



Berbets A. M.

THE DISORDERS OF FETO-PLACENTAL COMPLEX IN WOMEN WITH THREATENED MISCARRIAGE IN EARLY TERMS OF PREGNANCY

*Department of Obstetrics and Gynecology
Higher State Educational Institution
«Bukovinian State Medical University»*

96 pregnant females with the clinical signs of the threat of abortion in 1st pregnancy trimester have been selected in the main study group. The clinical signs included: pain in the lower abdomen, spot-like bloody discharge from vagina, ultrasound signs of the threatened abortion (segmental uterine contractions). Patients with known severe extragenital pathology, verified cervical incompetence, ABO and Rh-immunization and TORCH-infections were not included in the group. 30 healthy pregnant women formed control group. The main study group has been divided into two equal subgroups: 48 patients formed subgroup with traditional treatment of miscarriage, so they received pregnancy-saving complex therapy, including hormonal treatment (Duphaston 20-40 mg/day), spasmolytics, sedative and hemostatic medications. Other 48 women, who formed subgroup of correction additionally were treated by our therapeutic complex which included extract of ginkgo (in 40 mg capsules 3 times daily) and erynithum (10 mg pills 3 times daily). Extract of ginkgo has the disaggregant properties meanwhile erynithum is the donor of nitric oxide (NO). The course of treatment (excluding Duphaston) was 10-12 days and had been prescribed since 6th-8th weeks of pregnancy. The course of treatment had been repeated 3 times with the intervals of 7-10 days. The proposed therapy was aimed to improve blood supply for trophoblast. 25 pregnant randomly selected women from the subgroup of correction were examined using methods described below. The levels of the hormones (estradiol, progesterone, cortisol) were investigated in the venous blood by radio-immune analysis using automatic diagnostic complex "Gamma-1" and its specific chemical reagents (manufactured in Minsk, Republik of Belarus). Such extent of examinations was conducted twice: in 6-8 and 12-13 weeks of pregnancy. The blood samples were taken at the morning on fasting conditions of patients. The comparison was performed with the results of 24 randomly selected patients from subgroup with traditional treatment and with all 30 patients from control group. The serum levels of the hormones in examined women are represented in Table 1.

Table 1.

The indexes of the hormones in blood of women with the clinical signs of threatened abortion in the 1st trimester of gestation (M±m)

Group	Cortisol, nmole/l		Estradiol, nmole/l		Progesterone, nmole/l	
	6-8 weeks	12-13 weeks	6-8 weeks	12-13 weeks	6-8 weeks	12-13 weeks
Subgroup of correction (N=25)	577,08± 36,27*	646,67± 30,84*	11,33±0,60*	17,45± 1,08*	68,15±2 32*,**	119,79± 3,63**
Subgroup with traditional treatment (N=24)	489,65± 31,85*	513,23± 36,56*	12,09± 1,36	14,49± 1,92	98,43± 6,30	102,31± 6,87*
Control group(N=30)	336,54± 16,08	343,05± 25,16	9,78± 0,22	11,78± 0,46	108,90± 3,90	128,85± 3,74

Note: * - the difference between indexes is significant in comparison with control group,

** - the difference between indexes is significant in comparison with subgroup with traditional treatment

As seen from the table, the serum level of cortisol is significantly higher in both subgroups with threat of abortion, in comparison with healthy pregnant women ($p<0,05$). The mean concentration of estradiol in subgroup of correction was higher than in control group in 6-8 weeks of pregnancy with the background of treatment, and in 12-13 weeks of gestation ($p<0,05$). It might be caused by compensatory increasing of synthetic function of the trophoblast/placenta. The changes of concentration of the progesterone in the blood of pregnant with threat of miscarriage attract the most attention. The mean concentration of this hormone in subgroup of correction was the lowest by the start of treatment, but at 12th-13th week of gestation it had no significant difference with similar index of control group but was higher in comparison with such index of group with traditional treatment ($p<0,05$). The results of studying of the concentrations of the placental proteins are represented in Table 2.

Table 2.

The levels of the placental proteins in blood of women with the clinical signs of threatened abortion in the 1st trimester of gestation (M±m)

	Pregnancy-specific beta-glycoprotein-1 (PSG1)		Progestagen-associated endometrial protein (PAEP)	
	6-8 weeks	12-13 weeks	6-8 weeks	12-13 weeks
Subgroup of correction (N=25)	87,75±5,91*	244,50±16,47*,**	17,58±1,30**	77,87±5,35**
Subgroup with traditional treatment (N=24)	83,30±9,56*	130,55±16,07*	29,05±4,60	23,14±5,02*
Control group(N=30)	186,50±13,60	569,33±12,51	19,87±2,14	96,30±4,04

Note: * - the difference between indexes is significant in comparison with control group,

** - the difference between indexes is significant in comparison with subgroup with traditional treatment