All pregnant women with type concentric left ventricular geometry during the therapy (basal magnesia, hypertensive, and antispasmodic) were taken by us under monitor observation periods of 30–34 weeks or more. In three of them, in spite of the ongoing corrective therapy, we were awarded us with resistant hypertension deterioration in the pumping function of the left ventricle, reduced ejection fraction. All this required the transfer of the three patients in the group of pregnant women with severe preeclampsia, followed by addressing the issue of timing and method of delivery.

Considering that in 13 pregnant women with type concentric remodeling, reduced performance single and minute cardiac output, ejection fraction on the background of hypertension and increased peripheral vascular resistance, leading to increased left ventricular mass and LVMI, which were indicators of the growth of pathological changes in the circulatory system. These indicators show the progression of the pathological process with the transition into concentric concentric remodeling of the left ventricle geometry type.

In this group of pregnant women against the background of corrective therapy we monitored the study parameters. In all cases, the therapy was effective, as indicated by our data reduction RWT index <0.45 units. (0,39 ± 0,02 units.).

Thus, in our opinion, it is necessary to distinguish between situations where the increase in the number and weight of functioning structures of the myocardium is a compensatory process and when the increasing demands on the heart are responsible for the transition of the adaptive mechanism in the pathological process.

Inadequate marker of cardiovascular adjustment in PE is to develop disproportionately LVM, the formation of isolated diastolic left ventricular dysfunction and the development of circulatory system in all organs and tissues.

Thus, a disproportionately high rate of LVM, in patients with mild pre-eclampsia is as a predictor of severe preeclampsia before its clinical manifestation, and the indication for revision of the tactics of pregnancy.

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Features of renal function and some indicators of homeostasis in women with mild preeclampsia

Abstract: Study of features of renal function, some indicators homeostasis in women with mild preeclampsia. We have studied 50 women with physiological pregnancy, 100 pregnant women with mild PE (II group) in gestational age 30–34 weeks. The results of the data, it should be emphasized that among the numerous violations of various functions of the body of pregnant women with mild preeclampsia. The most prominent is hypovolemia due to preferential reduction of plasma volume, hypoproteinemia due to proteinuria and reduced renal perfusion parameters with the deterioration of their functional capacity.

Keywords: Kidney, renal hemodynamic, homeostasis, renal plasma.

Preeclampsia — pregnancy pathology related to the most serious complications for both mother and fetus and is characterized by functional disorders of vital organs and systems [3; 4; 6]. The blood supply to the kidney is closely related to their function. Glomerular filtration as renal blood flow increased during the first trimester of 30–50% and then gradually decreases. The direction of changes in renal blood flow and glomerular filtration rate during pregnancy is the same, but the strict parallelism of these changes is not marked [2; 5; 6]. Structural changes in the kidneys during pregnancy and are accompanied by certain changes in their physiology. In particular, pregnancy is characterized by dilatation of the afferent and efferent arterioles with a 50% increase in renal plasma flow. In the same extent (50%) and increased glomerular filtration

Objective: studying of features of the functional state of some indicators of renal homeostasis in women with mild preeclampsia.

Materials and methods

We have studied 50 women with physiological pregnancy, 100 pregnant women with mild PE (II group) 30–34nedel gestation. We used clinical and laboratory studies including blood tests and urine tests, fibrinogen, the study of the protein in the blood, count the amount of protein in the daily urine and functional methods for assessing the condition of pregnant women. Laboratory diagnosis included biochemical studies of renal function and determination of coagulation factors. Qualification excretory renal function is important both from a clinical and research with view. It is known that an increase in serum creatinine, decreased creatinine clearance or estimated glomerular filtration rate (GFR), microalbuminuria are independent predictors of cardiovascular disease and, in particular, hypertensive syndrome. Precise direct measurement of GFR is methodologically difficult; therefore, to the last time in clinical practice commonly used indicators of elevated levels of creatinine in the blood plasma and special formula. Thus their use is not only possible, but does not suggest a substantial increase in the cost of an assessment of renal function at the undoubted increase in the accuracy of the study.

Formula (Cockcroft-Goult, FCG).

FCG= {140 — Age x weight/Serum Creat (mg/dL) x 72} x 0.85

where {} geometric ratio (fraction), which is multiplied by a factor of 0.85 for women.

Statistical processing of the results was performed using Student's t test using a software package Statgraf and Microsoft Excel version for Windows.

Results and discussion.

The complex research of renal function and homeostasis parameters in 100 women with mild preeclampsia at term of 30 to 34 weeks.

Table № 1. – Data from clinical studies of blood and urine samples from women with mild preeclampsia, n = 150

Indicators	Mild preeclampsia (n=100)	Control group (n=50)	P
Кровь			
Hemoglobin, g/l	97,5±1,72	101,3±2,31	>0,05
Erythrocyte, 10^2/l	3,04±0,06	3,1±0,12	>0,05
Ht,%	36,0±0,18	36,3±0,26	>0,05
Total protein, g/l	69,3±2,14	81,0±0,35	<0,001
urine			
Diurnal diuresis, ml	950,7±27,6	1276,1±56,7	<0,001
relative density			
maximum	1,0322±0,0055	1,0240±0,0084	>0,05
minimal	1,0210±0,0044	1,0104±0,0084	>0,05
Protein, g/L	2,57±0,01	0,46±0,012	<0,001
leukocytes	4–10	2–8	

The above table reflects the performance of clinical studies of blood and urine of pregnant women in this group (for greater clarity, given identical control group). The table shows that for women with mild PE characterized by proteinuria and hypoproteinemia. The content of total protein in blood they 14.4% lower than the control group. Characteristic turned and a reduction of the daily urine output by 25.5%, relative to that of women with normal pregnancy with an increase in nightfraction and certain decrease variations in the relative density of urine. Almost 18% increased proteinuria. The results of our research showed that in III trimester of pregnancy complicated by preeclampsia mild, a decline to glomerular filratsiya (GF) 1,067 ± 0,061 mL/s, whereas in pregnant women in the control group it was 1,751 ± 0,076 mL/s (P <0,001). Reduced filtration ability of the kidneys in the study group of pregnant women with preeclampsia mild relatively healthy pregnancy is 39.1%.

Changes tubular reabsorption were less pronounced in pregnant women with mild preeclampsia. Amounting to 98,4 ± 0,4, it is only a tendency to decrease with respect to reabsorption in the control group, 98,7 ± 0,5%.

Reduced filtration ability of the kidneys in pregnant women with mild preeclampsia was associated with deterioration of concentration function. The concentration of urea and creatinine in their blood, were, respectively, 5,6 ± 0,7 mlmol/l and 96,3 ± 6,1 mmol/l, did not come out for the redistribution of physiological values, but somewhat higher than that of pregnant women in the control group (4 43 ± 0,21 mlmol/l

69,8 ± 5,3 mmol/l). Only the difference in creatinine was significantly (P <0,05).

The table below reflects the nature of the changes related to blood electrolytes in pregnant women with mild preeclampsia (for comparison, the data of the control group).

Table 2. – Biochemical parameters of the blood of women with mild preeclampsia

Indicators	Mild preeclampsia (n=100)	Control group (n=50)	P
natrium, mmol/l	137,7±2,51	130,5±3,20	<0,05
Potassium, mmol/l	3,7±0,06	3,6±0,03	>0,05
Calcium, mmol/l	1,90±0,034	2,45±0,02	<0,001
Urea, mmol/l	5,67±0,09	4,4±0,04	<0,001
Creatinine, mmol/l	96,3±1,81	69,8±2,10	<0,001

The table shows that the greatest change in the electrolyte composition of pregnant women with mild preeclampsia as for calcium, the level of which is even more reduced relative to that in healthy pregnant women. As for the solution, despite a statistically significant increase relative to the control of its numbers, its values do not exceed the physiological norm.

In general, women with mild preeclampsia there is an increase in the blood concentration of electrolytes (except calcium) without going beyond the normal range normal. Decline was the coefficient of purification of urea in pregnant women with mild preeclampsia by 13.5% compared to healthy pregnant women. Urea purification factor in the control group was 85,9 ± 1,9%, while in the test group it was equal 74,3 ± 2,6% (P <0,001).

Indicators clearance of all investigated electrolytes in mild preeclampsia was at the lower limit of normal and lower than those in the control group. The clearance of sodium was 0,62 ± 0,03 ml/min at 0,73 ± 0,05 ml/min in women with normal pregnancy. Clearance potassium — decreased by 39.0%. Clearance calcium — was lower by 20.5%. All the data were statistically significant (P <0,05)

Thus, the results of the data obtained, it should be emphasized that among the many disorders of various body functions pregnant women with mild preeclampsia. The most prominent is hypovolemia due to preferential reduction of plasma volume, hypoproteinemia due to proteinuria and reduced renal perfusion parameters with the deterioration of their functional capacity.

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About the detection of HIV — infection in relation to gender of surveyed persons

Abstract: The authors been studied the specific significance of men and women in the amount of detected HIV-infected patients in the republic for 1987–2013 years. Presents a comparative evaluation of detection of HIV infections among men and women as well as depending on the regions of the country for 2008–2013 years. Despite