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**PRETERM BIRTH AS THE MOST IMPORTANT PROBLEM OF THE MODERN OBSTETRICS**

**Grygoreva Y.V., Kibireva N.A.**

Amur State Medical Academy, Blagoveshchensk, Russia
Amur Regional Perinatal Center, Blagoveshchensk, Russia

**Abstract** In 2013-2014 the index of preterm birth in the Russian Federation was 5.9-6.2%. The Regional Perinatal Centre of Blagoveshchensk showed even a higher PB rate (10.7%) than that of the whole Russia.

**Key words:** preterm birth, risk factors.

The problem of the premature labor has become one of the most pressing issues in the modern obstetrics. It is connected with the high risk of perinatal morbidity and mortality.

Despite a great variety of studies devoted to the pathology the rate of preterm birth (PB) remains the same all over the world. In 2013-2014 the PB index in the Russian Federation was 5.9-6.2%. The Regional Perinatal Centre of Blagoveshchensk showed even a higher PB rate (10.7%) than that of the whole Russia.

The purpose of the study was to examine the stages of pregnancies ending in preterm deliveries between 22-37 weeks.

**Materials and methods.** A retrospective analysis of 150 records of PB obstetric care quality monitoring has been made. The average age of the women was 28 (+− 5) years old and women older than 28 predominated (56%). 25% were primigravidae, in 46% of the cases the number of deliveries was two and more. In 85% of the cases the pregnancy was desired, but the prenatal preparation was conducted only in every fifth case which equals to 17%.

64% of the women lived in towns and 36% were from villages.

71.3% of the women were examined by obstetrician-gynecologist more than 7 times during their pregnancy.

86% of the pregnant were examined by a physician twice – when they were registered and when they were 30 weeks pregnant. They had such somatic diseases as chronic bronchitis (10%) and chronic tonsillitis (15%).

The average menarche age was 13,2 +−0,4 years old. 30 pregnant had menstrual function disorders of hyperpolymenorrhea and oligomenorrhea type since the juvenile age. The pregnant who underwent very early preterm births had suffered from such gynaecological disorders as a pathology of the neck of the uterus (n=17).
One of the main causes of PB is the infectious factor. 150 women patients of the stationary who had been diagnosed with the risk of PB underwent bacterioscopic study of the cervical canal. The study showed that normocenose was found among 101 pregnant women with this disorder (67.4%). All the rest women under study had some signs of the inflammatory changes in the vaginal biota. 49 women (33%) had increased number of leukocytes visible on a Gram stain combined with the cocco-bacillary microflora.

Currently the criteria of the risk of PB include low abdominal pains, bloody discharge from vagina, shortening of the neck of the uterus, transvaginal ultrasound of uterus. Spasmodic and propelling low abdominal pains are subjective sensations of a pregnant woman, and one of the objective criteria of diagnosing is the length the neck of uterus which can be measured by transvaginal scanning. Uterus less than 20 mm long result in preterm delivery in 50% of cases.

In Russia the Actim Partus test (immune chromatographic test on stripes which allows to identify IGFBP-1 with its concentration of 10 mcg/l in the cervical canal’s biota) is used to diagnose the risk of PB. The results of our study showed that only 19 women were tested by Actim Partus (13%).

Over several years the women took such medicines as spasmolytics, tocolytics (B-adrenomimetics), magnesia sulfate, progesterone. Prescribing these medicines was effective at the beginning of the study, but in the course of treatment complications both in the pregnant woman’s state and that of the fetus gave rise to certain skepticism.

In prolonging pregnancy with the risk of PB the main role belongs to the tocolytic drugs – B-adrenomimetics. Their tocolytic effect is the result of stimulation of B-receptors in other organs, for example, in the heart it causes side effects in the cardiovascular and respiratory systems. This group of drugs is contraindicated to the women patients who suffer from thyreotoxicosis, angle-closure glaucoma, cardiovascular diseases (including bicuspid valve lesion). B-adrenomimetics can induce moderate hyperglycemia and their long-term oral application can cause gestational pancreatic diabetes. Within the study under consideration the correct dosage of Gynipral was applied in 12 % of the cases (n=18).

The necessity in decreased dosage and time of taking B-adrenomimetics resulted in search for some new alternative medication to treat the risk of PB.

Currently the risk of PB is treated succesfully by using niphedipine, a Calcium channel blocker. The mechanism of its action is that it depresses the contractile activity of myometrium and decreases its basal tone. This drug is successfully applied in the Regional Perinatal Centre.

Special attention should be paid to the preterm births which are complicated by preterm amniorrhea (PA). According to the information provided by the Regional Perinatal centre 33% of the preterm deliveries start with the preterm amniorrhea. Diagnosing PA is easily made with the help of various Amni Sure ROM tests, its sensibility being 99% and specificity 94%.

Currently the doctors use the expectant tactics in preterm amniorrhea cases. The main objectives of the expectant tactics are the prolongation of pregnancy and the possibility of applying an adequate dose of Dexamethosone to prevent respiratory disorders syndrome (RDS). Prevention of RDS of the fetus was carried out in 17% of the cases (25 women).

Another important issue affecting the perinatal results significantly is the method of delivery in the cases of spontaneous PB. At present the number of C-sections in premature deliveries has increased up to 57%.

When choosing the method of preterm delivery the following factors should be taken into account: some diseases which require emergency delivery, the gestational stage and supposed weight of the fetus, presence or absense of the amniotic fluid, signs of acute hypoxia, chorioamnionitis and the impossibility of a natural delivery, the uterus’s maturity during labour, the character of the labour. Before 34 weeks C-sections in preterm births are made cases of breech presentation and the delivery disorders.
The study shows that pregravid preparation is of great importance in prevention of PB. Pregravid preparation decreases the number of PB and pregnancy complications among women with burdened obstetrical history significantly.

Thus, the ways of settling the PB problem and improving the perinatal results can be stated as follows.

At the outpatient stage the main factors are:
- timely diagnosis of preterm birth and preterm amniorrhea;
- finding the risk group in pregravid period;
- pregravid preparation;
- decreasing harm from medications among the women patients with subjective signs of the risk of PB and the normal length of uterus by using ultrasound examinations.

At the maternity hospital it is important to:
- take the women with the risk of PB to a third-class stationary or a perinatal centre;
- administer adequate therapy for the risk of preterm delivery;
- apply proper methods of delivery;
- keep and treat the premature babies in the intensive therapy and neonatal resuscitation departments.

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THE RESULTS OF TREATMENT OF ATHEROSCLEROTIC MACULODYSTROPHIES WITH THE USE OF RETINALAMIN

Gusev A.N., Krasnogorskaya V.N., Vikhreva D.V., Moiseyenko G.A., Petrenko M.A.
Amur State Medical Academy, Blagoveshchensk, Russia

Abstract

The central chorioretinal dystrophy (CCRD) is one of the most common diseases in people over the age of 50 years. [10]. According to different authors frequency of macular lesions in old age as high as 40% [6, 7]. The pathogenesis of central chorioretinal dystrophies are circulatory disorders, metabolic dysfunction in the retina and pigment epithelium. Degenerative changes in the retina are caused by various factors, including the disorder of lipid peroxidation as a result of hypoxia. Activity of the antioxidant system reduced under conditions of hypoxia. is leads to activation of free-radical processes, oxidation of lipids and proteins, destruction of cell membranes, the membranes and in severe cases - to cell death. ATP deficit is accompanied by an increase in the concentration of calcium ions in hyaloplasm cells, which reduces the efficiency of autoregulation of blood circulation, contributes to the vascular spasm, an increase of ischemia and the energy deficit [9].

Key words: Central chorioretinal dystrophy, Retinalamin.

Currently, the treatment of CCRD widely used the medications of vasodilators, vitamins, and biostimulators [2, 3, 4, 5, 8]. Despite the wide variety of drugs, the disease progresses steadily. Pathogenetically directions in the treatment of central chorioretinal dystrophy is the application of peptide bioregulators. The use of peptide bioregulators contributes to regulation of intracellular protein synthesis in cells of the retina, pigment epithelium preservation, activation of reparative processes and functional interaction of cells, metabolism correction and prevention of oxidative stress, preventing cell death. In this connection, in the combined treatment CCRD, we used the preparation - Retinalamin.

The purpose of work - assessment the effectiveness of the treatment of patients with central chorioretinal dystrophies with the use product Retinalamin.

Material and methods. The study involved 38 patients with central chorioretinal dystrophy with initial and advanced stages of the disease between the ages of 52-76 years. In order to increase the effectiveness of pharmacological retinalamine, the drug was administered to the posterior pole of the eye under the conjunctiva (0.5 ml.) With a preliminary implementation of the food sclerectomy in the lower outer segment of the eyeball. The course of treatment was 10 days. The drug was administered daily in the lower conjunctival outer segment of the eyeball.

All patients before and after treatment were carried out a comprehensive examination: visual acuity, of the visual field. From the objective research methods we used reography and electroretinography (ERG). Given the localization of pathological changes in the retina we performed ERG in local area of retina. Rheography eye was performed using reopletizmografy RPG-2-02 and writing device H-327-5.

Results. After a course of treatment of visual acuity in the group average change from 0.49 ± 0.07 to 0.71 ± 0.08 (p <0.001), the peripheral border of the field have expanded by an average of 70.1 degrees in the amount of 8 meridians (p <0.05). As a result of the treatment the increase in visual acuity, 25 patients on average 0.1-0.3, 8 patients below 0.1 and 5 unchanged. Peripheral sight borders expanded at 78%, significantly reduced the relative scotoma. Rheographic ratio increased on average by 34.5% from baseline (p <0.001). Increasing