

# Protect your child from CMV



### Cytomegalovirus infection during pregnancy

Potential risks for the child can be avoided through hygiene rules



The most common infectious disease in pregnancy with possible serious consequences for the unborn child is cytomegalovirus infection (CMV). Unfortunately, many people have never heard of it.

Cytomegaly is a viral disease caused by the human cytomegalovirus. The virus belongs to the herpes virus family. In Germany, approximately 40-60% of women of childbearing age have no antibodies against CMV and subsequently no protection.

In the case of a first-time infection (primary infection) during pregnancy, there is a risk of transmission of the virus to the unborn child. In the case of infection during early pregnancy until the end of the 1st trimester in particular, there is the risk of lifelong foetal damage.

The problem is that in most cases the CMV infection remains undetected in healthy adults, as it runs without noticeable signs of illness (approx. 80% of the time) or only non-specific, mild flu symptoms occur. Since routine diagnosis for CMV does not take place either during pregnancy or in the newborn and the consequences are often not yet recognisable at birth (for example, hearing damage), no early treatment is carried out.

# WHAT ARE THE POTENTIAL CONSEQUENCES OF AN INITIAL CMV INFECTION DURING PREGNANCY?

In about every second first CMV infection during pregnancy, the virus is transmitted to the child. Fortunately, in about 85% of cases, the virus is transmitted without any health consequences. However, about 10-15% of children infected in the womb (approx. 1,200 children per year in Germany) can develop clinical abnormalities or even severe health problems at birth or in the first years of life.

In addition to the risk of starting life too early or weaker with a low birth weight, permanent damage to the nervous system and brain can occur, especially if transmission occurs during early pregnancy. Delayed mental and physical development as well as hearing disorders and damage to the eyes are the most common consequences of congenital cytomegaly.

The best protection for the unborn child is for pregnant women to protect themselves from CMV infection during pregnancy!

The virus can be excreted by infected people in body fluids and transmitted to others through close direct contact, such as saliva, blood and urine. The most common source of infection in pregnant women are CMV-shedding healthy infants who have only become infected themselves after birth, for example through breastfeeding or in toddler groups.

There is an increased risk of infection with CMV, especially where there is close contact with young children.

Close contact with young children poses the greatest risk of transmission for you. Children in toddler groups or nurseries in particular shed CMV viruses frequently and sometimes at very high concentrations. If you have close occupational contact with children up to the age of 3, the company doctor should examine the issue of an employment ban.



## Hygiene rules help to protect your unborn child!

If you observe the following hygiene rules when in contact with young children, you will considerably reduce the risk of infection:



Wash your hands thoroughly with soap and water several times a day – especially after wiping young children's noses, feeding them or changing their nappies.



Use your own crockery and cutlery. The same applies to toothbrushes and towels.



Do not put dropped dummies in your mouth. Rinsing is the safest solution. And don't kiss your child on the mouth!



The main risk of harm to the child is a first-time CMV infection in early pregnancy. You can only determine whether you belong to the risk group of CMV-seronegative pregnant women by checking for CMV antibodies in the blood before or at the beginning of pregnancy.

If the result is positive, you already have protective immunoglobulin G antibodies against the virus. In these pregnant women, reactivation or new infection with the virus is rare and the risk of transmission to the child is comparatively low. Up until now, there have been no methods for the routine detection of a second infection or reactivation.

If you lack protective antibodies against the virus, it means that you are CMV-seronegative. In this case, you should repeat the test in the first trimester, at the beginning of the second trimester and once in the 35th week of pregnancy.

Also observe hygiene rules when dealing with small children. Regardless of whether you have a primary CMV infection during pregnancy, the saliva and urine of the newborn should be examined for CMV DNA within two weeks of birth.

Talk to your gynaecologist about the CMV blood test.

#### WHAT TO DO IN CASE OF A FIRST INFECTION DURING PREGNANCY?

Currently, there is neither a vaccination against the CMV virus, nor an approved treatment option during pregnancy. However, based on initial trial data, treatment with already available off-label medicines can be considered. Antibody concentrates against the CMV virus (CMV hyperimmunoglobulins) or special antivirals directed against the virus can be used. However, these treatments should only be carried out after consultation with a specialist in prenatal medicine and after careful counselling of the pregnant woman.

You can find more helpful information about cytomegaly in pregnancy on our initiative's website:

