

## **HIV virus**

*Morad Kata, E. N. Luchko, O. V. Filiptsova*

*National University of Pharmacy,*

*Kharkiv, Ukraine*

philiptsova@yahoo.com

Human immunodeficiency viruses (HIV) is the virus that causes AIDS, which is the most advanced stage of HIV infection, the human immunodeficiency viruses (HIV) are divided into two species of Lentivirus (HIV-1/HIV2) Both types are transmitted from human to another through direct contact with HIV-infected body fluids, such as blood, semen, and vaginal fluids, or from a mother who has HIV and she transmit this virus to her child during pregnancy, or breastfeeding (through breast milk). While the virus is not active it will remain in the body secretly, it will stay in somewhere in the body and will be hardly discovered. the patient can't notice that he is having this virus because it doesn't have a specific body reaction that show it presence, from the common body reactions are fever, sneezing, temperature, coughing and headache like all other viruses and that will make it harder to the patient to understand if he is having this virus or not. And after 7 years approximately the HIV will develop from inactive virus to active virus which will be called "acquired immunodeficiency syndrome" (AIDS) is a condition in humans in which progressive failure of the immune system, and the patient may live from 9-11 years. The virus will cause low level of CD4+ cells (cluster of differentiation 4) which are part of the immune system cells, the will be chased and killed by CD8+ (cytotoxic lymphocytes), when CD4+ decline below a critical level, cell mediated immunity is lost and the body will become progressively more susceptible to opportunistic infections, leading to the development of AIDS. While the patient is sick of AIDS he will start having some signals that will identify him as a person who hold the virus, this signals are yellow and solid nails, yellow skin in the most part of the body, yellow or white tongue, the body will get older fastly. AIDS virus was first seen in laboratory in USA in 1981 by the center for disease control and prevention, found in a gay man patient that had also skin cancer, but this centers believe that the virus source first came from Norway.

At start the virus was called:"lymphadenopathy" and it was very comun virus in the gay community, heroin users, hemophiliacs (disorder of the blood in the body), and Haitians.

The virus was also called (GRID) gay related immune deficiency. In some words once the AIDS is active a lot of small cells such as the bacteria that will stay in the blood and start moving in the whole body and it is impossible to control them. The earlier the HIV virus is having medical treatment is better for the patient and make his percentages increase either to stop the virus development or to heal completely. Today AIDS is rare, the high success of the HIV vaccination and the treatment itself is so successful that there is less AIDS infected people, and make the treatment so special that it can end the virus before it get activated and attack the whole body and get uncontrolled.