



Herpes Eye Disease

What is Herpes?

Herpes Simplex is a common virus affecting humans. There are two types of Herpes Simplex Viruses (HSV). HSV Type 1 causes cold sores and can affect the face and eyes. HSV Type 2 primarily causes genital infections.

What are the symptoms of HSV in the eye?

HSV can affect almost any part of the eye. A rash with vesicles (blisters) can form on the eyelids. This typically crusts over and heals in 3-7 days. When the surface of the eye itself is involved, the eye may develop redness, tearing, photophobia (light sensitivity), headache, and foreign body sensation (the feeling of something uncomfortable in the eye). In most cases, the infection is just in the top layer of the cornea (front clear dome shaped surface of the eye) and is called epithelial keratitis. If the deeper layers of the cornea are involved, this is more serious and is called stromal keratitis. Stromal keratitis is more likely to lead to scarring of the cornea. Less commonly, HSV can affect the inside of the eye and retina (inside lining of the eye), causing uveitis (inflammation of the eye) and high eye pressure, leading to vision loss.

Who gets HSV?

All age groups are affected by HSV, including newborns. An infection in newborns can involve the central nervous system and other organs and can be life threatening. A majority of people have been exposed to HSV at some time in their lives without being aware of it. Many people become infected with this virus during childhood. It is commonly passed on by close contact, such as kisses from a family member who has a cold sore. In many people the initial infection does not cause any symptoms. The virus usually settles in the nerves of the face and remains dormant (inactive) for life. In some patients, the virus can be reactivated and spread down the nerve to the face and eye and cause disease. It is not known why reactivation occurs in some people, although it may be related to illness, stress, or trauma.

How is HSV diagnosed?

The diagnosis of HSV eye disease is usually made by symptoms, history and physical examination of the eye. Definitive diagnosis can be made with tissue culture or additional blood work. The rash on the eyelids is easily seen and resembles a collection of fever blisters. The ophthalmologist will use a slit lamp microscope to examine the surface and inside of the eye. The conjunctiva of the eye may be red. The classic HSV lesion of the cornea are small, multiple branching dendrites which can be seen when a special dye called fluorescein is placed in the eye. Deeper levels of infection inside the eye can also be seen with other instruments such as direct and indirect ophthalmoscopes.



How is HSV eye disease treated?

Treatment depends on the part of the eye that is involved. If the eyelids only are involved, an antiviral or antibiotic topical ointment may be prescribed. If the eye itself is involved, topical antiviral drops given several times a day are used. Oral antiviral medication such as Acyclovir may also be prescribed to lessen the severity of the infection. If deeper internal structures are involved, topical steroid drops may be given as well. Sometimes inflammation can be associated with an increase in eye pressure (glaucoma). If so, this may require special drops to decrease eye pressure. An episode of ocular herpes often clears without any permanent problems. If not adequately treated, HSV eye infections can lead to scarring and a permanent decrease in vision, so timely follow up with an ophthalmologist is essential.

Can HSV eye disease be prevented?

The HSV virus is contagious, but only few people who come in contact with the virus will develop an ocular infection. Recurrences of the infection, due to a reactivation of the virus, are common, affecting up to 1/3 of patients. Patients may be given oral medication on a long term basis to prevent recurrences.

What is Herpes Zoster?

The Herpes Zoster virus (HZV) causes shingles and is the same virus that causes chicken pox. The virus remains dormant in the body after a chicken pox infection and can reactivate later. HZV infections involving the eye can appear very similar to an HSV infection. The rash is usually painful and develops on the forehead and around one eye in a geometric pattern. The highest risk group are elderly and people with problems of their immune system. HZV infections are less common in children.

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