

Respiratory Distress Syndrome in Infants Born to Women with Covid

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Abstract: One in four babies born to a mother infected with COVID-19 are treated in the neonatal intensive care unit. However, there are high rates of stillbirth and neonatal mortality. Since 2019, the study of a new coronavirus infection during pregnancy is relevant and of particular importance, since the incidence of COVID-19 is growing rapidly throughout the world, and data on its consequences and complications during pregnancy are increasing and remain limited.

Key points: Respiratory distress, fetus, SARS-Cov-2 virus, newborn.

Since the end of 2019, as a result of the SARS-Cov-2 epidemic, the virus and its consequences have had a devastating impact on the health system, social and economic life around the world. In the early years of the epidemic, there was not enough information about the effect of this virus on the body of a pregnant woman and the fetus. Although there is little information about the impact of SARS (severe acute respiratory syndrome) and MERS (Middle East respiratory syndrome), which were common before the SARS-Cov-2 epidemic, on pregnancy, there is little information about the impact of other respiratory infections. diseases, including influenza. Based on the findings, information about the negative consequences of COVID-19 during pregnancy has been enriched[1,2].

A successful pregnancy requires that the mother's immune system be tolerant of the genetically foreign fetus. This leads to increased tolerance of the cardiovascular and respiratory systems. Otherwise, the rate of disability and mortality due to infection during pregnancy will increase. In understanding the susceptibility to infections during pregnancy, the results obtained from the study of infectious diseases of pregnant women show that susceptibility to the disease depends not only on the susceptibility of the pregnant woman's body, but also on the vulnerability of the pathogenic virus to the effects of the body. the immune system. The cohort analysis concluded that there was no difference between the two groups. That is why assumptions about the susceptibility of a pregnant woman's body to the SARS-Cov-2 virus have not been proven. But it is wrong to consider these as final conclusions[3].

Interest in research into the risk of many diseases in pregnancy has increased the number of different clinical observations, and the conclusions of expanded clinical studies are that there are some confounding factors associated with pregnancy (for example, the perception of pregnancy as a sign of health). . In the first clinical studies examining pregnancy as a risk factor, the composition of the selected groups did not match the comparison groups, and in subsequent studies, women of reproductive age were recommended to become pregnant over pregnant women. A Centers for Disease Control and Prevention study of more than 400,000 women of reproductive age with COVID-19 shows that the risk of death is significantly higher for pregnant women than for non-pregnant women[4].

Scientists at Columbia University came to the same conclusion in their research. There are also a number of risk factors for the disease during pregnancy, which include the woman's age, large body

weight, blackness, concomitant diseases with pregnancy, such as diabetes mellitus, hypertension. Research on postpartum women regarding COVID-19 suggests that these women are also at high risk of contracting the disease. In 13% of pregnant women with asymptomatic clinical course of COVID-19, their condition worsened and new symptoms appeared in the first 7 days after birth. Postpartum symptoms (fever, hypoxia) were more common in women with COVID-19 than in those without (12.9% and 4.5%, respectively). According to a study conducted in Brazil, postpartum mortality due to the SARSCov-2 virus was higher than mortality during pregnancy. In the postpartum period, a woman's age and diabetes mellitus are considered independent risk factors for death. According to the symptom information, the most common symptoms are nasal congestion - 72%, cough - 64%, headache - 59, disturbances in smell and taste - 54%. Fever is 28%[5,8].

The World Health Organization is constantly updating its recommendations for the treatment of patients with COVID-19. Based on numerous clinical studies, specific recommendations for the treatment of COVID-19 for pregnant women have been developed. However, treatment recommendations for non-pregnant women should not be separated from those for pregnant women. This treatment regimen includes remdesivir, dexamethasone, and monoclonal antibodies. If pregnancy causes the development or progression of severe disease, such women can receive specific monoclonal antibodies against SARS-Cov-2 in an outpatient setting as a prophylaxis or after treatment. The treatment algorithm for COVID-19 is almost the same for pregnant and non-pregnant women, however, an approach that takes into account some specific circumstances is required for pregnant women. For example, during pregnancy, peripheral oxygen saturation should be 95% or higher. This is important for the diffusion of oxygen across the placenta. The due date for pregnant women should be selected individually, taking into account the benefits and risks for the mother and child[6,9].

At the 32nd week of gestation and later, it is advisable to think about childbirth when refractory hypoxemia manifests itself or the disease passes into critical stages. Recent studies suggest that small improvements in the PO₂/FiO₂ ratio can be achieved during labor and delivery of COVID-19-related respiratory distress syndrome in pregnant women. But it would be appropriate not to generalize this finding because morbidity and mortality rates are very low in patients who do not develop acute respiratory failure. Consequences of SARS-Cov-2 infection. Several studies have shown that infection with the SARSCov-2 virus increases the risk of complicated pregnancy. A systematic review of the literature and meta-analysis of 42 studies involving a total of 438,548 pregnant women found that preeclampsia, preterm birth, and stillbirth were more common in pregnancies coinfecting with COVID-19 than in uninfected pregnancies with SARS-Cov-2.met[2,8].

In severe late stages of the disease (respiratory rate 30 per minute, oxygen saturation 93% or less, shortness of breath complicated by pneumonia), severe preeclampsia, gestational diabetes, pregnancy ending by cesarean section, preterm labor, cases of preterm birth, for example, in the intensive care unit newborns. treatments are more common than mild to moderate COVID-19 cases[10].

Although one large study conducted in the United States disproved the link between cesarean section and COVID-19, it proved that preterm birth is associated with the SARS-Cov-2 virus. A meta-analysis confirmed the existence of a correlation between a decrease in platelet count in patients with the SARS-Cov-2 virus, an increase in the concentration of liver enzymes in the blood, the development of preeclampsia, eclampsia, hemolysis, and help syndrome. . With a symptomatic course of the disease, the incidence of preeclampsia is higher than with an asymptomatic course. Thus, the association between cesarean section and SARS-Cov-2 infection may depend on patient ethnicity and geographic location[4,10].

During pregnancy, the likelihood of contracting a severe form of the disease increases. Treatment is almost the same for pregnant and non-pregnant women. The severe course of the disease leads to hospitalization of patients, an increased need for artificial ventilation devices, and an increased risk of death. Treatment should not be stopped due to pregnancy status, but should include treatment

with antibodies against the SARS-Cov-2 virus to prevent severe complications. Immunizing the mother prevents infection of the fetus. But maternal vaccination rates will be at their lowest in 2021. This requires vigilance regarding the health of mother and child.

REFERENCES

1. Roseau N., Valencia D., Newton S.M. et al. Disease severity according to pregnancy status among laboratory-confirmed SARS-CoV-2 infections occurring in women of reproductive age in Colombia. *Pediatr Perinat Epidemiol* 2021. Online before print.
2. Knobel R, Takemoto MLS, Nakamura-Pereira M, et al. Mortality from COVID-19 among women of reproductive age in Brazil: the burden of the postpartum period. *Int J Gynaecol Obstet* 2021;155(1):101–9.
3. Dawood FS, Warner M, Tita A, et al. Incidence, clinical characteristics, and risk factors for SARSCoV-2 infection among pregnant women in the United States. *Clin Infect Dis* 2021;ciab713.
4. Jamieson J., Rasmussen S.A. Update on COVID-19 and pregnancy. *Am J Obstet Gynecol* 2022; 226(2):177–86.
5. Savitz DA, Bengtson AM, Hardy E, et al. Pregnancy and the risk of severe infection with coronavirus disease 2019: methodological issues and research recommendations. *BZHOG* 2022;129(2):192–5.
6. Allotey J, Stallings E, Bonet M, et al. Clinical manifestations, risk factors, maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: a live systematic review and meta-analysis. *BMJ* 2020;370:m3320.
7. Musakhodjayeva D.A., Karimov R.K., Rasulova S.Kh. Immunological indicators of complications of surgical bowel disease in children. *Medical Immunology (Russia)*. 2023;25(4):907-912. <https://doi.org/10.15789/1563-0625-IIO-2859>
8. Sh. I. Navruzova, D. R. Khamraeva, M. U. Ergasheva, S. H. Rasulova, Functional Constipation in Children, *American Journal of Medicine and Medical Sciences*, Vol. 12 No. 9, 2022, pp. 908-911. doi: 10.5923/j.ajmms.20221209.12. <http://article.sapub.org/10.5923.j.ajmms.20221209.12.html>
9. Halimovna, R. S. . (2023). New Mechanisms of Formation of Irritable Bowel Syndrome in Children. *International journal of health systems and medical sciences*, 2(9), 52–55. Retrieved from <https://inter-publishing.com/index.php/IJHSMS/article/view/2515>
10. Fatullayeva, B. O. . (2023). New Covid-19 Coronavirus Infection in the Practice of a Neonatologist and Pediatrician. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 2(10), 227–235. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/8332>