

AIDS

AIDS (Acquired immune deficiency syndrome) derived from a retrovirus-human immunodeficiency virus (human immunodeficiency virus), Leading to the destruction of the immune system, gradually become the target of many opportunistic diseases, and then contribute to a variety of clinical symptoms. HIV is a fragile RNA virus that, if exposed to the air, can die in seconds to minutes, depending on the amount of virus. The nature of HIV is particularly fragile and inaccessible to the air. HIV infection is mostly transmitted in closed environments such as blood vessels, transfusion, shared syringes, and the environment of the vagina or anorectum (such as condomless, anal sex) Infected through blood, semen, vaginal fluid, breast milk, etc., excluding saliva, sweat, urine or other body fluids.(1) Under normal circumstances, kissing does not cause HIV infection. There is a fundamental difference between AIDS and HIV infection. After being infected with HIV, or in the incubation period before onset, HIV patients are HIV carriers. The only symptoms after the onset of the disease are called AIDS.

As the AIDS virus enters the body, it will soon enter the acute infection period. The virus multiplies rapidly, the amount of virus in the blood can reach millions, and the number of CD4 + cells will also decrease significantly. Subsequently, CD8 + cells become active, killing the infected cells, and the immune system began to produce antibodies against the AIDS virus. The activity of CD8 + cells is considered to be one of the factors controlling virus levels. If they respond strongly, they can delay the course of the disease, but they cannot clear all viruses. After the CD8 + cell activity gradually weakened and disappeared, the level of CD4 + cells also recovered to about 800 per microliter (normal value was about 1200). (2)

Common symptoms include fever, lymphadenopathy, pharyngitis, rash, muscle pain, fatigue, mouth ulcers, and may also include headache, nausea, vomiting, diarrhea, liver / splenomegaly, weight loss, thrush, neurological disease, etc. The specific symptoms vary from case to case, and it is possible that each symptom will occur. The duration of these symptoms averages about 28 days, usually at least one week. Because these symptoms are not specific, they are often not considered a sign of HIV infection. Doctors may even misdiagnose patients with similar symptoms when they see a doctor, and other more common infectious diseases. Therefore, these symptoms cannot be used as a basis for the diagnosis of HIV infection. But you still need to be careful when you encounter these symptoms. Because patients have high levels of virus in their blood, they are very contagious.

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Highly active antiretroviral therapy (HAART), commonly known as "cocktail therapy" is a combination of at least three anti-HIV drugs to effectively control the plasma viral load of HIV-infected patients and increase The number of CD4 lymphocytes significantly reduces the risk of opportunistic infections, tumors, and death associated with HIV infection in patients, and reduces HIV transmission. Generally, two types of nucleoside reverse-transcriptase inhibitors (NRTIs) are used as the backbone of treatment, and then non-nucleoside reverse-transcriptase inhibitors (NNRTIs) and protease inhibitors are used. (Protease inhibitors (PI) or other drugs with new antiviral mechanisms, such as fusion inhibitor (FI), integrase inhibitor (II), and CCR5 antagonist), choose a drug Matching to form a combination of anti-AIDS drugs. (3)

"Cocktail therapy" has a considerable effect on inhibiting the reproduction of HIV in the human body. Most patients who take the drug regularly cannot detect the amount of virus in the blood, which not only reduces the chance of infection, but also increases the number of CD4 lymphocytes. High, also greatly reduces the chance of patients with opportunistic infections and tumors and the risk of death, but this is not the same as cure, because the instrument itself has its sensitivity limitations. Furthermore, the virus may still exist In lymph nodes, macrophages, central nervous system or other tissues and cells. Therefore, there is still no way to cure HIV infection in the current treatment method. The infected person must take patience and continuous medication to control the disease. Irregular medication will lead to resistance of the HIV virus, which will make treatment difficult in the future. In addition, maintaining safe sex is an important key to preventing repeated infections with drug-resistant viruses. (4)

As a Dental hygienist, we should have observed possible oral lesions and check medical history to screen possible AIDS patient and report the dentist regarding patient's condition and refer patient to proper health care facility. Although, AIDS can not be cured entirely, however, we can prevent it and stop it from spreading.

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