EFFECT OF TORCH INFECTION ON PREGNANT WOMAN AND EMBRYO

Yodgorova Nodira Turgunboyevna
Tashkent Medical Academy Associate Professor, Department of Microbiology, Virology, Immunology, Candidate of Medical Sciences

Paygamova Farangiz Khurshidovna
is a student of Tashkent Medical Academy No. 1, Faculty of Medicine, Group 216

Keldiyorova Durdona Kamilovna
Tashkent Medical Academy No. 1, Faculty of Medicine, Group 225 student

Sayfiddinov Jasur Sharofiddin o'g'li
Tashkent Medical Academy No. 1, Faculty of Medicine, Group 225 student

Alijanova Sarvinoz Rustam qizi
Tashkent Medical Academy No. 1, Faculty of Medicine, Group 225 student

Ne'matov Normat Furqat o'g'li
Tashkent Medical Academy No. 1, Faculty of Medicine, Group 225 student

Annotation: *TORCH is an acronym made up of the first letters of the most common infections that are very dangerous for the fetus. TORCH infection is a group of infections that can affect people of any age and gender, but only occurs in pregnant women, fetuses and newborns. It is an infectious disease that mainly occurs during pregnancy and affects newborns. It produces the same pathological symptoms in men and women. This infection can be transmitted sexually, through airborne droplets, through mother's milk to the child, through infection in the birth canal, and through the fur and feces of cats. affects the development of dementia. When an infected person coughs or sneezes, it can spread to other people through saliva and mucus. Early detection, treatment and prevention of all diseases included in the TORCH group is an effective measure for disease prevention.*

Key words: *Toxoplasmosis, cytomegalovirus, parvovirus B19, measles, HSV-1, HSV-2, viral culture, vaginal route.*

TORCH infection (or syndrome) is a group of infectious diseases affecting the fetus or newborn. When infected with TORCH infections during pregnancy, they can have a harmful effect on all systems and organs of the fetus, especially on its central nervous system, increase the risk of miscarriage, stillbirth and birth defects of the

child. That is why, now, infection with TORCH complex infections is a direct indication for termination of pregnancy.

T.O.R.C.H-acronym appeared from the first letters of the most dangerous infections for the fetus:

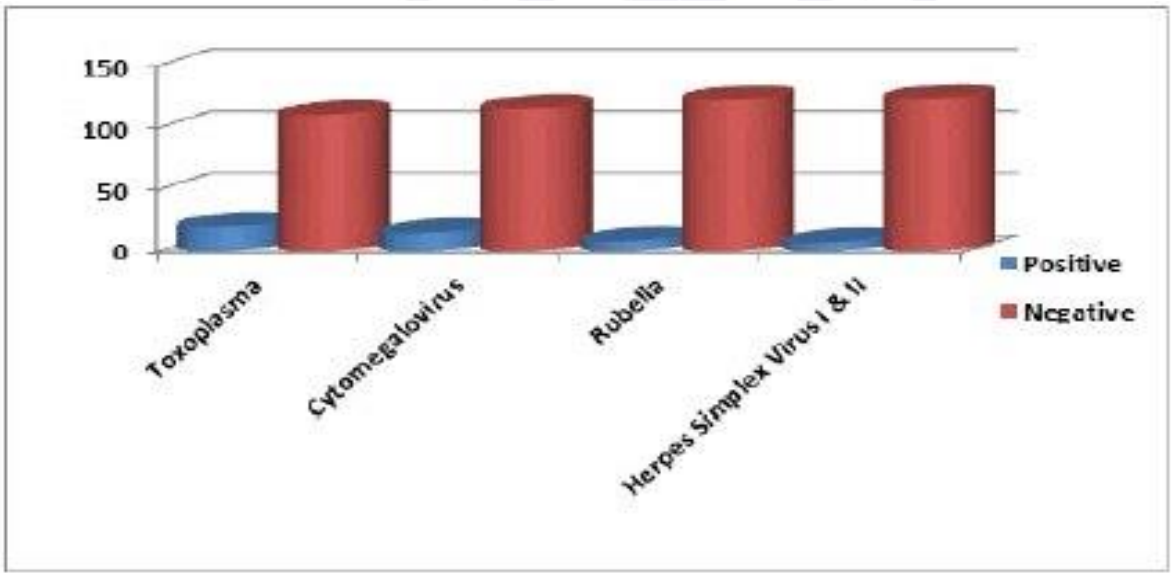
T (toxoplasmosis) - toxoplasmosis

O (other) - other infections (hepatitis B, syphilis, chlamydia, other infections caused by various viruses and bacteria)

R (red) – red

C (cytomegaly) - cytomegalovirus infection

H (herpes) - herpes I-II, type II



This picture shows the positive and negative ratio of viruses that are part of the TORCH infection for the body.

T-Toxoplasmosis

Toxoplasmosis is a parasitic disease that affects the nervous system, causes enlargement of the liver and spleen, and changes in the lymph nodes. In some people, this disease passes without symptoms.

Due to the development of the immune response in the body, parasites in the blood are reduced. However, parasite cysts remain in the tissues. The primary source of disease is cats. All mammals except humans, cats and dogs can get toxoplasmosis. Toxoplasma cysts released from the intestines of cats fall into the soil and are spread around by water, wind, and transport wheels. The digestive organs are the gateway of the parasite. The pathogen is absorbed into the blood from the small intestine and spreads throughout the body.

There are two types of toxaplasmosis; congenital and acquired. The acute form of congenital toxoplasmosis is severe: it is accompanied by enlargement of the liver and spleen, and the appearance of rashes.

Acquired toxoplasmosis is characterized by fever, headache, muscle pain, and enlarged lymph nodes. In order not to get this infection, it is necessary to follow the rules of personal hygiene, not to eat raw meat and avoid cats.

O-Others

Others include HIV, Syphilis, Parvovirus B19, Varicella (chicken pox), Zika, and other infections.

For example, Syphilis is a sexually transmitted infection caused by bacteria. Congenital syphilis is transmitted by babies through the birth canal. HIV- (human immunodeficiency virus) can be transmitted mainly through sex, a contaminated syringe, from a nursing mother to a child through breast milk. Zika virus is a virus transmitted mainly through mosquitoes and through sexual contact.

Varicella is a virus that causes chickenpox.

Parvovirus B19 causes a mild rash. It is spread through saliva or mucus when a person coughs or sneezes.

R-rubella

R-rubella (measles) is an acute infectious viral disease, which is manifested by an increase in body temperature and symptoms of a cold. Due to vaccination against measles at a young age, this disease does not occur often. This disease is an acute viral infection, characterized by a rash, fever and damage to the fetus in pregnant women. In the body of children with congenital rubella, the virus can be stored for a long time (1.5 years or more). Vaccination against rubella has been included in the vaccination calendar since 1969. After that, the rate of this disease decreased to 1:100,000. The latent period of the disease is 15-24 days. During this period, enlargement of the back of the neck, back of the neck, behind the ears, and lymph glands is observed. The resulting rashes are itchy. Today, there is a hypothesis that the cause of Alzheimer's disease (mental weakness) in adults is rubella, which was experienced in childhood.

C-CMV

CVM (cytomegalovirus) is a member of the herpes virus family. The virus damages internal organs and the central nervous system. When internal organs are affected, weakness, diarrhea, constipation are observed. Fetal pathologies may develop when pregnant women are infected. If the infection occurs during pregnancy before the 12th week, it causes miscarriage and the birth of the child with birth

defects. This virus is mostly asymptomatic, i.e. without symptoms, in men. The virus spreads from the infected organism through urine, saliva and tears. Transient jaundice, enlargement of the liver and spleen are observed in patients infected with the virus. In 10-30% of cases, children infected with the virus have atrophy of auditory nerve fibers and mental retardation. Diagnosis of this disease is carried out on the basis of laboratory tests.

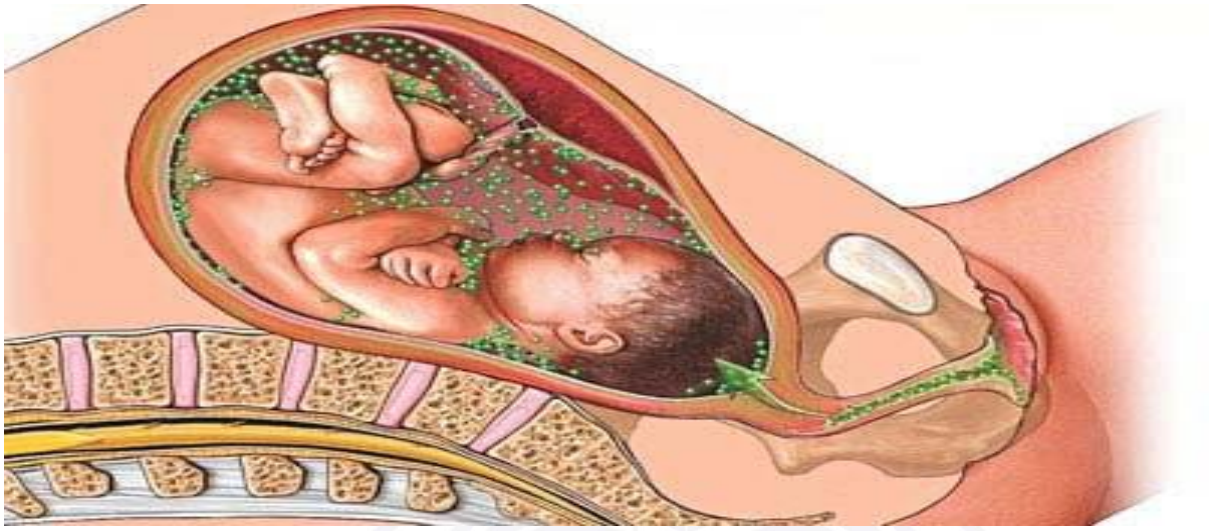
H-herpes simplex

Herpes is a highly contagious sexually transmitted disease. There are 5 types that are most common in humans, and two of them are: HSV-1 (oral and genital), HSV-2 (sexual), cytomegalovirus, chickenpox virus, Epstein-Barr virus, most often a new breed. It is transmitted to the newborn during vaginal delivery. The latent period of the disease lasts from two to twelve days. Today, special drugs against herpes are used.

The negative characteristic of infections of the TORCH group is that the symptoms of their presence in the body may not be observed at all or may be poorly manifested. It is difficult to make a diagnosis from clinical symptoms such as rash and fever. Therefore, the most accurate diagnostic method is the detection of immunoglobulins in the blood. Infections at the beginning of pregnancy can have bad consequences. This infection causes the following symptoms: fever, lethargy, low birth weight, purpura (red or brown spots), microcephaly (small head), hepatosplenomegaly (enlarged liver). After the age of two, the following symptoms of TORCH infection appear in a child: loss of vision and hearing, seizures, and learning disabilities. Infection is transmitted from mother to child in the following ways:

1) Via satellite; during pregnancy, diseases pass through the blood stream to the blood of the baby through the placenta. The placenta supplies the fetus with oxygen, nutrients and blood.

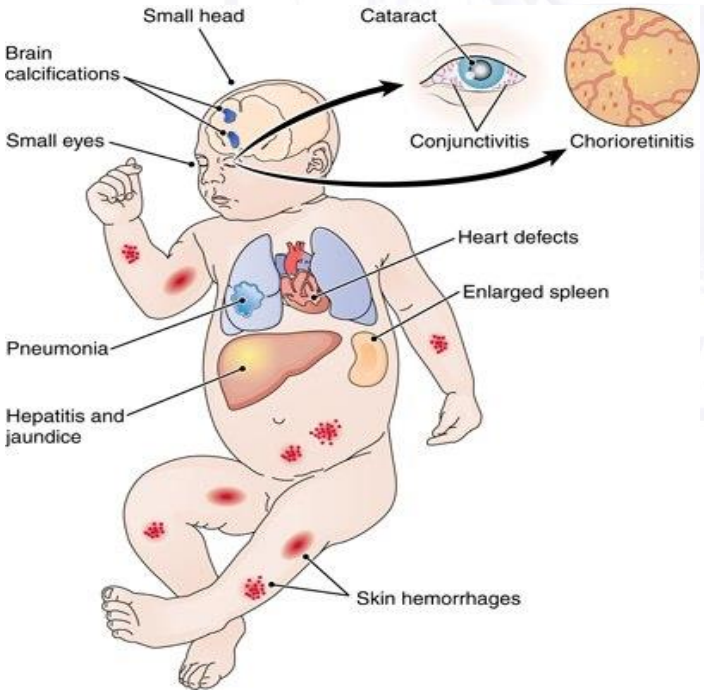
2) during childbirth: the baby gets infected while passing through the birth canal during vaginal birth.



This picture shows vaginal transmission of TORCH infection.

3) After birth: it can be transmitted from mother to child through breast milk.

TORCH infection during pregnancy is diagnosed by blood tests, PCR (polymerase chain reaction) tests and viral culture. Viral culture is the doctor's examination of saliva, nasal mucus, blood, urine, and amniotic fluid samples. Some congenital diseases, problems related to growth or development of major organs can be detected by prenatal ultrasound.



Treatment for TORCH infection depends on the disease, when the infection occurred, and the severity of the symptoms. Most TORCH infections are treated with medication. Identifying the infection as soon as possible leads to a positive result. It is important for the health and future of the fetus and woman to have a child and pregnancy without any problems, to be tested for TORCH infection. In most cases, babies with TORCH infection can make a full recovery.

Conclusion: The conclusion is that as the future of our country is in the hands of the young generation, women should protect themselves from various infections and

viruses during pregnancy, follow the rules of hygiene, have a proper sexual relationship and immunity in order to give birth to a healthy child. must be strong.

REFERENCES:

1. Aliyev –MIKROBIOLOGY LABORATORY COURSES
2. https://youtu.be/Tt_rPcKXZGE?si=v63pl3DmFpN5yiWQ
3. Birger M.O. Handbook of microbiological and
4. virological research methods. 3rd edition.— M., “Melitsina”
5. Levinson_W_ELEVENTH_Levinson_U_Medical_microbiology_11_ELEVENTH.
6. https://my.clevelandclinic.org/health/diseases/23322-torch-syndrome
7. https://www.ncbi.nlm.nih.gov/books/NBK560528/
8. Litusov_Private bacteriology.
9. https://images.app.goo.gl/atbAAsFigNNvzbL77
10. https://www.google.com/imgres?imgurl=https://gmed.uz/backend/web/uploads/service/16461332398020.jpg&tbnid=9q92JTWSArC2qM&vet=1&imgrefurl=https://gmed.uz/en/ item-torch-infection-during-pregnancy-research&docid=E3uxLrrC_5PmBM&w=400&h=280&itg=1&hl=uz-UZ&source=sh/x/im/m1/4
11. 1_1_Atlas_on_Microbiology_A_A_Vorobiev_.