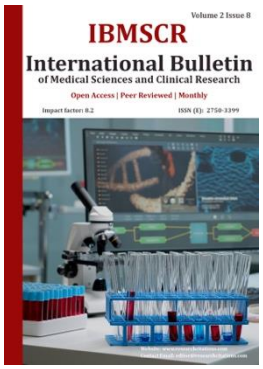

MODERN ASPECTS OF THE INFLUENCE OF INTRAUTERINE INFECTIONS ON THE FETUS

Shokhinova Anakhita Shokhinovna
Rakhmatova Dilnoza Doniyorovna
Sadriddinova Madina Ravshanovna
Scientific adviser: Assistant of the Department of Obstetrics and Gynecology
Shopulotova Z.A.
No. 1 Samarkand state medical university, Samarkand, Uzbekistan
https://doi.org/10.5281/zenodo.10652724

Annotation. Against the background of a low level of infant mortality, the modern health care system maintains a high incidence in the structure of infections specific to the early neonatal period, among which the leading position is occupied by intrauterine infections, which are transmitted directly from mothers [1,3,4,6]. Infection of the fetus and newborns plays an important role in the development of infectious and inflammatory diseases. The aim of the study was to identify the clinical and neurological features of congenital malformations of the central nervous system in children born to mothers with TORCH infection. In this study, we analysed the results of a survey of 57 women and their children for the presence of intrauterine infection and its impact on the child. The main stages of laboratory diagnostics have been identified. The presented article will allow doctors of specialized specialties to systematize for themselves such concepts as IUI and its risk factors, focus on the features of the clinic and diagnosis, as well as the prevention of IUI, which will reduce the incidence of IUI. mortality in the structure of infections specific to the early neonatal period, as well as to reduce the increase in disability among young children due to this pathology.

Key words: intrauterine infection, TORCH infections, perinatal mortality, infant morbidity, ARCNS, extragenital pathology, gestosis.

Relevance. Preterm labor is defined as labor that begins before 37 completed weeks of pregnancy. More than 12% of infants born in the USA are preterm.1 Preterm birth is the major cause of neonatal morbidity and mortality in developed countries. Sequelae of preterm birth are common in the neonatal period, may persist into adulthood and are inversely related to gestational age.

Preterm birth may result from either spontaneous developments or medically indicated interventions. Known causes of spontaneous preterm labor include infection (intrauterine or extrauterine), multiple gestation, placental abruption, hormonal disruptions and other factors,2 though a large proportion of preterm births are 'idiopathic', or without known cause.

At least 40% of preterm births are associated with intrauterine infection.3 In individual cases it is often difficult to determine whether infection is the cause or consequence of the processes leading to preterm delivery.

The aim of the study: to identify the clinical and neurological features of congenital malformations of the central nervous system in children born to mothers with TORCH infection.

Material and methods. The study was conducted on the basis of the second children's family polyclinic and the 1st children's city (Samarkand) hospital for the period 2017-2019. The study included 57 children aged 1 month to 3 years.

The patients were divided into 3 study groups:

Group 1 of the study - children with ARCNS born to mothers with TORCH infection included 17 girls, 20 boys, a total of 37

Group 2 of the study of children without ARCNS born to mothers with TORCH infection included 9 girls, 11 boys, and a total of 20.

Group 3 of the study, the control group included 10 girls, 10 boys, for a total of 20.

During the study, clinical and anamnestic data, objective examination data, laboratory data (general blood count, general urinalysis, blood test for viral infection, biochemical blood test, bacteriological study, flora culture, caprogram) were used, ECG, ultrasound were used as additional research methods, and a consultation with a pediatric neurologist was also carried out.

Results and discussion. When analyzing the structure of the infectious factor according to nosological forms, it was determined that most often (55% of cases) mothers were diagnosed with CMV + VH, and less often (in 4% of cases) CMV + VH + Chlamydial infection. It was found that the vast majority of them had combined forms of mixed infections, and cytomegalovirus infection was also in the leading place among all others.

The risk factors for intrauterine infection in the antenatal period in our study were: aggravated obstetric anamnesis - miscarriages, stillbirths, previous premature births, death of previous children in the neonatal period [7,8,9], abortions were determined in study group 1 in 40.5% (15) cases, in study group 2 in 20% (4) cases in the control group in 5% (1) cases.

Pathological course of pregnancy - gestosis, threat of pregnancy termination, polyhydramnios, anemia of pregnancy, exacerbation of chronic infectious and somatic diseases, ARVI in the second half of pregnancy [12,15,17], in group 1 of the study was determined in 81% (30) cases; in group 2 in 60% (9) cases and in the control group in 5% (1) cases. Maternal estrogenital pathology was detected in group 1 in 32.4% (12) cases; in group 2 in 20% (4) cases; in 3 study group in 5% (1) cases. Analysis of birth weight in children showed that low birth weight was detected in 56.7% (21) of cases in group 1, compared to 40% (8) in group 2 and 10% (2) in the control group of the study. Clinical and genealogical analysis showed a burden of congenital and hereditary pathology in 5.4% (2) of the families of the 1st study group, the parents were found to have malformations, including defects of the nervous system. Parental inbreeding was found in 5.4% (2) of cases in group 1 of the study and in 5% (1) of cases in group 2 of the study, in the control group of the study of consanguineous marriages was not determined. The study of the concentration of immunoglobulins in the blood serum of children of the 1st group of the study showed that the level of IgG was 804.1±43.72 mg/%, and in the children of the 2nd group of the study, a significantly increased content of IgG was observed - 1107.1±44.21 mg/% (P<0, 01). The study of the IgM level showed that the blood serum of healthy children contained in the range of 11.3±0.84 mg/%, and in children born to mothers with TORCH infection in the neonatal period, its content was increased by 1.5 times and amounted to an average of 16.95 mg/%, which is significantly higher than the control indicators (P<0, 01).

Conclusion. Thus, it becomes obvious that in children born to mothers with TORCH infection, against the background of a severe antenatal period and a high titer of IgG and IgM during the first year of life, gross brain lesions are formed, which complicates the immediate and long-term prognosis.

References:

1.Вайншенкер, Ю.И. Маломанифестные инфекции перинатального периода и их клинико-неврологические проявления у детей и подростков / Ю.И. Вайншенкер [и др.] // Инфекционные болезни. – 2013. – Т. 11, № 1. – С. 44–49.
2. Горбунов, Е.Ф. Характеристика поражений внутренних органов при перинатальном хламидиозе / Е.Ф. Горбунов, В.А. Цинзерлинг, Н.В. Семенов // Архив патологии. – 2007. – № 3. – С. 33–36.
3.Детские болезни / под ред. Н. Н. Володина, Ю. Г. Мухиной. – М. : Династия, 2011. – Т. 1 : Неонатология / под ред. Н. Н. Володина, Ю. Г. Мухиной, А. И. Чубаровой. – 512 с.
4.Колобов, А.В. Значение структурных изменений плаценты у ВИЧ-инфицированных женщин / А.В. Колобов // ВИЧ-инфекция и иммуносупрессии. – 2012. – Т. 4, № 1. – С. 42–50.
5.Маянский, А. Н. Инфекционные взаимоотношения в системе «мать-плод» / А. Н. Маянский // Вопр. Диагностики в педиатрии. – 2009. – Т. 1, № 5. – С. 5-13.
6.Shopulotova Z., Shopulotov S., Kobilova Z. MODERN ASPECTS OF HYPERPLASTIC PRO //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 787-791.
7.Неонатология : учеб. пособие / А. К. Ткаченко [и др.] ; под общ. ред. А. К. Ткаченко, А. А. Устинович. – Минск : Выш. шк., 2009. – 494 с.
8.Основы перинатологии : учебник / под общ. ред. Н. П. Шабалова, Ю. В. Цвелева. – 2-е изд., перераб. и доп. – М. : МЕДпресс-информ, 2002. – 576 с.
9.Очилдиев А. А., Худоярова Д. Р., Элтазарова Г. Ш. Искусственные аборты при беременности //Достижения науки и образования. – 2019. – №. 13 (54). – С. 67-70.
10.Перинатальные инфекции : практ. пособие / под общ. ред. А. Я. Сенчука, З. М. Дубоссарской. – М. : МИА, 2005. – 318 с.
11.Shopulotova Z., Kobilova Z., Bazarova F. TREATMENT OF COMPLICATED GESTATIONAL PYELONEPHRITIS IN PREGNANTS //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 630-634.
12.Руководство по инфекционным болезням / под общ. ред. чл.-корр. РАМН, проф. Ю. В. Лобзина. – 3-е изд., пере- раб. и доп. – СПб.: Фолиант, 2003. – 1040 с.
13.Shopulotova Z., Kobilova Z., Shopulotov S. NEW OPPORTUNITIES FOR THE TREATMENT OF HYPERACTIVE BLADDER SYNDROME //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 770-773.
14.Цинзерлинг, В.А. Перинатальные инфекции. Вопросы патогенеза, морфологической диагностики и клинико-морфологических сопоставлений : практическое руководство / В.А. Цинзерлинг, В.Ф. Мельникова. – СПб: Элби СПб, 2002. – 352 с.
15.Утениязов Р. Ж. и др. Применение метода жидкостной цитологии в диагностике дисплазии шейки матки //Достижения науки и образования. – 2019. – №. 13 (54). – С. 82-84.
16.Shopulotova Z., Kobilova Z., Bazarova F. TREATMENT OF COMPLICATED GESTATIONAL PYELONEPHRITIS IN PREGNANTS //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 630-634.
17.Klein, J. O. Infectious Disease of the Fetus and Newborn Infant / J. Remington, J. O. Klein, C. B. Wilson. – WB Elsevier Saunders Company, PA, USA. – 2011. – P. 918-1041.