

Cytomegalovirus (CMV) in the Transplant Patient

What is cytomegalovirus (CMV)?

Cytomegalovirus (CMV) is a common virus that can infect anyone of any age. Most people have had CMV by the time they reach an adult age. When CMV infects a person, the virus remains in the body for life.

CMV is not a problem for people with healthy immune systems and only causes mild symptoms. CMV can cause severe illness in transplant patients. The risk of CMV infection is highest during the first year after transplant because your immune system is weakened with high doses of anti-rejection medicines. But, CMV infection can occur any time anti-rejection medicine is increased.

Can you prevent CMV?

There are antiviral medicines to prevent CMV infection after transplant. The medicines are used for the first 3-12 months depending on your risk for CMV. Sometimes your doctor will decide to watch your labs for CMV and use a medicine if needed.

How did I get CMV?

CMV is common in the community. You were likely exposed to CMV during childhood and your immune system has kept it under control. You also may have been exposed to CMV through your donor, if they were infected with CMV. The virus lives in the tissue of the transplant. There are special protocols in place to ensure you do not get sick.

Is it contagious? Do I need to worry about spreading it to other people?

There is a good chance that the people around you have already had the virus. You do not need to worry about spreading it to other people unless they have an impaired immune system. This includes people who are pregnant or people receiving chemotherapy. One of the best ways to prevent CMV is to wash your hands.

What are the symptoms of CMV?

Symptoms of CMV are related to the virus level in your body. The most common symptoms are feeling very tired and run down, stomach upset and fevers. Call your transplant coordinator if you have any of these symptoms:

- Nausea
- Vomiting
- Diarrhea
- Fever
- General feeling of being unwell
- Low white blood cell count
- Fatigue
- Muscle aches

How do you know I have it?

The level of CMV virus is found by a blood test.

What do I need to do about it?

- Your doctor will check the level of virus in your blood and how fast it is going up. If you are not feeling well and your virus levels are high, you may need medicine.
- Antiviral medicine is available in a pill and IV. If you are having a lot of stomach symptoms, you may need IV medicine. If you are feeling very

poorly, you may need to come to the hospital.

- Your transplant provider may reduce your anti-rejection medicines for a short time. This will help your body fight the CMV.
- Transplant pharmacists may be involved in your care to help manage your CMV.
- You will need to do blood (lab) tests at least once a week to check the CMV levels in your blood. This is to check if the medicine is working and to see if you have any medicine side effects.

How will you know when CMV is gone?

- The CMV will never be “gone”. It is a virus that lives in your body for life. Your immune system will learn to control it on its own without antiviral medicine.
- Based on your blood (lab) tests and your risk, the transplant team will decide how long you need to take antiviral medicine and how long you will need to get labs looking for CMV.

If I have CMV, will my transplant be ok?

CMV can spread to other organ systems in your body. If left unchecked, it can be very serious. However, most often the antiviral medicine can control the virus before it causes a serious problem.

Your transplant team will watch the virus closely. They will make changes to your medicine if needed.