

AN EXAMINATION ON HIV AIDS: A SUBSTANTIAL THREAT TO MANKIND

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ABSTRACT

HIV/AIDS has long been one of the world's most widespread illnesses. HIV infection and AIDS are caused by the human immunodeficiency virus (HIV), which is a lent virus. AIDS is a human disease in which the immune system gradually fails, allowing life-threatening infections and malignancies to flourish. HIV infection is spread via the transmission of blood, sperm, vaginal fluid, and breast milk. HIV is found in various body fluids as free virus particles as well as virus inside infected immune cells. HIV infects important immune cells such as helper CD4 T cells and macrophages. Through a variety of processes, including pyro ptosis of contaminated T cells, HIV infection causes low numbers of T cells. The manifestations of AIDS are mainly caused by diseases that do not occur in people who have a sound immune system. The majority of these infection caused by bacteria, viruses, fungi, and parasites that are usually regulated by immune system components that HIV destroys. When a couple with one infected partner uses condoms on a regular basis, the risk of HIV infection is less than 1% per year. Female condoms may offer an equal degree of protection, according to some research.

KEYWORDS: AIDS, HIV, HIV Infection, Highly Active Antiretroviral Therapy (HAART), Antiretroviral Therapy (ART).

REFERENCES:

1. Nasrullah M. et al. Comparison of alternative interpretive criteria for the HIV-1 Western blot and results of the Multispot HIV-1/HIV-2 Rapid Test for classifying HIV-1 and HIV-2 infections. J. Clin. Virol., 2011 Dec;52 Suppl 1:S23-7.doi: 10.1016/j.jcv.2011.09.020.
 2. Palmer S, Josefsson L, Coffin JM. HIV reservoirs and the possibility of a cure for HIV infection. 2011;270(6):550–560. doi: 10.1111/j.1365-2796.2011.02457.x.
 3. Sevilya Z. et al. Killing of latently HIV-infected CD4 T cells by autologous CD8 T cells is modulated by Nef. Front. Immunol., 2018, doi: 10.3389/fimmu.2018.02068.
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4. Douek DC. et al. HIV preferentially infects HIV-specific CD4+ T cells. *Nature*, 2002 May 2;417(6884):95-8. doi: 10.1038/417095a.
5. Vijayan KV, Karthigeyan KP, Tripathi SP, Hanna LE. Pathophysiology of CD4+ T-Cell depletion in HIV-1 and HIV-2 infections. *Frontiers in Immunology*. 2017;8:580. doi: 10.3389/fimmu.2017.00580.
6. Wejse C. et al. Impact of HIV-1, HIV-2, and HIV-1+2 dual infection on the outcome of tuberculosis. *Int. J. Infect. Dis.*, 2015 Mar;32:128-34. doi: 10.1016/j.ijid.2014.12.015.
7. Girum T, Wasie A, Worku A. Trend of HIV/AIDS for the last 26 years and predicting achievement of the 90-90-90 HIV prevention targets by 2020 in Ethiopia: A time series analysis. *BMC Infect. Dis.*, 2018;18: 320. doi: 10.1186/s12879-018-3214-6.
8. Kharsany ABM, Karim QA. HIV Infection and AIDS in Sub-Saharan Africa: Current Status, Challenges and Opportunities. *Open AIDS J.*, 2016, doi: 10.2174/1874613601610010034.
9. K. Hess et al., “Diagnoses of HIV Infection in the United States and Dependent Areas. *HIV Surveill. Rep.*, 2016 Apr 8;10:34-48.
10. Benu RRYP, Rao SHB, Simanchal P, Prasanna K. Predictors of Mortality among HIV Patients on HAART in an ART Centre – A Retrospective Study. *Int. J. Med. Public Heal.*, 2016, doi: 10.5530/ijmedph.2016.4.6.
11. Woodham AW. et al. Human Immunodeficiency Virus Immune Cell Receptors, Coreceptors, and Cofactors: Implications for Prevention and Treatment. *AIDS Patient Care STDS*, 2016 Jul;30(7):291-306. doi: 10.1089/apc.2016.0100.