

AIDS

Khade Anil dashrath

HSBPVT'S PARIKRAMA DIPLOMA IN PHARMACEUTICAL
SCIENCES, KASHTI.

Abstract -

HIV/AIDS has always been one of the most thoroughly global of diseases. The human immunodeficiency virus (HIV) is a lent virus that causes HIV infection and AIDS. AIDS is a condition in humans in which progressive failure of the immune system allows life-threatening infections and cancers to thrive. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells. HIV infects vital cells in the human immune system such as helper CD4 T cells, macrophages. HIV infection leads to low levels of T cells through a number of mechanisms, including pyroptosis of infected T cells. The symptoms of AIDS are primarily the result of conditions that do not normally develop in individuals with healthy immune systems. Most of these conditions are opportunistic infections caused by bacteria, viruses, fungi and parasites that are normally controlled by the elements of the immune system that HIV damages. When condoms are used consistently by a couple in which one person is infected, the rate of HIV infection is less than 1% per year. There is some evidence to suggest that female condoms may provide an equivalent level of protection.

Keywords -

AIDS, Transmission, Symptoms.

BIO-

Name- khade Anil dashrath

Profession- Diploma in Pharmacy

Introduction-

Chiefly infection can appear in various forms. In general doction would look for bodily signs that are associated with the disease This is not defective because, statistics shows different presentations of HIV ustection [1] There link between nutrition, a age and locomotors disorders in HIV infected persons, particulady whis ace above 45 yeand with body mass indes 225 kg/m², are suggesttol to limit physical activities. Those people are less likely to have locomotors disorders Alrican societies face social and medical challenge in aged people listag with HIV inlinction as they are dependent (2) HIV.infected individuah could now enjoy a near normal life

expectancy due In the many advances in the field of HIV medicine [3]Numeros Mudies on the biology, pathophysiology or therapy of HTVsociated malignancies are single-couter experiences with fewrandomized controlled trials. Hence, madti institutional collaboration is nuandatory. AIDS Malignancy Consortium (AMC) is a clinical trials group supported by the National Cancer Institute, specifically focused en performing dioical and laboratory studies in HIV/AIDS patients with cancer [4] Concera su HIV tufested patients extrnd beyoud medical and psychiatric complications. Many caregivers develop symptoms of depression and anticty leading them to burnout and also there was high level of depression in HIV patients. Hence every HIV patients attending the drone should aho be msigned thoroughly for depression [5] When there is no effective HIV vaccams, behavior change is the key to prevention effunts [6]. Social Health Insurance consultancy program delivered by nurse's support sease HIVpatients willingness to obtain it [?]

Significance of molecular changes during infection

In spite of the progress made in the implementation of polymeras shain reaction in Togo, access to Early Infant Diagnosis (EID) HIV remain to be viewed Implementation and accessibility seems be difficult, role of government sector and proper administrative and technical procedurs I help in cauty diagnosis infants.

Impact of gender and social behaviour

There differences in epidemiological and dusical charactenstics antong Mexican women that could have had an impad on their virological and immunological nespomes. Improving women's adherence treatment Mexico would need diminating obstacles to the national health care system and widespread health can ealth care services and implementing programs that take into account women's role as maternal caregivers. The author highlights the need to integrate social dements of health associated with gender inequality and social analysing treatmurs trespone (601position when Even though significant progress has been made in recent times. to fight against HIV/AIDS, several key affected populatines continue to struggle with high rates of HIV infection and lack of knowledge un HIV prevention and treatment programs Transgender women are one such grump, affected with high rates of HIV infection and extreme discrimination and violence. There is a crucial need and evalnate novel interventions that improve tailored for this helpless population. Structural intervention should be made in law and pobey [61] Large member of HIV postive men and women wished to have children and

reproductive status of HIV patients are not only affected by their HIV status but are also subject to different predictor factors [62].

Recent studies on HIV infection

A research initiative by amfAR's Countdown to a Cure for AIDS has targeted to develop the scientific basis for a cure by 2020. Which was launched in February 2014, the Countdown is planned to intensify amfAR's science-focused HIV research program through strategic investments of \$100 million over the next five years. Few recent research findings are mentioned in this review. When compared to NK cells neutrophils are six times better to kill HIV infected cells when antibodies were present. Neutrophil-mediated effector responses could be investigated in future HIV vaccines [71]. Transmission of HIV by dendritic cells might have essential implications for viral persistence in vivo in environments where residual replication could persist in the face of antiretroviral therapy [72]. Treatment with immune checkpoint inhibitors might have dual benefits in HIV infection in acting on the cancers frequently associated and also by helping to purge the HIV reservoirs that indefinitely persist despite antiretroviral therapy [73]. The role of statins in decreasing inflammation associated with HIV infection is being evaluated in a National Institutes of Health funded clinical trial. Inflammation is alleged to contribute to the persistent HIV reservoirs, the primary barrier to a cure [74].

Role of immune cells in diagnosis and treatment

Even though there are reports that reveal CD4 and CD8+ T-cells were generated from progenitor cells with the help of OP9-DL1. It was demonstrated for the first time that OP9-DL1 cells are capable to support the development and function of a diverse population of mature human thymocytes and also provide the required signals for infection with HIV. It was being clearly stated that co-culture of human thymocytes with OP9-DL1 offers a greater 11-7 response when compared to co-cultures with thymic epithelial cells. This reveals that they are an appropriate candidate for exogenous stimuli on thymocyte function [37]. Anti-retroviral therapy administration would be substantial in management of HIV. Specific biomarkers need to be identified for sustained suppression and development of drug resistance. Improvement of overall general health may help to decrease HIV transmission rates, CD4 quantification act as an alternative source and cost effective. test that could serve as additional tool in management of HIV infected patients [38]. Multiple HIV proteins enhance CXCL10 production along with other inflammatory

Complications in infants

Health professionals are responsible for diagnosis of disorders associated with HIV infection and follow-up of HIV-infected paediatric patients, it is critical to achieve early detection and subsequently being capable of improving the quality of life of both patients and their families (51) Occurrence of HIV in children is high in the Eastern India, maximum was observed as maternal to child transmission [52]) HIV positive children should have a monotonous neuropsychological assessment at intervals as part of their standard care to detect children with cognitive impairment on time [53]

The World Health Organization has framed inclusive methods to prevent HIV infection in infants and young children HIV transmission to infants and young children could be prevented by avoiding infection. In women, prevention at unplanned pregnancies among HIV infected women, providing care and support. Specific medication to reduce mother to infant HIV transmission which include antiretroviral drug use, safer delivery practices and infant-feeding counselling and support [54]. To focus on paediatric HIV infection,

Conclusion

HIV vaccine exploration over the last two decades has been a tale of early courage, worldwide convention now is more concerned with how to progress scientific research to develop at least partially defensive vaccine becomes a possibility. On the other hand, Education team to be utmost in effect to decrease transmission of infection. There is need for teamwork between the gap in respect to health care. Role of government sector and proper administrative and technical procedures are much more important in this aspect. Collaborative research on diseases associated with HIV infection, role of immune cells in diagnosis and treatment, significance of molecular changes during infection, complications in infants, impact of gender of gender and social behaviour and diagnosis of disorders associated with HIV infection might help in

HIV-infected individuals could now enjoy a near normal life.

Reference

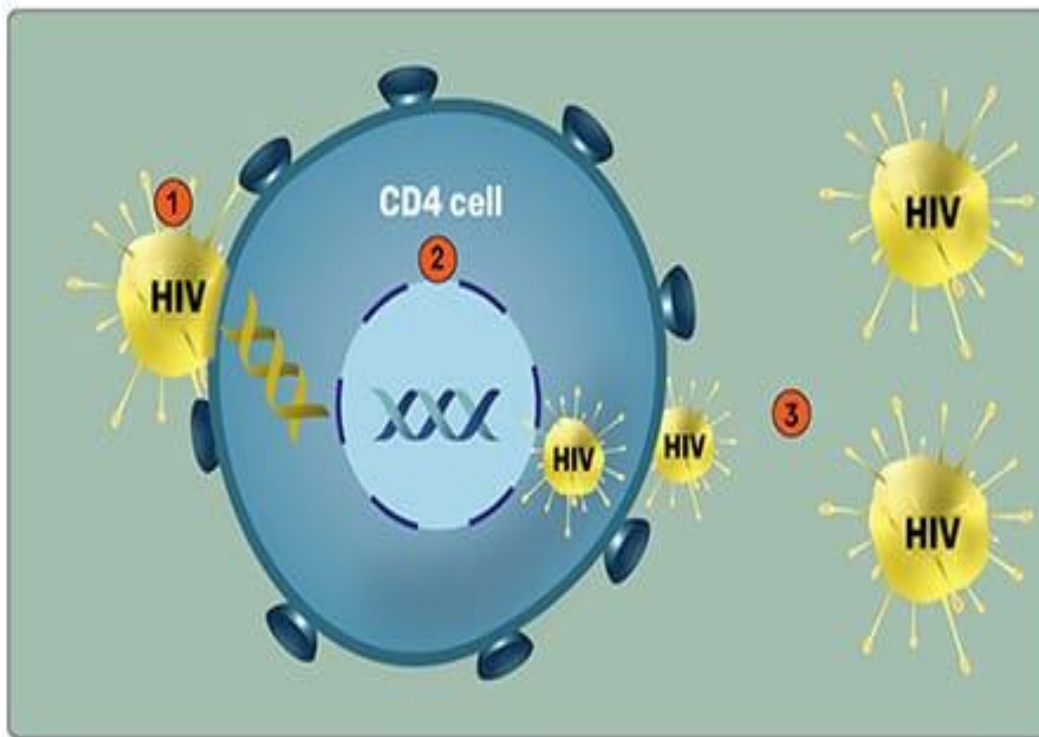
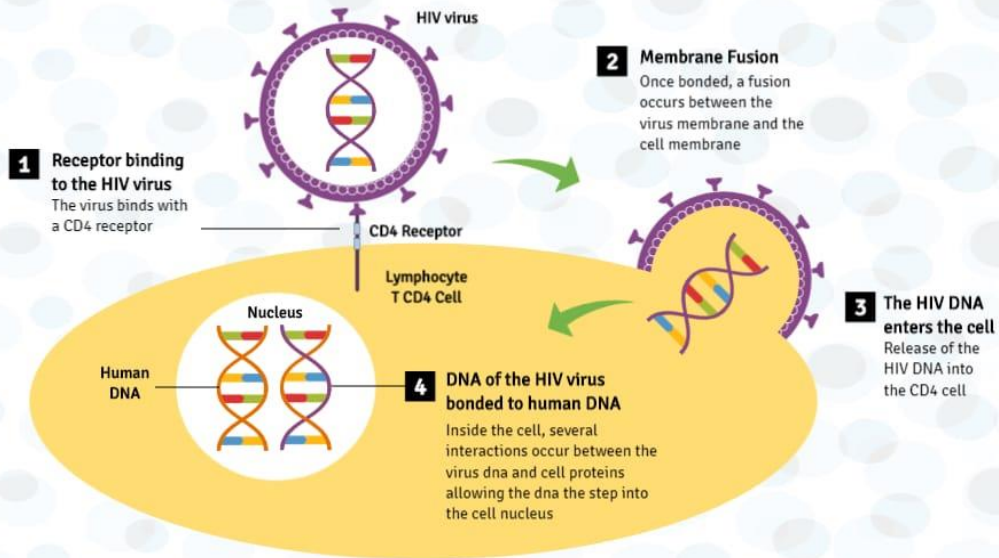
1. Arena NM, Gluck E, Guvas P (2017) Acute psychosis: An atypical presentation of advanced HIV infection. *JADRS* 12.

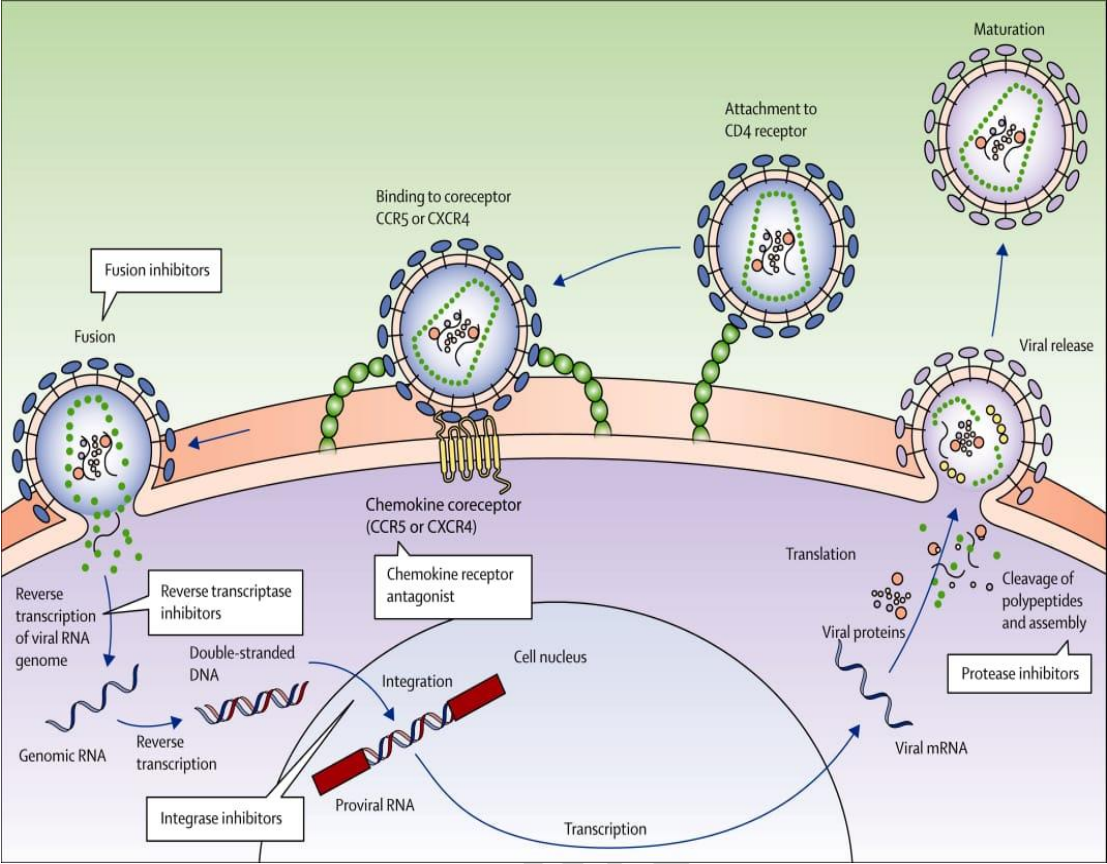
2. Tamon AK, Dal 2, Lensus S, Hangaran Peres Ket al (2017) Age of WPHV infection and locomotor disorders: Experience of the factions and

3. Hannah Wil, Dulz F (2013) Contemporary management of patients with HIV infection. *ADS Cin Remery*

CAPCDR 7th CONFERENCE 2023

HIV virus infecting a T CD4 cell





CAPCDR 7th COM