



HERPES SIMPLEX (Cold Sores and Genital Herpes)

WHAT IS HERPES?

Herpes simplex refers to a group of viruses that infect humans. Like herpes zoster (shingles, see Fact Sheet 509), herpes simplex causes painful skin eruptions. Itching and tingling are usually the first signs, followed by a blister that breaks open. The infection stays dormant in nerve cells. This is called "latency." However, it can become active again with no warning. Herpes can be active without symptoms or visible signs.

Herpes simplex virus 1 (HSV1) is the common cause of cold sores (oral herpes) around the mouth. HSV2 normally causes genital herpes. However, through sexual activity, HSV1 can cause infections in the genital area, and HSV2 can infect the mouth area.

HSV is a very common disease. Approximately 45 million people in the US have HSV infection – about one in five people over the age of 12. The US Center for Disease Control estimates that there are 1 million new genital herpes infections each year. The rates of HSV infection have increased significantly in the past ten years or so. About 80% of people with HIV are also infected with genital herpes.

HSV2 infection is more common in women. It infects about one out of four women and about one out of five men. Genital HSV can cause potentially fatal infections in babies. If a woman has active genital herpes at delivery, a cesarean delivery is usually performed.

Repeat outbreaks of HSV may occur even in people with normal immune systems. Prolonged herpes outbreaks may be a sign of a weakened immune system. This includes people with HIV disease, especially those over 50 years old. Fortunately, prolonged outbreaks that fail to heal are rare except in people with HIV with very low CD4+ cell counts. Also, they have become very uncommon since the introduction of more effective antiretroviral treatments in the 1990s.

HSV AND HIV

HSV is not one of the infections that are part of the official diagnosis of AIDS. However, people infected with both HIV and HSV are likely to have more frequent

outbreaks of herpes. These outbreaks can be more serious and last longer than for people without HIV.

Herpes sores provide a way for HIV to get past the body's immune defenses and make it easier to get HIV infection. A recent study found that people with HSV had three times the risk of becoming infected with HIV as people without HSV. A recent study found that treating HSV can lead to a significant reduction in HIV viral load. However, another study found that treating genital herpes did not prevent new HIV infections.

People with both HIV and HSV also need to be very careful during outbreaks of HSV. Their HIV viral load (see Fact Sheet 125 on viral load) usually goes up, which can make it easier to transmit HIV to others.

On the other hand, treatment of HSV in people with both HIV and HSV can reduce HIV viral load. It might also reduce the risk of transmitting HIV to others.

HOW IS HSV TRANSMITTED?

HSV infections are passed from person to person by direct contact with an infected area. **You don't have to have an open HSV sore to spread the infection!**

Also, most people with HSV don't know that they are infected and aren't aware that they could be spreading it. In fact, in the US, only about 9% of people with HSV2 infection knew that they had it.

HOW IS HERPES TREATED?

The standard treatment for HSV is the drug acyclovir, given orally (in pill form) from two to five times a day. Another form of acyclovir is valacyclovir. It can be taken just two or three times a day, but it is much more expensive than acyclovir. Famciclovir is another drug used to treat HSV. In 2011 there were several reports that using acyclovir or valacyclovir reduced HIV viral load and slowed disease progression.

These drugs do not cure HSV infections. However, they can make the outbreaks shorter and less severe. Doctors may prescribe "maintenance" therapy – daily anti-herpes medications – for people with HIV who have had repeated outbreaks.

Maintenance therapy will prevent most outbreaks. It also significantly decreases the number of days each month when HSV can be detected on the skin or mucous membranes, even when there are no symptoms.

CAN HERPES BE PREVENTED?

It is difficult to prevent the spread of HSV. Partly this is because most infected people don't know that they carry HSV and can spread it. Even people who know they are infected with HSV may not realize they can transmit the infection even without an open herpes sore.

Condoms can reduce the rate of HSV transmission. However, they cannot prevent it. HSV infections can be transmitted to and from a larger genital area, such as that area covered by "boxer shorts" – and also around the mouth. If people with herpes take valacyclovir every day, they can reduce the risk of transmitting herpes to others. Once-daily valacyclovir is approved for people without HIV who have up to 9 outbreaks a year. However, once-daily therapy is less effective in people with HIV and others with very frequent episodes.

Drug companies are working on vaccines to prevent HSV. One vaccine showed good results against HSV2 in women, but not in men. No vaccines have been approved yet to prevent HSV infection, but research is ongoing in this area.

THE BOTTOM LINE

Herpes simplex is a viral infection that can cause genital herpes or "cold sores" around the mouth. Most people infected with HSV don't know it. HSV is transmitted easily from person to person during sexual activity or other direct contact with a herpes infection site. Herpes can be transmitted even when there is no visible open sore.

There is no cure for herpes. It is a permanent infection. People with herpes have occasional outbreaks of painful blisters. When each outbreak ends, the infection becomes latent for a while. People with HIV have more frequent and more serious outbreaks of HSV.

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