



Cytomegalovirus (CMV) Infection: A Guide for Patients and Families after Stem Cell Transplant

What is cytomegalovirus (CMV)?

Cytomegalovirus (CMV), a common virus, is a member of the herpes family. During the course of their lives, many people are exposed to CMV. But if they have strong immune systems, they have no health problems from this exposure. The virus stays inactive (dormant) in their bodies.

Why do I need to know about CMV?

Your immune system will be weakened by the medicine you must take after your stem cell transplant and by the transplant, itself. Your body might not be able to fight off infections such as CMV. If you were exposed to CMV in the past, CMV may become active again and cause problems for you. When you have a suppressed (weakened) immune system, untreated CMV can be life-threatening.

How could I have gotten CMV?

Most people are exposed to CMV at birth or as children. The virus remains dormant in their bodies for their lifetime.

Cytomegalovirus is often transmitted through infected bodily fluids (urine, saliva, breast milk) that come in contact with the hands of a susceptible person.

From the hands, CMV is then absorbed when the person touches his or her nose or mouth.

CMV is also transmitted through transplanted organs, stem cell transplants, and rarely, through blood transfusions. This is why your doctor will carefully check your blood for active CMV.

How will I be tested for this virus?

A blood sample will be taken by a nurse or phlebotomist once a week, or if you show symptoms of CMV infection. These samples will be taken for at least the first 100 days after your stem cell transplant.

The sample must be drawn before 9 a.m. Results are either negative or positive.

If my blood tests negative, will I still need to be retested?

Yes. It is important to test frequently for CMV while your immune system is suppressed from the transplant and

immunosuppressive medication. You are at risk for having active CMV while your immune system is suppressed.

If my blood tests positive for active CMV, what can I expect?

A CMV positive test will give a number, which tells the amount of virus found in your blood. The number (amount of virus), will help your doctor decide if you should take an antiviral medication to kill the virus.

If your doctor decides not to put you on antiviral medication, he or she will recheck a blood sample in a few days.

If your doctor decides to put you on an antiviral medication, you will receive this medication every day until your blood test for CMV comes back with a lower number than the previous test or is negative.

Depending on your transplant and blood test results, your medication will be either in tablet or in I.V. (intravenous) form. If you need I.V. medication, you may need to be admitted to the hospital for 1 to 2 weeks.

Will my donor be tested, too?

Yes. If your donor is positive for CMV, he or she can transmit this infection to you through the donated stem cells. Knowing if your donor is a CMV carrier helps your

doctor to predict your risk for active CMV infection.

If I have not been exposed to CMV before my transplant, how can I protect myself from future exposure?

Simple hand washing with soap and water removes the virus from the hands. We recommend frequent hand washing.

If you have other questions about CMV, please feel free to ask your doctor or nurse.



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