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Cytomegalovirus (CMV) and Pregnancy

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to cytomegalovirus may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care professional.

What is cytomegalovirus (CMV)?

CMV is a common virus that can infect people of all ages. Once the virus enters your body it stays there for life, but a healthy immune system keeps the virus in check. Most people infected with CMV will never have any symptoms. Over half of adults have already been infected with CMV by the time they are 40 years old.

CMV is spread from one person to another through contact with saliva, semen, vaginal fluids, blood, urine, tears, feces, or breast milk. A pregnant woman can also pass CMV to her unborn baby. A baby that is born with a CMV infection is said to have congenital CMV. About 0.2-2.5% of babies worldwide have congenital CMV.

Who is at increased risk for CMV infection?

Women who work in day-care centers or women who are around toddlers and young children are more likely to come in contact with CMV. However, CMV is a common virus so anyone can be exposed.

What steps can I take to help prevent infection?

The best way to prevent infection is to practice good hygiene. Wash your hands after changing diapers and after contact with urine, feces, or saliva. Mouth-to-mouth kissing with children attending day-care is discouraged. Pregnant women should refrain from sharing food, drink, and eating utensils. All women who have more than one sexual partner should use latex condoms during intercourse.

How can I find out if I am infected with CMV?

A blood test can determine if you have been infected with CMV. Ideally, testing should be done before you get pregnant. If a pregnant woman is

found to be infected, several tests may need to be done to find out if the infection is new (primary) or old (recurrent). You can discuss whether you need to be tested with your health care provider.

I am pregnant and have just found out that I have recently been infected for the first time with CMV. Is my baby at risk?

When a woman is infected with CMV for the first time during pregnancy (primary infection), the risk that her baby will get infected is about 30-50%. Only 10-15% of these babies will show symptoms of infection at birth. Babies born with symptoms of CMV infection may have small red spots on their skin, seizures and problems with their liver, spleen and eyes. Most of these symptoms will go away within a few weeks or months. However, babies born with CMV are also at risk for long term effects such as hearing loss, mental retardation, and vision problems.

Eighty-five to ninety percent of babies that are born with a CMV infection (congenital CMV), will not show any symptoms at birth. Most of these babies will not develop problems from the disease later on. However, 10-15% of babies with congenital CMV that do not show symptoms at birth will still develop some of the long term effects such as hearing loss and learning difficulties.

I had a CMV infection a year ago, but my doctor told me I now have a recurrent infection. I am pregnant. Is my baby at risk?

When a woman gets a recurrent CMV infection during pregnancy, the risk that she will pass the infection to her baby is low: 1% or less. Only 1-10% of babies born with CMV from a recurrent maternal infection will have symptoms at birth. However, long term effects such as hearing loss and

learning problems will still occur in 10-15% of infected babies that do not show symptoms at birth.

Does it matter when in my pregnancy I get a primary or recurrent CMV infection?

The timing of the infection during pregnancy does not seem to affect the risk of passing CMV to the baby. However, infection earlier in pregnancy may cause babies to have more severe disease.

How can I find out if my baby has been infected with CMV during my pregnancy?

If you have been infected with CMV during pregnancy, a test called amniocentesis can be done to see if the baby has been infected. This test takes some fluid around the baby (amniotic fluid) and looks for signs of the virus. There is a small risk for miscarriage with amniocentesis (about one half of one percent). You and your health care provider can discuss the risks and benefits of getting this test.

Some babies that have been infected with CMV during pregnancy will show signs of problems on ultrasound. Problems may be seen on ultrasound include slow growth, small head size, a large placenta, and differences in certain structures in the brain. However, many babies with CMV will not show any signs of infection on ultrasound. After birth, the baby's saliva, urine, or blood can be tested for CMV. This testing can tell for sure whether the baby has a CMV infection.

I am pregnant and have a CMV infection. Is there any way to help my baby from getting infected?

One study showed that giving hyperimmune globulin (an agent to boost the immune system) to a pregnant woman with a CMV infection may lower the risk of her baby being born with symptoms of CMV. Please talk to your health care provider about hyperimmune globulin if you have had a CMV infection during pregnancy.

Is there any way to treat congenital CMV?

There is no treatment that will completely prevent all the symptoms or long term effects of congenital CMV. However, newborns with CMV who are given ganciclovir, an antiviral medication, may have a lower chance of hearing loss, eye disease, and learning problems.

Can I breastfeed if I have a CMV infection?

CMV passes into breast milk and a baby can be infected through breast milk. However, full-term

babies who get infected with CMV through breast milk usually do not get seriously ill. Premature babies may have a higher risk of getting a symptomatic CMV infection from breastfeeding. Neither premature nor full-term babies who are infected with CMV through breast milk appear to be at risk for long term problems. Please speak with you and your baby's health care providers if you are breastfeeding and have CMV.

What if the father of the baby has a CMV infection?

A father cannot pass a CMV infection directly to a baby during pregnancy. However, since CMV can be spread by sexual intercourse, you should use a latex condom if you are pregnant and you know that your partner has recently been infected.

September 2014.

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If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.