

Genital Herpes: Pathophysiology, Diagnosis and Treatment Methods

Mubashar Aziz*

Department of Pathology, Bahauddin Zakariya University, Multan, Pakistan

*Corresponding author: Mubashar Aziz, Department of Pathology, Bahauddin Zakariya University, Multan, Pakistan; E-mail: maubashar@aziz.edu.pk

Received: 23-Nov-2022, Manuscript No. JIDT-22-85096; **Editor assigned:** 28-Nov-2022, Pre QC No. JIDT-22-85096 (PQ); **Reviewed:** 12-Dec-2022, QC No. JIDT-22-85096; **Revised:** 19-Dec-2022, Manuscript No. JIDT-22-85096 (R); **Published:** 26-Dec-2022, DOI:10.4173/2332-0877.22.S6.004.

Citation: Aziz M (2022) Genital Herpes: Pathophysiology, Diagnosis and Treatment Methods. J infect Dis Ther S6:004.

Copyright: © 2022 Aziz M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Description

Genital herpes is a sexually transmitted disease caused by Herpes Simplex Virus type-1 (HSV-1) and Herpes Simplex Virus type 2 (HSV-2). The herpes simplex virus spreads from one person to another through direct contact. Touching a cold sore can easily transmit the herpes simplex virus. Primary herpes is usually most severe and begins after an incubation period of 4-6 days, but can last 1-26 days after exposure. Symptoms include pain, inflammation, and erythema followed by erythema-based clear vesicles. The clear liquid then forms a pustule. Healing takes place over 1 to 6 weeks. After primary infection, HSV has the unique ability to migrate up peripheral sensory nerves into dorsal root ganglia and remain dormant until reactivated. It is unclear how viral reactivation is triggered, but there is clinical correlation with many different stimuli. These common viral diseases are transmitted through direct contact. HSV can be spread to other people when they have direct contact with already infected person. Immune system plays an important role in the controlling the severity of disease. Immunodeficiency people are at increased risk of complications. A study showed that 72% of those tested for antibodies to HSV-2 infection doesn't have any symptoms. HSV has been isolated from almost all visceral and mucosal sites. A clinical manifestation depends up on anatomical location, age and immune status of the host, and viral serotype.

Primary infection causes serious complications than secondary infection; reactivation of latent infection can lead to frequent clinical manifestations. Oro-facial infections (gingivostomatitis and pharyngitis) are the most common early clinical manifestations of HSV-1 infection. Lesions on the edges of the lips (herpes labialis) are most common manifestation of latent infection. The clinical aspects of primary genital infections are clinically similar to HSV-1 or HSV-2, although relapses are more common with HSV-2. Complications include aseptic meningitis, transverse myelitis, and sacral radiculopathy. Extragenital lesions can occur during the course of primary infection of the genitals. HSV can cause various eye infections such as keratitis, conjunctivitis, and retinitis. Herpes

simplex encephalitis is the most commonly identified cause of acute sporadic viral encephalitis in the United States. Magnetic resonance imaging is used to diagnose abnormalities. Esophagitis and lung infections can be caused by HSV and are most commonly seen in immunodeficiency patients. Neonatal infection can occur through contact with secretions from infected mother.

Genital herpes cannot be cured. However, daily use of antiviral drugs can prevent or shorten outbreaks. Antiviral drugs can also reduce the chance of infecting others.

Genital herpes is more common in women than in men. However, it spreads more easily from men to women. Persistent infections with herpes simplex virus (HSV) and other brain infections are consistently associated with cognitive impairment. These infections can also interfere with sleep. Sleep disturbances may explain cognitive impairment. Herpes viruses cause Burkett's lymphoma in humans and also nasopharyngeal cancer in humans. In humans, the herpes simplex virus is commonly found in cervical and vaginal sores in women and genitalia in men (estimated in 15% of men over the age of 15). The symptoms of genital herpes often disappear and may reoccur. Although herpes can be painful, it does not usually cause serious health problems like other sexually transmitted infections. Without treatment, sores may persist. But in some patients sores will disappear naturally after some period of time.

Diagnosis can be done by detection of HSV- Deoxyribonucleic acid (DNA) by polymerase chain reaction assay in lesion debris, fluid, or tissue. Virus isolation can also be performed in tissue culture, but this is 3-4 times less sensitive than DNA molecular techniques. Clinical methods are also used to test the diagnosis of HSV infection. Acyclovir, valacyclovir, or famciclovir are used to treat mucocutaneous and visceral infections. People with frequent infections can be treated with suppressive therapy. Herpes simplex encephalitis is treated with high-dose acyclovir-10 mg/kg for every 8 hours (14 to 21 days). Acyclovir-resistant HSV strains can be treated with foscarnet or cidofovir.