



Indicators of the correlation analysis of perinatal health against the background of infections

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Abstract

This article outlines the course of gestation against the background of infections (HSV, CMV, chlamydia, toxoplasmosis) and their consequences and impact on women of childbearing age and the fetus. Types of infections, such as HSV, CMV, chlamydia, toxoplasmosis, were studied on the basis of traditional and modern methods of research, including clinical, biochemical, molecular - biological (PCR), functional, morphological analyzes, and improved tactics of pregnancy management in women in a group of high-risk hazards. Also, topical issues of managing and treating problem pregnancies related to infections (HSV, CMV, chlamydia, toxoplasmosis) in the pre - graft period, and their preparation for childbirth, as well as obstetric tactics on them are highlighted.

Keywords: embryo and fetopathy, TORCH infection, cytomegalovirus, herpes, toxoplasmosis, chlamydia, pregnancy, fetus, newborns, placental morphology

Introduction

Despite the advances made in gynecology over the past decades, the problem of intrauterine infection of the fetus and the associated widespread spread of obstetric-gynecological pathology, premature births are a serious scientific and practical problem [4, 9, 11]. Intrauterine infections cause antenatal death of the fetus and are among the most significant etiological factors of neonatal morbidity and infant mortality [1, 10].

TORCH-infection (or STI) in this structure took a leading position, because embryotoxic and teratogenic actions of viruses cause the emergence of various VLR [2, 6, 9]. In viral exposure, symptoms of immaturity of the fetus, disemбриgenia, ZVUR, encephalitis, hepatitis, nephritis, pneumonia, pathology of the gastrointestinal tract are noted [3, 5, 8]. 34-45% of VLP develops as a result of genital herpetic and viral infection [3, 7, 11]. Only GVI causes 30-40% of antenatal losses, perinatal losses are 50-75% [4, 6, 12]. Clinical manifestations of severe congenital toxoplasmosis are necrotizing meningoencephalitis, micro- and hydrocephalus, retinoroditis, optic nerve atrophy, cataract, microphthalmia, myositis, myocarditis, hepatitis, mental retardation.

The aim of the study was to study the clinical and morphological features of embryo and fetopathy in women with chronic TORCH infections (HSV-1,2, CMV, toxolases, chlamydia) and optimize the tactics of their management.

Material and methods

The object of the study was 13170 history of childbirth and 585 gynecological card of women of reproductive age, who retrospectively studied the frequency and structure of TORCH infection in CDF. A prospective study of 147 women with TORCH-infections. Using the enzyme immunoassay, 177 blood serum studies were conducted for the presence of IgM and IgG antibodies to the herpes simplex virus,

cytomegalovirus, toxoplasmosis, chlamydia. Clinical, bacteriological, biochemical, molecular-biological (PCR), functional and morphological in this has been studied 132 times.

Results

For the first time in the conditions of the Samarkand region, on the basis of voluminous retrospective and prospective studies, the frequency and structure of embryo - and fetopathies were determined. The object of the study was 13170 history of childbirth and 585 gynecological card of women of reproductive age, who retrospectively studied the frequency and structure of TORCH infection with CDF. 373 cases of embryo and fetopathy were detected from them, 168 (1.3%) of pregnant women who had chronic forms of infection. We have studied the structure of the fetal pathology (PDP) in 373 (2.8%) infants (2004 - 2008 yy.), of these, VPR was found to be 0.92% (121).

In chronic forms of TORCH infections, pregravid therapy and treatment during gestation does not help to reduce gestational complications and embryo and fetopathies, which proves the inexpediency of specific antiviral treatment.

Morphological and morphometric analyzes of the placenta have shown that, despite the treatment, there were specific morphological changes in the sequences characteristic of certain types of infection, which confirms the ineffectiveness of specific treatment.

The obtained results allow to justify the inexpediency of using specific antiviral therapy in chronic TORCH infections (HSV-1,2, CMV) in women with the risk of developing embryo and fetopathy. Perinatal medical information about infections (HSV, CMV, chlamydia, toxoplasmosis) can be compared with the correlation analysis. Between premature birth and premature rupture of membranes ($r = 0.82, P < 0.05$), unsatisfactory progress in labor ($r = 0.95; P < 0.01$), respiratory insufficiency syndrome (SRN) ($r = 0.95; P < 0.01$) and a strong

correlation is determined between the infant's injury ($r = 0.93$, $P < 0.01$). The mean correlation was associated with retrovesical cesarean section (PKK) ($r = 0.77$, $P < 0.05$). An inverse correlation was observed between intrauterine infection (VI) and urgent labor ($r = -0.90$, $P < 0.01$), congenital malformations (fetal malformations) of the fetus and intrapartum death (IC) of the fetus ($r = -0.93$, $P < 0.01$). That is, the more urgent births, the less intrauterine infection, and it cannot be a direct cause of IPR, IP. At the same time, the frequency of intrapartum death increases perinatal mortality ($r = 0.89$, $P < 0.01$).

In the early neonatal period, the deterioration in the state of newborns is most often observed in hypotrophic children born with asphyxia, NWFP and VLP ($r = 0.83$, $P < 0.05$, $r = 0.94$ and 0.97 , $P < 0.01$).

It was found that assessing the condition of infants according to their weight indicates that there is a correct correlation between the weight of the newborns and the NNR trauma ($r = 0.91-0.94$, $P < 0.01$).

It should be noted that 13170 pregnant women had 168 cases of chronic infections (HSV, CMV, toxoplasmosis, chlamydia) (see Table 1).

Table 1: Frequency and types of chronic forms of infection in pregnant women (n = 168)

Infections (chronic forms)	abs.	%
CMV	129	76.8
CMV + OGV-1,2	2	1.2
CMV + toxoplasmosis	28	16.7
CMV + chlamydia	9	5.4
Total	168	100.0

Of the 168 (1.3%) pregnant women who had chronic forms of infection, 162 were born without VWD, and 6 (3.6%) of newborns were identified as VWD. We studied the structure of the pathology of fetal development (PDP) in 373 (2.8%) of newborns (2004-2008), of which 0.92% were found (121). The results of these analyzes are shown in Table 2.

As a result, a retrospective analysis showed that the main causes of termination of pregnancy I-II trimesters, were antenatal fetal death and VDP-15.7%. The pathology of fetal development is 2.8% in infants and 0.92% in VLP. Mono VPR is only 25.7%, of which more are encountered mono-VPR-10.7% of the nervous system, 4.3% reduction of the

limb, 3.2% of the gastrointestinal tract (GI tract), and multiple VLP was found 6.7 %.

The results show that pregnant women who have a risk of developing fetal pathology or who have an HIV infection, were not always checked for chronic forms of infection. The degree to which the development of VL is insufficiently studied against the background of chronic forms of infection. Among chronic forms of infected infections, CMV was detected in 76.8% of cases with mono-infection and 23.2% in the form of mixed infections. Pathologies of fetal development were observed in 3.6% of infected patients.

Table 2: Structure and types of fetal development pathologies (n = 373 people)

No.	Types of PRPs	abs.	%
I	2	3	4
A.	Mono VPR	96	25.7
I.	Malformations of the central nervous system	40	10.7
	- Hydrocephalus	27th	7.2
	- Spina bifida	3	0.8
	- Anencephaly	7th	1.9
	- Microcephaly	3	0.8
II.	Reduction of limbs	16	4.3
	- clubfoot	2	0.5
	- Other	14	3.8
III.	Malformations of the digestive tract	12	3.2
	- Atresia of the anus	2	0.5
	- Intestinal obstruction	4	1.1
IV.	Hereditary	eleven	2.9
	- Down syndrome	4	1.1
	- The wolf's mouth	2	0.5
	- Hare's lip	3	0.8
V.	Tumors	4	1.1
	- Teratoma	2	0.5
VI.	Congenital heart disease	3	0.8
VII.	Other VLOOK	10	2.7
	- Stigma of disembryogenesis	4	1.1
B.	Multiple VLFs	25	6.7
	- "Hare's lip", "The wolf's mouth"	4	1.1
	- Spina bifida + hydrocephalus	3	0.8
	- Deformation of the auricles + stricture of the external auditory canal	2	0.5
AT.	Antenatal fetal death	252	67.6

In the risk factors for the development of fetal pathology, the main place was occupied by unfavorable living conditions, hereditary factors, extragenital disease and acute respiratory viral infections.

The analysis of perinatal period indicators shows that from 2004 to 2008 there is a decrease in the tendency to 4-5-fold asphyxia and triplicate of hypotrophy and NWFP. But there is an increase in the number of fetal infections 5-fold, and antenatal fetal death significantly increased. VLR, early neonatal death and perinatal mortality rates remain stable.

VLR, early neonatal mortality and perinatal mortality rates have been revised in recent years. There were births, mainly with mono-congenital malformations. Among the VLP, the cleft lip, wolf mouth - 9.8% - 20.5%, reduction of limbs - 8.6% - 14.3%, Spina bifida - 5.1% - 13.4%, VPS - 6, 3 - 13.4% had gastric and intestinal atresia - 2.7% - 7.8% and so on. Screening tests revealed anomalies in the nervous system. However, the above-mentioned anomalies can also be detected by early prenatal screening in the early stages of pregnancy. Prenatal Screening can help to identify birth defects, reduce childhood disability and reduce infant mortality. The achieved results help the family to use both spiritually and economically.

Total deliveries in the Samarkand region, 2010 - 71796, 2011 - 68468, 2012 - 67172, 2013 - 68427, 2014 - 74572, 2015 - 82686, including live births in 2010 - 71415, in 2011 - 68144, 2012 is 66870, 2013 is - 68203, 2014 is 74393, 2015 is 82071. The stillborn in 2010 is 381 (5.3%), 2011 is 324 (4.7%), and 2012 is 302 (4.5%), 2013 - 571 (8.3%), 2014 - 527 (7.1%), 2015 - 615 (7.4%), indicators of perinatal mortality: 2010 - 808 (11, 3%), 2011 - 686 (10%), 2012 - 620 (9.2%), 2013 - 935 (13.7%), 2014 - 946 (12.3%), 2015 - 1183 (14.3%). Data show that in recent years, perinatal mortality and infant mortality have also increased. We can explain this according to the instructions for determining the live birth and stillbirth criteria recommended by WHO. parturition- complete expulsion or extraction (extraction) of a dead or live fetus from a mother weighing more than 500 grams, regardless of the gestational age, or at a period of 22 weeks or more. Before that, we defined the births under Order No. 56 of the Ministry of Health of the Republic of Uzbekistan, to determine the criteria for live birth and stillbirth. 2014 On January 27, a new order No. 21 of the Ministry of Health of the Republic of Uzbekistan was issued, introducing changes and additions to the above-mentioned order. By order No. 21 the procedure came into force on July 1, 2014. This case follows as a result of applying the conditions of this order in practice. At present, the introduction of new modern medical technologies into practice, the application of national and local protocols, yield results. In the past, the survival of children with very low body weight were problematic. Application of the latest technology, which are mentioned above, allow the survival of newborns. In particular, the basic role is played by the equipment of maternity hospitals, the qualification of medical personnel and the quality of medical care.

Structure of causes of death of newborns in the Samarkand region:

1. Syndrome of respiratory disorders (mainly in immature neonates)
2. Asphyxiation

3. Infection
4. Birth trauma
5. VDP and other reasons.

Conclusions

Among the causes of neonatal mortality in children with respiratory distress syndrome and asphyxia, there is delivery and care for newborns, the introduction of effective perinatal care, including the primary resuscitation of newborns and the implementation of the thermal chain in practice. And the most common infections (HSV, CMV, chlamydia, toxoplasmosis) also have a role in the development of pathology in newborns.

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