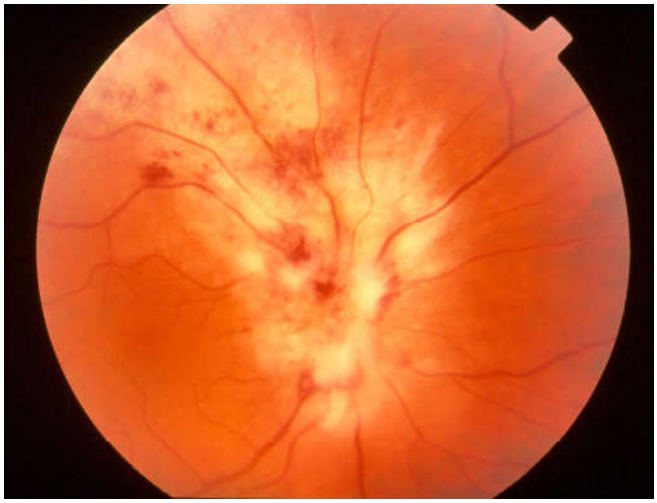
Cytomegalovirus Retinitis

What is cytomegalovirus retinitis?

Cytomegalovirus retinitis (CMV retinitis) is a serious viral eye infection of the retina. The retina is the light-sensing nerve layer that lines the back of the eye. It is most often found in people with weakened immune systems.



What are symptoms of CMV retinitis?

CMV retinitis symptoms can begin with a slow onset of floaters with blurred vision over a few days. This can lead to a loss of peripheral (side) vision. Sometimes the symptoms begin with a blind spot in the center of vision and can lead to a loss of central vision. The symptoms usually happen first in one eye but often progress to the other eye. Without treatment or improvement in the immune system, CMV retinitis destroys the retina and damages the optic nerve. This results in blindness. People with CMV retinitis will often develop a detached retina.

Eye Words to Know

Retina: Layer of nerve cells lining the back wall inside the eye. This layer senses light and sends signals to the brain so you can see.

Floaters: Shadows moving across vision cast by specks floating in the eye.

What causes CMV retinitis?

CMV retinitis is caused by the cytomegalovirus. This is one of the herpes viruses that infects most adults. The vast majority of people who have cytomegalovirus have no symptoms of infection. They will never have any problems because of the virus. But in people with weakened immune systems, the virus can reactivate and spread to the retina. This can lead to vision-threatening eye problems.

Who is at risk for CMV retinitis?

CMV retinitis is a significant threat to other people with weak immune systems. This includes people such as:

- those with HIV/AIDS
- those having immunosuppressive therapy for cancer/leukemia
- recipients of organ transplants.

The earliest symptom of CMV retinitis is floaters with a shadow appearing in the peripheral (side) vision as the disease worsens. Ophthalmologists need to check people with compromised immune systems for the disease.

HIV, AIDS and CMV retinitis

Before highly active antiretroviral therapy, CMV retinitis was a common problem for people with AIDS. While it is less common now, people with HIV or AIDS still have a higher risk for CMV retinitis. They should see an ophthalmologist regularly.

How is CMV retinitis diagnosed?

Your ophthalmologist will give you a dilated eye examination. In this exam, dilating eye drops will be placed in your eyes to dilate, or enlarge, your pupils. Your ophthalmologist will look at areas of your eye, including your retina, for signs of CMV retinitis.

How is CMV retinitis treated?

Strengthening your immune system is an important part of treating CMV retinitis. People with HIV or AIDS often improve if they are on highly active antiretroviral therapy (HAART).

There are also specific CMV retinitis treatments. Ganciclovir and other antiviral medicines can be taken in several ways:

- by mouth
- through a vein
- as an eye injection
- through an implant in the eye that delivers medication over time.

Often your ophthalmologist will need to perform laser surgery. This will strengthen the retina where CMV damage has occurred.

Although treatments are available, you cannot get back vision lost because of CMV retinitis. Even with treatment, the disease may still progress. Recurrence of CMV retinitis is common, so regular checkups with an ophthalmologist are important.

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Summary

Cytomegalovirus retinitis (CMV retinitis) is a serious viral eye infection of the retina. It is most often found in people with weakened immune systems.

The earliest symptoms are floaters with a shadow appearing in your side vision as the disease worsens. Ophthalmologists need to check people with compromised immune systems for the disease.

Strengthening your immune system is an important part of treating CMV retinitis. People with HIV or AIDS often improve if they are on highly active antiretroviral therapy (HAART). There are also specific CMV retinitis treatments. These include antiviral medicines and laser surgery.

Although treatments are available, you cannot get back vision lost because of CMV retinitis. Even with treatment, the disease may still progress.

If you have any questions about your eyes or your vision, speak with your ophthalmologist. He or she is committed to protecting your sight.

Get more information about cytomegalovirus retinitis from EyeSmart—provided by the American Academy of Ophthalmology—at **aao.org/cmvr-link**.

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