Brief Report

Key Points in HIV Infection Pathology

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Key Points in HIV Infection Pathology

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Abstract

HIV infection is a nowadays pathology that affect persons from all of the world. Pathogenesis of the HIV-infection and cancer is a great problem, with a complexity directions in research. More important in HIV infection to patients, is also to take into consideration others things, such as prevention, diagnosis, monitoring, treatment, including control measures. This previously mentioned, should be supported by statistical studies that report on restricted or extended geographical areas, to the level of social class and age. In our written text we try to describe from our opinion, strategies in HIV, infection, status knowing as a social and as a healthcare problem.

Keywords: HIV; infection; diagnosis; treatment; monitoring

1. Introduction

Actually, HIV infection is a pathology that affect persons from all of the world. This disease, is relatively stigmatisant. So patient must be evaluate and monitorised periodically. Immune system affecting must be evaluate periodically using blood tests and cellular biomarkers evaluation, for prevention or for diagnosis of other developing diseases. Ill human subjects, diagnosed with HIV, are in continue exposure to malignancy, for example but for sure not only [1,2]. In order to establish the HIV infected patient and individual ill status, inflammatory biomarkers and them laboratory results, play a significant role in developing accompanying diseases [3–5]. More than, inflammatory biomarkers in patients diagnosed with HIV, are implied in cardiovascular and blood vessels diseases [6,7]. In this direction, angiogenesis is considered as a dysregulated status in HIV- infected persons [8]. In studies is important to find the permeability level of a blood vessel [9]. A structural analyse from each blood vessel compound is important to find and to show. In vascular endothelial cells developing, research studies could find receptors such as Tie-1 and Tie-2, which are responsible for vascular maturation and angiogenesis [10]. Also best to talk a little bit about angiopoietin-1 via Tie-2 knowing that signaling facilitates endothelial development and also good to mention about Ang-2 that acts as an Ang-1 antagonist by binding to the Tie-2 receptor [11]. From another perspective, we can mention that HER family members also interact with non-HER family members [12,13]. Human papillomaviruses (HPV) are a group of host-specific DNA viruses with 15 high-risk or oncogenic subtypes with bad implications in developing neoplasia, to patients diagnosed with HIV infection [14,15]. Results of studies show as that HPV infections are greatest causes of cervical cancer and more than, contribute for developing other neoplasic cells in another locations from the human body. Actually laboratory techniques, such as immunohistochemistry, is consider proper for diagnosis [16] (Figure 1).

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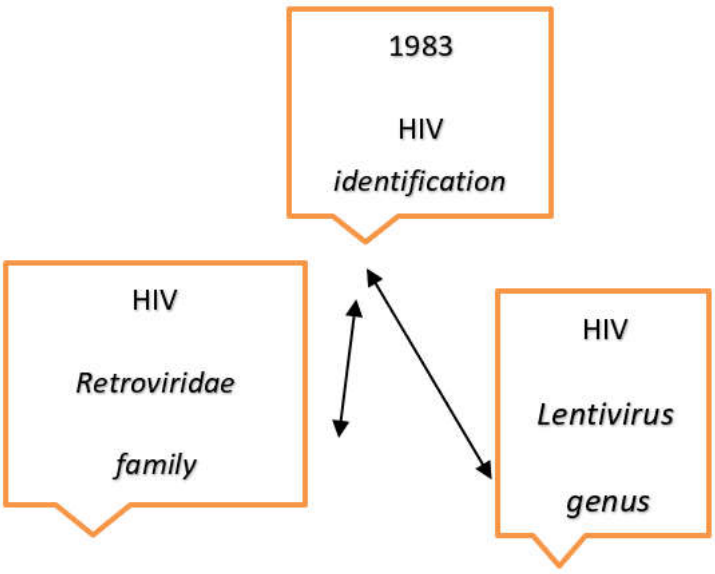

Figure 1. HIV informations.

2. Psychological, Medical, and Ecological Perspectives Influencing the Behavior of the Patient Diagnosed with HIV

From a psychological, medical, and ecological perspective, behavior is seen as affecting and being affected by 5 influencing factors: intrapersonal or individual factors, interpersonal factors, institutional, organizational factors, community factors and public policies. More than, also from this perspective, a model with three influencing factors can be achieved: individual, interpersonal and community by combining the last three categories of factors. The result is a third category related to broad social structures united under the title of community factors [17]. This is an interesting field of study, in connection with psychologists. As a result from specialists studies in this direction, should be find possible future trends in HIV interprofessional abordations.

From another perspective, pathogenesis related to a possible connection between HIV-infection and cancer is also a currently problem in research.

A medical history to a patients diagnosed with HIV infection is important and include signs, and symptoms, knowing personal sexual status, but not only [18]. More than, a social history could be considered as a integrative part of a medical evaluation to a HIV infected patients [18]. Medical specialists must be carefully and able to monitor, tracking status to comorbidities and malignancy to HIV infected patients [19,20].

HIV is part in the Retroviridae family more specific *Lentivirus* genus [21].

There are known informations about two types of HIV, exactly HIV type 1 (HIV-1) and HIV type 2 (HIV-2) [22].

As we know, the US National Institutes of Health describe three stages of HIV infection. So there are acute HIV infection, chronic or asymptomatic HIV infection, and AIDS [23] (Figure 2).

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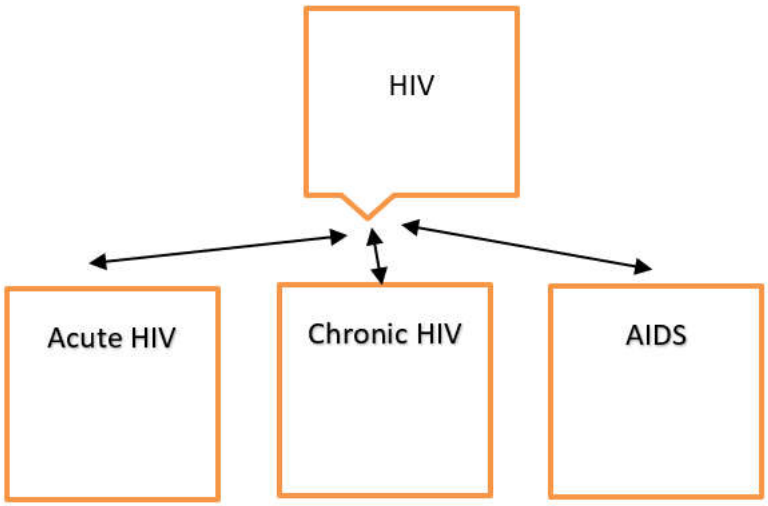

Figure 2. HIV Infection types.

3. HIV Management

Regarding the management of HIV / AIDS infection, the number of co-infections that change the evolution of the disease, as indicated from the growing number of studies, has increased; notably tuberculosis, which is previously mentioned. Related prevention methods in HIV diseases, concretely to infected patients, have been made theoretically, different types of methodologie with a possible application in practice. HIV prevention, HIV transmission and management of HIV/AIDS since the virus was discovered in the early 1980s. are in attention of many scientists in this field of research [24].

For HIV prevention, idea for finding and developing a proper vaccine, have largely failed. Actually in this field, research studies including, pre-exposure prophylaxis methods such as vaccines, together with treatment and cure, are in attention [25].

In intention to treat HIV infection to ill patients diagnosed with this viral disease, the developing antiretroviral therapy, with applicability in prevention and in treatment of HIV, is applicable with a great success [25]. From a specific perspective, we can mention that HIV infection contributes to developing comorbidities. Such diseases, include finally all organs and systems from the human body. For example we can mention, cardiovascular disease, bone disease, renal and hepatic disease.. The applicability of antiretroviral drugs is useful in inhibiting HIV replication [26]. HIV remains a major public health problem which need a well management in order to avoid developing other bad pathologies as neoplasia, that affect the ill status from each diagnosed HIV infected patient. Specific HIV programs, for example the Global Fund and the President's Emergency Plan for HIV Relief (PEPFAR) took attention knowing the result reffering the millions of lives saced with specific treatment. In this context, antiretroviral drugs play a significant role [27,28]. The future trends in of PEPFAR remains unclear. In HIV infection, antiretroviral therapy can reduce virus in the blood. So blood tests are able to detect level in this infection of the human body [29]. Clinical trials are used for studies in HIV [30].

4. Conclusions

Techniques for the laboratory diagnosis in HIV, are implied and conduct to a proper level reffering to the life quality, in patients diagnosed with HIV. The global target for 2030 is the elimination of AIDS as a public health problem. To help to meet this goal, it there are the necessary means to succeed in ending the HIV / AIDS epidemic. This is by identifying, treating, and educating the HIV-positive patient. However, the challenge is with reaching the groups where infection and

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transmission rates are highest. Both nationally and globally, one of the best solutions is to raise awareness of this public health problem is to reach out to different populations.

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