Aids hiv

Health & Medicine, Disease



Acquired Immune Deficiency Syndrome (AIDS) is the progression of the Human Immunodeficiency Virus (HIV). AIDS is the final stage of the development of HIV. Without receiving treatment, an HIV infected person usually develops AIDS within ten years (Advert. org, 2007). In order to understand AIDS, you must understand where it comes from: HIV.

HIV is a virus, transmitted from one person who is infected to another person who is not infected. HIV attacks the immune system and kills a specific system cell called a CD4 lymphocyte (Advert. org, 2007). HIV is a rapid mutating virus, which helps it form being destroyed by the immune system's natural defenses.

According to the Center for Disease Control and Prevention (CDC), the first human case of HIV appeared in a male from the Democratic Republic of Congo in 1959. It is unknown exactly how he became infected (CDC. gov, 2007). The CDC stated (2007):

"For many years scientists theorized as to the origins of HIV and how it appeared in the human population, most believing that HIV originated in other primates.

Then in 1999, an international team of researchers reported that they had discovered the origins of HIV-1, the predominant strain of HIV in the developed world. A subspecies of chimpanzees native to west equatorial Africa had been identified as the original source of the virus.

The researchers believe that HIV-1 was introduced into the human population when hunters became exposed to infected blood" (CDC. gov, 2007).

In America, the first cases of AIDS occurred in the beginning of the 1980s.

There had been a few cases of homosexual men who developed opportunistic cancers or infections that did not respond to treatment attempts. AIDS was not yet named. AIDS was later identified in 1982.

There are four main stages that compose HIV infection: "primary infection, clinically asymptomatic stage, symptomatic HIV infection, and progression from HIV to AIDS" (Advert. org).

- Primary infection is similar to the flu, with symptoms that are characteristic of the flu virus. This stage only lasts a few weeks. During this stage, diagnosis is often missed (Advert. org, 2007)
- The clinically asymptomatic stage can have an average duration of ten years. There are usually no symptoms during this time. Antibody tests, however, can be positive for HIV.

The viral load test plays an important role in treatment. It measures the amount of HIV that enters the lymph nodes, where the virus tends to gravitate to (Advert. org, 2007).

- The symptomatic HIV infection stage shows more symptoms. This is because the immune system has been damaged quite a bit more. The symptoms can start out weak and become stronger as the immune system deteriorates further. During this time, many opportunistic infections and cancers appear (Advert. org, 2007).
- The final stage is the progression from HIV to AIDS. A person with HIV will be diagnosed with AIDS when they develop a low count of T helper cells.

They may also be diagnosed with AIDS if they have several opportunistic infections or cancers (Advert. org).

The symptoms of AIDS can vary. Most symptoms are caused by infections. Many are similar to the flu virus, such as fever, chills, and weakness. Major pulmonary illnesses that can occur are pneumocystis pneumonia and tuberculosis.

Major gastrointestinal illnesses that can occur are esophagitis and chronic diarrhea. Major neurological illnesses that can occur are toxoplasmosis, which infects the brain, eyes, or lungs, progressive multifocal leukoencephalopathy (PML), which causes nerve impulse impairment, AIDSdementiacomplex (ADC), and cryptoccal meningitis, which can be fatal if not treated (Wikipedia Online Encyclopedia, 2007).

Major opportunistic cancers occur in people with HIV, and almost always signal progression to AIDS. The following malignant cancers can lead to an AIDS diagnosis:

- Kaposi's sarcoma the most common type of tumor found in HIV+ people; affects the skin, mouth, lungs, and gastrointestinal tract
- B-cell lymphomas the presence of these cancers almost guarantees
 a person has progressed to AIDS
- · Cervical cancer In women with HIV, this cancer is caused by the human papilloma virus (HPV)

With a weakened immune system, HIV+ people can also develop a large amount of infections that can be bacterial, fungal, parasitic, or viral in nature. The following are descriptions of some of the possibilities, provided by MayoClinic. org (2006):