4. – C. 40-42.
7. Kamalova M. I., Khaidarov N. K., Islamov S. E. Pathomorphological Changes in Cerebral Vasculature in Ischaemic Stroke // *JournalNX.* – 2021. – T. 7. – №. 03. – C. 60-66.
8. Ilkhomovna K. M., Kadyrovich K. N., Eryigitovich I. S. Clinical and demographic quality of life for patients with ischemic stroke in Uzbekistan // *ACADEMICIA: An International Multidisciplinary Research Journal.* – 2020. – T. 10. – №. 10. – C. 883-889.