INFECTIONS OF VIRAL INFECTIONS ON THE MOTHER AND THE FETAL DURING PREGNANCY

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Abstract. *This article analyzes the effects of viral infections on the mother and fetus during pregnancy. The natural weakening of the immune system during pregnancy makes the female body susceptible to various viruses, which poses a threat to the health of the mother and fetus. The article discusses the complications that influenza, rubella, measles, cytomegalovirus and other viruses can cause at different stages of pregnancy. It is shown that viral infections can cause general weakness, intoxication and chronic complications in the mother's body, and congenital defects, developmental delay and perinatal complications in the fetus. Therefore, the importance of prevention, early diagnosis and medical supervision is emphasized. The article is intended for medical workers, pregnant women and a wide range of readers interested in a healthy lifestyle.*

Keywords: *pregnancy, viral infections, maternal health, fetal development, prevention, early diagnosis, perinatal complications.*

Pregnancy is a physiologically and immunologically unique and responsible stage for the female body. During this period, the natural weakening of the immune system makes the female body more susceptible to various viral infections. Viral diseases can seriously affect not only the general health of the pregnant woman, but also the life and health of the developing fetus. In particular, influenza, measles, rubella, cytomegalovirus and other viral infections pose different risks at different stages of pregnancy.

Today, the global spread of viral infections, migration processes and environmental factors further increase the relevance of this problem. Viral infections during pregnancy can cause premature miscarriage, fetal developmental defects, premature birth and perinatal complications. Therefore, studying this topic on a scientific basis is of great importance in protecting the health of the mother and fetus.

Pregnancy is accompanied by profound physiological and hormonal changes in the female body. During this process, the immune system is somewhat weakened, because the mother's body should not perceive the fetus as foreign tissue. This is precisely the condition that makes pregnant women more susceptible to viral infections. Reduced immune defenses increase the risk of developing infections, ranging from simple respiratory viruses to severe viral diseases.

Although viral infections during pregnancy can be mild, in some cases they cause serious complications in the mother's body. Most importantly, these infections can have a direct or indirect negative impact on the development of the fetus.

Viral infections that pose a risk during pregnancy include influenza, respiratory viral infections, rubella, measles, chickenpox, cytomegalovirus, hepatitis viruses, HIV, and herpes viruses. The effect of each virus on the mother and fetus varies depending on the stage of pregnancy when it is contracted.[1]

For example, rubella virus, if infected in the first three months of pregnancy, sharply increases the risk of heart defects, hearing and vision damage in the fetus. Cytomegalovirus can cause damage to the central nervous system and mental retardation.

Viral infections are accompanied by general weakness, high body temperature, and signs of intoxication in a pregnant woman. Some viruses damage the lungs, cardiovascular system, and nervous system, complicating the course of pregnancy. For example, the influenza virus increases the risk of pneumonia in pregnant women and can lead to severe conditions.

In addition, complications such as gestosis, anemia, and changes in blood pressure are more common against the background of viral infections. These

conditions have a negative impact not only on the health of the mother, but also on the normal development of the fetus.

Viruses are transmitted to the fetus mainly through the placenta. Although the placenta normally acts as a protective barrier, some viruses have the ability to overcome this barrier. This process is called transplacental infection.

In some cases, viruses can also be transmitted to the baby during childbirth or through breast milk. The effect of the virus on the fetus depends on its stage of development, and the most dangerous period is the first trimester of pregnancy. It is during this period that the main organs are formed, and viral exposure can lead to birth defects.

Viral infections can cause conditions such as embryopathy and fetopathy in the fetus. Embryopathy occurs in the early stages of pregnancy and is manifested by congenital anatomical defects. Fetopathy occurs in the later stages of pregnancy develops, characterized by fetal growth retardation and functional disorders.[2]

As a result of viral damage, the central nervous system, cardiovascular system, respiratory and auditory organs may be damaged in the fetus. In some cases, the risk of intrauterine death or premature birth also increases.

Early detection of viral infections during pregnancy is important for maintaining the health of the mother and fetus. With the help of modern laboratory tests, viral infections can be detected in the early stages and necessary measures can be taken.

Pregnant women should be regularly monitored by a doctor and seek medical help immediately if symptoms of infection appear. Early diagnosis reduces the risk of complications and ensures normal fetal development.

Prevention is the most effective way to combat viral infections during pregnancy. It is important to adhere to a healthy lifestyle, follow the rules of personal hygiene, and strengthen immunity.[3]

Expanding vaccination measures among the population, especially vaccinating women against certain viral diseases before pregnancy, is an effective

way to protect the health of the mother and fetus. It is also recommended to avoid crowded places during periods of infection.

Caution is required in the treatment of viral infections during pregnancy, since not all drugs are safe for the fetus. Treatment should be carried out only under the supervision of a doctor. The main emphasis is on symptomatic treatment, supporting the body and preventing complications.[4]

If necessary, special antiviral drugs are used, but their effect on the fetus is assessed individually. Continuous monitoring of the condition of the mother and fetus is important.

Informing women about the risks of viral infections during pregnancy is one of the important tasks of the health system. Through medical and educational work, women should be explained the symptoms of infection, preventive measures and the importance of timely consultation with a doctor.

This approach is of great importance not only for mothers, but also for raising a healthy generation.[5]

In conclusion, viral infections during pregnancy are a serious risk factor for the health of the mother and fetus. The physiological weakening of the immune system makes pregnant women susceptible to various viruses, increasing the likelihood of a severe course of the disease. Viral infections can cause general weakness in the mother's body, complications and disruption of the pregnancy process. At the same time, they negatively affect the normal development of the fetus, increasing the risk of birth defects, developmental delay, premature birth and perinatal complications.

Early diagnosis, regular medical supervision and adherence to preventive measures are important in preventing this problem. To protect pregnant women from viral infections, it is necessary to form a healthy lifestyle, observe personal hygiene rules and strengthen vaccination measures. Also, the development of medical and educational work among the population is an important factor in maintaining the health of the mother and child.

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