



## Cytomegalovirus (CMV)

Cytomegalovirus (CMV) is a common virus found in spit, blood, pee, semen and breast milk. Between 50% and 85% of Americans will have CMV by the time they are 40. It is not often noticed in a person with a healthy immune system.

When the immune system is weak, CMV can cause a lot of damage to the eyes, gut, lungs or other organs in the body.

One of the most common forms of CMV is CMV retinitis. CMV kills the cells in the back of the eye. It can lead to blindness without treatment.

When they take HIV meds, fewer people have problems with CMV. About 5% of people with HIV will have problems with CMV, even with HIV treatment.

### Symptoms

The signs of CMV depend on the part of the body it attacks.

- CMV retinitis attacks the eyes and causes black spots or floaters, light flashes, fuzzy vision or blind spots in the vision.
- CMV colitis attacks the colon and causes loose stool.
- CMV esophagitis attacks the throat and makes it hard and painful to swallow.
- CMV myelitis attacks the nerves and causes numbness. This begins at the base of the spine. It can travel to the legs and make it hard to walk.
- In rare cases, CMV causes encephalitis or pneumonia. The signs of CMV encephalitis are like those of other brain infections. You might have trouble with focus, headaches, or changes to your sense of self.

- CMV-related pneumonia is rare. It can cause shortness of breath and a dry cough.

### Causes and Risk Factors

CMV is a type of herpes virus. Most people will get it when they exchange body fluids. This can occur when you have sex, kiss, have hand-to-eye or hand-to-mouth contact, or breastfeed.

The risk that you will be ill due to CMV is highest when your CD4 cell count falls below 100. Problems with CMV are rare in people with a CD4 cell count above that.

### How to Know You Have CMV

A doctor will ask you about past and current health problems or symptoms. The doctor may need to take a small piece of tissue to get a closer look. This is true in cases of CMV in your colon or throat. If CMV myelitis is suspected, a small sample of spinal fluid will be tested.

Sometimes the virus can be grown from samples of blood or pee. This shows if the virus is in the body. It does not show whether there is organ disease.

### Treatment

Treatment of CMV has gotten better. The first line of defense is HIV meds. Once a person's CD4 count is 100 to 150 and stays there for at least three months, he or she can stop the meds used to treat CMV.

These meds are used to treat CMV:

- *Ganciclovir* is used to treat CMV in the eye and other parts of the body. A tube is placed in a vein so that daily doses of the drug can flow into the body. After two weeks, the drug may be taken as a daily pill called valganciclovir. This drug can cause the number of white blood cells to go down. It

may create an upset stomach, throwing up, and low levels of male hormones.

- *Foscarnet* is a whole body treatment that is given through a vein several times a day. This drug can upset the balance of salt in the body and cause you to lose water. That may lead to kidney problems or kidney failure.
- *Cidofovir* is used to treat CMV in the eyes. You inject this drug into a vein every week at first and then every other week. This drug can cause kidney problems. It has to be given along with other meds to cut the risk of kidney failure.
- *Valganciclovir* is a whole body therapy. It can be given through the veins or as a pill.

Your doctor will know the right treatment for you.

## Prevention

HIV treatment is the best way to prevent CMV. HIV meds build up the immune system. This keeps the CMV in check. People who have low CD4 cell counts should get eye exams often to check for CMV in their eyes.

### **For more information**

Contact your Registered Nurse Care Manager, or call Positive Healthcare's Nurse Advice Line at: (800) 797-1717.

