



Sexually Transmitted Infections: A Guide to Genital Herpes

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An Introduction to the Disease...

Viruses are microorganisms which are much smaller than a normal sized bacterium. They can neither grow nor reproduce outside a living cell. Viruses invade living cells and dominate them like a bothersome woman in her daughter-in-law's house. They use the cell's chemical machinery to stay alive and replicate and can eventually go onto causing viremia. Virus can be categorized into two groups according to their means of replication- DNA viruses and RNA viruses. Under the umbrella of 'DNA viruses' is the *herpes simplex virus*, which is the virus responsible for causing the disease of our topic of discussion- Genital Herpes.

Genital Herpes is a sexually transmitted infection which comes about when the herpes simplex virus type two (2) finds its way into the skin or mucous membrane through microscopic breaks or cuts in the skin and/or mucous membrane.

Transmission...

Sexually Transmitted Infections can only be transmitted by direct person-to-person contact with an infected person, and this is the same for genital herpes. The herpes simplex virus causes genital herpes by entering the skin or mucous membranes through microscopic breaks in the skin and mucous membranes. This can be easily carried out when sexual contact of any type and form is made with an infected genital area.

The genital area can become infected when a person who has cold sores or herpes infection of the mouth makes oral contact with an uninfected person's genital area. Though it is more common to acquire this disease via sexual intercourse, it is still very possible to contract genital herpes by oral sex.

Signs???

Most people who are infected with genital herpes are not aware of their infection. According to demographics, 1 in 5 of infected in a population will have no symptoms, 3 in 5 will have mild symptoms that are likely to be mistaken for another disease condition of left undiagnosed, and 1 in 5 will have obvious symptoms which will be diagnosed by a doctor.

For the 1 in 5 whose symptoms will be obvious and can be correctly diagnosed, their symptoms will be characterized by painful blisters around the genital or rectal area at the onset of the infection. When these blisters break open, they will form ulcers which will take from 2 to 4 weeks to heal. A person may also experience flu-like symptoms which include fever, body aches, and swollen lymph nodes. Immediately prior to an outbreak, there may be an itching, burning, or tingling sensation of the skin around the genital area. Also, in some women, cervicitis may be the only indication of a genital herpes infection.

Diagnosis of this infection can be carried out through laboratory tests, such as viral culture and nucleic acid amplification tests to detect the genetic material of the virus, and immunologic tests to identify antibodies to genital herpes virus, in the body fluid.

Treatment

Genital Herpes is a lifelong infection. Once a person has been infected with the virus, the infection will persist throughout the individual's life, with the potential for recurrent outbreaks.

The average rate of viral recurrence is four to five times in the first two years after being infected. However, over time, it tends to become less active and less frequent. With each outbreak it becomes less severe as time goes on. But don't be dismayed if you have this

infection, there are antivirals that can be used to reduce the severity and frequency of outbreaks (virus-suppressing therapy) and to manage the symptoms (especially for the rare extreme cases). These oral antivirals are acyclovir, famciclovir and valacyclovir.

Prevention is better than Cure

Herpes infection can be spread both during an outbreak and by infected people, even when there is no outbreak of the condition, so prevention of this disease can be difficult. While condoms may help prevent the spread of genital herpes during sexual activity, the infection can also be spread from skin contact in areas not covered by the condom, or during oral to genital contact. So the best preventive measure for a sexually transmitted infection such as Genital Herpes as always, is sexual abstinence.

Couch Conversations: Doctor to Patient

Patient: Doctor, I'm pregnant... and I have herpes!

Doctor: Did you contract it before or after your pregnancy.

Patient: I contracted it before my pregnancy, but why'd you ask?

Doctor: Because genital herpes can cause problems during a pregnancy. These complications can be more serious depending on whether you already had genital herpes, or you developed it for the first time while you were pregnant."

Patient: Okay?

Doctor: but you don't need to worry, the risk of infecting your baby is very low.

Patient: How do you know that?

Doctor: During the last few months of your pregnancy, you will pass all the protective antibodies to your baby. These antibodies will protect

your baby during birth and for several months after delivery as a measure of passive immunity. So even if you have recurrent episodes of genital herpes throughout your pregnancy, your baby will not be at increased risk of infection. However, healthy mommy, healthy baby, so you may need to take acyclovir continuously from your 36th week of pregnancy till the baby is born to reduce the severity of your symptoms. But...

Patient: But what, doctor?

Doctor: If you have genital blisters or ulcers at the time of the natural birth, the chance of passing the infection on to your baby will rise to three in a hundred. Having a C-Section will easily remedy this.

Patient: Okay, I'll be careful, doctor. What if I had contracted the virus in my first or second trimester, what then would've happened to my baby?

Doctor: You would've been at risk of suffering a miscarriage. And there would also have been an increased risk of passing the virus on to your baby. And if it was in your third trimester, there would have been a higher risk of passing the virus to your baby. As you would not have had time to develop the protective antibodies needed to pass to your baby. But don't worry, we're here to help you through this pregnancy.

Appendix of Definitions

- **Sexually Transmitted Infections**- Infections that are passed from one person to another during **sexual contact**.
- **Viremia**- The presence of a virus in the blood.
- **Cervicitis**- Inflammation of the cervix.
- **Antivirals**- They are a class of medication used specifically for treating viral infections.

- **Antibodies**- (also known as immunoglobulins), they are proteins produced by the body's immune system when it detects harmful substances, called antigens.
- **C-Section**- A caesarean section is an operation to deliver a baby. It involves making a cut in the front wall of a woman's tummy (abdomen) and womb.

References

- <http://www.medicinenet.com/script/main/art.asp?articlekey=17664>
- <http://www.medicinenet.com/script/main/art.asp?articlekey=5997>
- <http://www.herpes.org.uk/>
- <http://www.nhs.uk/conditions/Genital-herpes/Pages/Introduction.aspx>
- <http://www.nhs.uk/Conditions/Genital-herpes/Pages/Complications.aspx>