



insufficiency, which can be diagnosed by careful retrospective analysis or in early pregnancy. However, cervical insufficiency is clinically manifested in the II-III trimesters of pregnancy.

There are many factors, ranging from genetic, anatomical, functional, to organic disorders, namely acquired due to mechanical damage to the cervix and cervix, leading to isthmio-cervical insufficiency. We should not forget about infectious-inflammatory and dysbiotic conditions.

For early diagnosis of cervical insufficiency, in the "age of information and scientific knowledge", thanks to the rapid development of new technologies, it is best to use the technique of three-dimensional transvaginal scanning in 8-9 weeks (in static reconstruction) to address the feasibility and timeliness of cervical suturing in pregnant women at risk for cervical insufficiency and subsequent pregnancy with the possible use of obstetric pessaries.

A retrospective analysis of 100 case histories was performed. It was found that the therapy aimed at prolonging pregnancy was less needed by those women who were fitted with an obstetric pessary. The same results were shown comparing the effect of suturing the cervix and the administration of progesterone if the length of the cervix is 25 mm or less.

To date, various modifications of suturing have been proposed, as well as a variety of suture materials, which makes it possible to increase the effectiveness of surgical treatment during pregnancy to 88.8%. The double P-shaped suture superimposed on the area of the internal pharynx was proposed by A.I Lyubimova and N.M Mamedaliyev, the efficiency is 94%. This suture has many advantages, namely: reliable, the ability to perform this manipulation in a normal maternity hospital and in case of prolapse of the amniotic sac, does not lead to increased uterine tone and the development of contractile activity, low trauma. Up to now, there are no convincing data on the benefits of prescribing progesterone, suturing or obstetric pessary in case of cervical contraction.

The material used for suturing also plays a significant role. It should be noted that when applying cervical cerclage with mercilene tape (Etikon) instead of the usual mylar used, gave more advantages for practical use. Because mersilene is more elastic and less traumatic than mylar. Also, this material does not violate the structure and innervation of the cervix.

Therefore, the diagnosis and treatment of cervical insufficiency require a comprehensive approach, and the method of treatment must be carefully selected, weighing all the advantages and disadvantages. However, the use of obstetric discharge pessary and / or cervical cerclage with mersilene tape in high-risk groups for the prevention and treatment of cervical insufficiency can reduce perinatal losses by reducing the number of preterm infants.

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CORRELATION OF SOME HORMONES IN THE BLOOD OF WOMEN WITH ENDOMETRIOSIS WHICH ASSOCIATED WITH INFERTILITY

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Most authors consider that the products lutropina (LH) and folitropin (FSH) is different types of cell functional activity which is controlled by a common releasing hormone.

Despite the existence of a general stimulator of the hypothalamic gonadotropin products, the degree of response of the pituitary effect uniform for LH and FSH.

The aim of our study was to examine the concentration of pituitary hormones in the blood of women with endometriosis associated with infertility.

For the purpose of the research we have conducted a special study of protein (lutropin-LH, folitropin-FSH) hormones level in the blood plasma of women with endometriosis associated with infertility, which formed the main group of 20 people. Similar studies of protein hormones level were performed in the control group, which made somatically healthy women of reproductive function preserved, whose age corresponded to the age of patients of the main group.

In the study (women with infertility) and control groups conducted a special study of protein (lutropin-LH, folitropin-FSH) hormones level in the blood plasma of 2-3-day menstrual cycle - basic and on the day of the puncture of ovarian stimulation cycle in superovulation. The level of



hormones measured by ELISA using a set of reagents for quantitative ELISA determination of hormones in blood serum: "IFA gonadotropin-FSH", "Gonadotropin-LH ELISA."

The value of P (authenticity difference) was determined by Student's table-Fischer. Differences between contrasting averages were considered significant at $P < 0.05$.

Analyzed the results of our research stated that women with endometriosis associated with infertility 2-3 days of the menstrual cycle endocrine function of gonadotropocytes anterior pituitary did not differ from that of the control group. This fact appeared to have additional criteria for the formation of the main group.

LH level at 2-3 second day of the menstrual cycle in women with infertility differed from indicators in the control group slightly. LH to FSH ratio in the study and control groups was within 0,58-0,63.

According to the literature ratio LH / FSH ranges in healthy women within 1.5-2.0. In our patients as the control group and the main factor is now slightly below that can explain the features of the methodology for determining the level of hormones in blood plasma. We used a method of determining the amount of hormone (pg / ml), while in a number of laboratories measured activity in international units (IU / L). Attention is drawn to the fact that our patients at an altitude of superovulation stimulation stated statistically significant reduction in the level of luteinizing hormone $16,2 \pm 5,27$ to $1,08 \pm 0,06$ pg / ml. This reduction in blood lutropin explained reciprocal dependence between synthesis and activity of estradiol vertical luterin-lutropin-progesterone.

Along the surveyed women was found a slight increase of folitropin of $7,05 \pm 0,8$ to $10,7 \pm 1,16$ likely due to circulating levels of outside administered hormone. Value LH / FSH was respectively: 0.1 stimulated cycle; 2.2 in the control group. This is quite important because the normal functioning of the ovaries is possible only at a ratio of LH / FSH 1-1.5.

Thus, in patients with endometriosis associated with infertility found significant disorders of rhythm and secretion of blood gonadotropin hormones that are proportionate to the degree of severity of the disease. Thus, basal levels of LH and FSH hardly different from the targets, and the folliculin phase of the menstrual cycle decreased concentrations of LH to normal levels of FSH background. However, despite the presence of abnormalities in the secretion of gonadotropin hormones compensation body's response in this disease provide a state of homeostasis because ovulation in 2/3 patients retained, while the reproductive function is much impaired.

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CHANGES OF THE LEVELS OF MELATONIN IN CASE OF IUGR

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Intrauterine growth restriction (IUGR) is a common reason for perinatal morbidity and mortality. Also, it is often complicated with fetal distress. Melatonin is widely known as an anti-oxidant agent, which might decrease the damage of tissues caused by hypoxia. We aimed to investigate whether the level of melatonin in umbilical blood after birth is different in case of IUGR, comparing to normal fetuses.

14 women, whose pregnancies were complicated with IUGR, were included in study group. The presence of IUGR was confirmed by ultrasound fetometry in the 3rd pregnancy trimester, 30-36 weeks of gestation (estimated body weight of the fetus was below 10th percentile for current pregnancy term). The control group consisted of 13 women who had uncomplicated pregnancies. All patients delivered their children vaginally in pregnancy term over 37 weeks. The cases of severe fetal distress which required a caesarian section, obstetrical forceps or vacuum extraction of the fetus, were excluded from the study.

The umbilical blood was taken immediately after birth of a baby from the placental side of clamped and cut umbilical cord. The concentrations of melatonin were assayed using ELISA kit manufactured by IBL (Germany), the results were estimated using Mann-Whitney U-test.

It's been established that the mean concentration of melatonin in umbilical blood is significantly lowered in case of IUGR (7,50 pg/ml, 95% confidence interval for mean 3,0818 –