

Sight problems

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Most people do not experience any HIV-related problems affecting their sight and the use of HIV treatment will prevent the severe damage to the immune system that can lead to sight problems.

However, a proportion of people with very weak immune systems develop serious eye diseases that may lead to blindness if not treated promptly.

The most serious eye disease is caused by cytomegalovirus (CMV). If your CD4 count is or has been below 50, CMV may cause retinitis – damage to the light-sensitive lining of the eye called the retina. Other infections that can affect the eye include varicella zoster virus (VZV), herpes simplex virus (HSV), toxoplasmosis and syphilis.

Symptoms of eye diseases

Early symptoms of CMV retinitis can include:

- blurred vision
- new 'floaters' – tiny black specks that move around in your line of sight
- a blind spot
- flashes of bright light

If your CD4 count is or has been low you should take any of these symptoms seriously and consult your doctor, as the earlier CMV is treated, the less damage it is likely to do. If your CD4 count is higher the problem is very unlikely to be CMV, but you should still tell your doctor about your symptoms.

Uveitis (inflammation of an inner layer of the eye) causes redness and pain in the eye and blurring of vision. It can be caused by toxoplasmosis or by the anti-MAI drug rifabutin, especially if you are taking other drugs that boost rifabutin levels.

Checks and examinations

You can check your own eyesight for any distorted, blurred or obscured areas while reading a page of a newspaper. Alternatively, some doctors use a grid pattern, printed on card, instead of newsprint. If your vision (in one eye at a time) improves when you look through a pinhole, it is likely you need to see an optician about glasses. Eyesight can change temporarily after illness because of changes in the lens of the eye.

Your usual doctor can examine the back of your eye, although you may need to visit a specialist if problems are found. An instrument called an ophthalmoscope is used to look into the eye, and photographs of the retina may be taken. You may be given eye drops to dilate the pupil of the eye, making it easier for the doctor to see the interior.

The central part of the retina where images are focused is known as the macula. It may only take a small area of damage to this central area to cause a substantial loss of sight. Damage to the retina outside the macula may cause no loss of sight or only the loss of some sight out of the corner of your eyes, but it will usually spread if left untreated.

Treatment

The best way to prevent serious eye problems is to take HIV treatment to boost your immune system. HIV treatment should be started when your CD4 cell count falls to 350, well above the level where CMV becomes a real risk. However, some people only find out that they have HIV when they have a very low CD4 cell count. In these circumstances, HIV treatment can still increase CD4 cell count, protect against infections and lead to a longer and healthier life.

Sight loss due to CMV can't be corrected by glasses because the retina is permanently scarred. The aim of anti-CMV treatment is to try to prevent the damage to the retina from getting any worse. Drugs such as ganciclovir, foscarnet and cidofovir can slow down or prevent the CMV lesions from

spreading. The drugs can be taken in a number of different ways, including tablets, intravenous infusions, injections into the eye and eye implants.

After CMV retinitis has been stabilised, maintenance therapy using lower doses of the same drugs or oral ganciclovir capsules has to be continued indefinitely to stop it reactivating. If you have experienced sight loss your clinic can refer you to social services that can help you adjust.

If you have a very low CD4 count or a blood test finds signs of CMV infection, some clinics offer anti-CMV drugs to try to prevent CMV retinitis from developing.

If the sight problems are caused by a different infection the appropriate treatment will be used, such as anti-viral drugs for VZV, or antibiotics for toxoplasmosis. Uveitis is treated by stopping or reducing the dose of rifabutin, and the symptoms may be helped with anti-inflammatory treatments.

Looking after your eyes

Sight problems can affect anyone, whether or not they have HIV. Common problems include short- and long-sightedness. It's a good idea to go for regular eye tests so that any problems can be identified early. Most people are advised to go for an eye test every two years.