

# Cytomegalovirus (CMV)

**Cytomegalovirus (CMV)** is a common virus that can affect anyone at any age. Most people have been exposed/infected with CMV by the time they are adults. In those people with a healthy immune system, symptoms are usually mild like a cold or the flu. These individuals feel sick for 1-2 days then symptoms resolve. CMV in a transplant recipient is more serious and requires treatment.

CMV infections can happen at any time, so you need to be familiar with the symptoms, and contact your Transplant Coordinator if you are experiencing them.

Common symptoms include:

- ✓ Fatigue
- ✓ Vomiting
- ✓ General feeling of being unwell
- ✓ Muscle aches
- ✓ Fever
- ✓ Cough or shortness of breath
- ✓ Diarrhea
- ✓ Changes in blood counts
- ✓ Nausea

CMV has a variety of symptoms that can also come from other causes. Just because you experience one of these symptoms does not mean you have CMV. If you have the symptoms, a blood test will be ordered to check for the infection.

Once the symptoms resolve, the virus remains in your body for life, but with a healthy immune system, the virus remains inactive. During your evaluation, you had a test call a CMV IgG, and if that result was positive, you had been exposed during your lifetime. The CMV can reactivate when a person is sick or their immune system is weakened.

CMV after transplant can come from three sources:

- ✓ Exposure to someone with CMV
- ✓ From inside you, if you had been exposed in your life
- ✓ From your donor, if they have a history of CMV exposure

For transplant recipients, the highest risk occurs during the first year after transplant as your immune system is at its weakest. You are given a strong dose

of anti-rejection medication during your transplant to decrease your immunity, and your other antirejection medication doses are generally higher in the first year as well. You will receive routine CMV monitoring during the times you are at greatest risk of infection. After transplant, if you are at increased risk, you are placed on an antiviral medication to prevent CMV infection. You will be on Valganciclovir (Valcyte®) for 3-6 months after transplant.

There are multiple ways a CMV infection can be treated, which can include:

- ✓ Decreasing your antirejection medications
- ✓ Restarting the antiviral medication (could be one you were on before or something stronger)
- ✓ Treatment comes as a pill or IV medication
- ✓ IV medication typically will include a hospital stay to get treatment started
  - Blood work to check CMV will be done regularly to make sure it is resolving and not increasing in counts. It will continue until the viral counts are gone.
  - Additional appointments with the Transplant Team and Transplant Infectious Disease will also be needed.

It is important to follow the directions for treatment and monitoring of the CMV virus. CMV can affect other systems in your body outside of your transplanted organ. The Transplant Team will be monitoring you very closely. If the virus goes unchecked, it can be very serious.

CMV infections in transplant recipients can cause additional health problems, such as:

- ✓ Lung infections (pneumonia)
- ✓ Heart infection (myocarditis)
- ✓ Liver disease (hepatitis)
- ✓ Pancreas infection (pancreatitis)
- ✓ Stomach/Intestine infections (colitis)
- ✓ Brain/Spinal Cord infection (meningitis or encephalitis)
- ✓ Blood clots in a vein (venous thrombosis)