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PERINATAL IN ITS FETAL INFECTION IMPORTANCE OF PATHOLOGY

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Introduction: Today, one of the main tasks of experts in many countries is to improve the health of the mother and ensure a healthy birth. Although there are currently many scientific and practical methods for studying and identifying pathogens, intrauterine infection and intrauterine infection are still a major problem in the fields of perinatology, neonatology and pediatrics [4].

Intrauterine infection is a congenital infection. Examples of intrauterine infections include measles, chlamydia, mycoplasmosis, toxoplasmosis, herpes simplex virus, and cytomegalovirus infections. It is estimated that there are about 400 cases of congenital measles in Russia each year. The incidence of congenital cytomegalovirus infection in Russia is unknown, while in the United States, cytomegalovirus infection accounts for 1% of all births, 1 in 1,000 babies infected with herpes simplex virus, and 1 in 400 babies born with parvovirus infection [8.9 out of 400].

It is known that intrauterine infections are characterized by their severity and

dangerous consequences. Death is 12% in congenital toxoplasmosis, 90% in herpes simplex virus infection, 80% in enterovirus infections, and 100% in congenital measles. Intrauterine infection is always accompanied by known clinical symptoms [2].

Such opportunistic pathogens are transmitted from mother to fetus, then to the fetus, and multiply over time. They lead to various pathological conditions in the perinatal and neonatal periods, which in turn leads to the emergence of a group of children with frequent illnesses [1,7].

The purpose of the inspection. To study the causes of perinatal pathology in infants, related to the somatic health of the mother, as well as the etiological significance of opportunistic pathogens.

Material (source) and inspection methods. To determine the cause of both perinatal pathology and intrauterine infection, 140 infants were examined at the Department of Pediatric Pathology of the Samarkand Regional Children's Multidisciplinary Medical Center.



In order to determine the cause of microbes in perinatal pathology, bacteriological tests were performed on blood, throat mucus, pus and feces from infants. Statistical and anamnestic and partial bacteriological examinations were also conducted among mothers of infants. The results of statistical processing were calculated according to the Student's criterion ($p < 0.05$).

Examination results and their analysis.

According to the results, out of 140 infants

examined in the pathology department, 106 (75.7%) had a day of life up to a week. The rest of the babies were born in the late Neonatal period.

Babies with a variety of pathologies, delivered in the early neonatal period, have ante- and intranatal infections. Analysis of nosological forms of pediatric diseases revealed diarrhea, sepsis, neonatal pneumonia and other purulent-inflammatory diseases (Table 1).

Table 1

Nosological forms of pediatric diseases

Number of checked	Types of neonatal pathology	Number of pathological indicators
140	Diarrhea	49 (35.1%)
	Sepsis	29 (20.7%)
	Neonatal pneumonia	24 (17.1%)
	Vesiculopustulosis in infants	20 (14.3%)
	Omphalitis	16 (11.4%)
	Conjunctivitis	2 (1.4%)

It turns out that diarrhea is superior to other pathologies with high rates. Second place was taken by sepsis, which was detected in 29 (20.7%) of 140 babies. In total, 67 (47.8%) infants with sepsis were diagnosed with purulent-inflammatory diseases. It is known that sepsis, neonatal pneumonia and diarrhea are the leading causes of death in perinatal pathology among infants, sometimes the main cause of death (3,6). Therefore, the identification of clinical symptoms and the study of the etiology of microbes can lead to a high level of practical research in perinatology.

The results of the study show that gram-negative microorganisms occupy the leading position in the feces. In sepsis and purulent-inflammatory diseases, gram-negative rods and streptococci have given way to staphylococci. We believe that in the

etiology of purulent-inflammatory diseases, such processes occur under the influence of various factors, and most importantly, staphylococci have become resistant to many antibiotics over the years.

1-2 strains of pathological material staphylococci were isolated from each sample to determine antibiotic susceptibility and pathogenic properties. A total of 150 strains were isolated and studied. All of them were hemolytic, golden-pigmented, and 96 (64%) out of 150 strains had plasma coagulation properties (Table 2).

The antibiotic susceptibility of staphylococcal strains was found to be more resistant to amikacin, amoxiclav, cefazolin, and ciprofloxacin. Of the 150 strains, 20 (13.3%) were more sensitive to amikacin, 10 (6.6%) to amoxiclav, 17 (11.3%) to



cefazolin and 33 (22%) to ciprofloxacin. The remaining strains were moderate to low susceptibility. Staphylococcal strains have been shown to be highly sensitive to gentamicin (60-40%), cefotaxime (45-30.1%) and ceftriaxone (61-40.6%). Thus, the most effective antibiotics against staphylococci are gentamicin, cefotaxime, ceftriaxone.

An analysis of the anamnesis of mothers of babies with perinatal pathology revealed that 84% had anemia, 24 out of 34 mothers had influenza during pregnancy, 17 had toxicosis, 11 had a risk of miscarriage and 7 had nephropathy. The number of mothers infected with TORCH - 4, with pyelonephritis - 5. Physiological infertility

was observed in 17 cases, intravenous and intramuscular stimulation - in 7 cases, cesarean section - in 4 cases. Thirteen of the waters were polluted.

It is difficult to identify the cause of infection based on the biological characteristics of Candida, Streptococcus, Klebsiella, E.Coli pathogens isolated from mothers and babies, because they are identical in all sources. However, the study of phage susceptibility of staphylococci allows to identify the source of infection in perinatal pathology, infants.

For this purpose, we isolated 56 strains of staphylococci from maternal pups and 96 strains from different foci of infants, as well as phagotypic compatibility.

Table 2: Microorganisms isolated in perinatal pathology in infants

Check bloods soni	Pathology types	Materials for testing	Number of inspections	Germ type	Number of detected
140	Diarrhea	Garbage	49	St.aureus5	16 (32.7%)
				St.aureus5 + Candida	12 (24.5%)
				EPEC5 + Candida	11 (22.5%)
				EPEC5	6 (12.2%)
				Candida	4 (8.1%)
	Sepsis	Landing	29	St. aureus	19 (65.7%)
				St.aureus + Candida	3 (10.5%)
				Streptococcus	4 (13.9%)
				E.Coli	2 (6.9%)
	Neonatal pneumonia	Throat	24	St.aureus + Candida	15 (62.5%)
				Klebsiella + Candida	9 (37.5%)
	Babies vesicles pustules	Yiring		St. aureus	12 (60%)
				Streptococcus	4 (20%)



			20	St.aureus + Candida	4 (20%)
	Omphalitis	Yiring	16	St. aureus	10 (62.5%)
				St.aureus + Candida -	6 (37.5)
	Conjunctivitis	Yiring	2	St. aureus	2 (100%)

According to the results of phagocytic compatibility, most staphylococcal cultures were lysed with group I and III phages. The phagocytic compatibility of staphylococcal strains isolated from mothers and infants was of particular importance. In addition, the phage landscape of staphylococci isolated from maternal pups and infants from different foci was very compatible and differed among them by the predominance of epidemic phagotypes 80, 81, 83A.

This situation suggests that the role of mothers in the development of perinatal pathology in infants in the maternity hospital is of particular importance.

Conclusion

1. Taking into account the above, it can be said that anemia, pyelonephritis, viral infections reduce the natural defenses of the mother's body, inhibit the development of the immune status of the fetus and cause perinatal pathology.
2. In perinatal pathology, diarrhea is the first, followed by sepsis and pneumonia. In their origin, gram-negative staphylococci occupy a special place.

The compatibility of the phagotype of staphylococci isolated from mothers and infants proves that mothers are the main source of infection in infants with various infections.

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