

Patient information from BMJ

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Cytomegalovirus

Cytomegalovirus is a common virus that is usually harmless. But it can cause serious problems if pregnant women pass it on to their unborn babies. It can also be more serious for people with weakened immune systems, such as those with HIV.

The symptoms of CMV are a bit like flu or like having swollen glands. If you have a flu-like illness while pregnant, it's important that you see your doctor.

What is cytomegalovirus?

Cytomegalovirus (CMV) is a virus that is carried by most people and usually causes no symptoms or signs of illness. After the virus infects you, it usually just stays in your body without causing any problems.

From time to time the virus might flare up and become 'active'. But if you have a healthy immune system you will only have a mild illness that's a bit like flu, or you might not become ill at all.

Because CMV is usually harmless, and because it spreads so easily, trying to avoid it is pointless. For example, it can be spread by:

- close physical contact, kissing, and sex
- blood transfusions
- organ and cell transplants, and
- from mother to baby in the womb.

CMV in pregnancy

One group of people who should try to avoid catching CMV is pregnant women. This might sound strange, as most people, including pregnant women, will already have CMV.

But if you catch a new strain of CMV, it's likely to be what's called an 'active strain', which can cause illness. This often happens when pregnant women catch CMV from another young child.

CMV that is passed on to a baby in the womb is called congenital CMV.

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Pregnant women are advised to:

- practise good hygiene, especially around small children. For example, you should wash your hands thoroughly after changing nappies, and
- see your doctor straight away if you have an infection or flu-like illness while pregnant.

But CMV spreads easily, so it's not always possible to avoid it, despite your best efforts. So if you get symptoms of flu, a sore throat, or swollen glands while pregnant, see your doctor.

Your doctor can't treat you while you're pregnant. But he or she can monitor your baby. If your baby has CMV your doctor can then treat him or her soon after birth. The earlier a baby is treated, the better the outcome.

The most common problem that CMV causes in babies infected in the womb is hearing loss. CMV is one of the most common causes of hearing loss in children.

But it can also cause harm in other ways, including problems with nerve and brain development, and mental disability.

Between 10 and 20 in 100 babies infected with CMV in the womb will have some problems. And about half of these babies will have lifelong problems, usually including hearing loss.

CMV in people with weakened immune systems

If you have a weakened immune system, CMV can cause serious harm, including problems with your blood cells and major organs, and problems with the eyes that can sometimes lead to blindness.

CMV can be a particular problem for people with HIV, or for those who have had an organ transplant, or a cell transplant (for example, bone marrow).

People taking antiretroviral treatment (ART) for HIV should be told by their doctor to look out for the symptoms of CMV (and any other infection) so that they can get treatment straight away.

And people who have had a transplant of any kind will be carefully watched for any problems.

What are the symptoms?

In people with a healthy immune system, CMV doesn't usually cause any symptoms. If you do have symptoms, they will usually be similar to those of a flu-like illness or mild glandular fever, such as:

- fever
- sore throat
- swollen glands, and
- feeling weak and tired.

These symptoms will clear up by themselves just as if you had flu or a cold.

In people with weakened immune systems, such as those with HIV, the symptoms also start with a fever, but the effects can be much more serious.

What treatments work?

If you have a healthy immune system, a first infection with CMV or an occasional flare-up is not serious, and you don't need treatment. You just need to take care of yourself as you would with any infection. You won't even know that it's CMV.

In people who need treatment, such as those with weakened immune systems, the treatment for CMV is antiviral medicines.

Treatment for newborn babies

There is no treatment for pregnant women with CMV. But you should see your doctor if you have symptoms. Your doctor can then check if the infection has been passed on to your baby.

Your doctor can then monitor your baby's progress. Most babies that are infected with CMV in the womb are born healthy.

Newborn babies with CMV symptoms can be given antiviral medicines. These medicines don't get rid of the virus completely, but they weaken the virus so that they can reduce the harm it causes.

If your baby needs treatment for CMV, he or she will need to stay in hospital for as long as the treatment lasts.

What will happen?

If you have CMV because of a weakened immune system, your doctor will monitor you regularly to check how you are doing, and to make sure that you are getting the right treatment to help you avoid serious problems.

Your doctor will also want to look out for problems that can sometimes be caused by the side effects of antiviral medicines. These can include problems with blood cell production and liver damage.

If you are pregnant and have CMV your doctor will monitor your baby's progress carefully. This will probably mean having tests and scans.

If you are pregnant, the most important thing you can do about CMV is simply to be aware of it. If you become ill with a fever and flu-like symptoms, see your doctor straight away.

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