

An Update Research on HIV in Pregnancy

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Abstract

Worldwide prevalence of the human immunodeficiency virus infection exists, yet there is no known treatment or vaccination. The risk of maternal and perinatal morbidity and death increases for HIV-positive women who get pregnant or contract the virus while they are carrying a child, especially if the infection is not well managed. Additionally, there is a chance of vertical transmission to the fetus both throughout pregnancy and during nursing after delivery. To lessen the effects of HIV during pregnancy, appropriate care must be put in place, preferably beginning with preconception counselling and pregnancies planned when the viral load is at its lowest. A suitable combination of anti-retroviral must be used during pregnancy, and the viral load, cluster of differentiation cell counts, blood counts, liver function tests, and kidney function tests must all be closely monitored. Delivery preparation should not vary in women receiving cART with reduced viral loads. When a patient presents late or whose viral load is unknown or uncontrolled at birth, specific precautions must be taken to prevent vertical transmission.

Keywords: Human Immunodeficiency Virus (HIV); Combined Anti-Retroviral Therapy (Cart); Vertical Transmission; Pregnancy; Breast-Feeding Serodiscordant

Introduction

For mothers with HIV, breastfeeding is still a risk for infant infection and is discouraged in high-income nations; nevertheless, in low-income nations, exclusive breastfeeding is advised [1]. If nursing must take place, it is better to suppress the viral load and continue cART until weaning [2]. The care of serodiscordant couples' particular challenges should start with pregnancy planning [3]. Steps to prevent HIV transmission to HIV-negative partners and vertical transmission to newborns should be prioritised [4]. In 1983, the human immunodeficiency virus was identified as the causative agent of acquired immunodeficiency syndrome [5]. HIV infection has already been documented in every country on earth, making it a worldwide epidemic even though AIDS was originally identified in the United States in 1981, mostly among homosexuals [6]. In 2018, 1.7 million of the 37.9 million persons living with HIV/AIDS worldwide were children [7]. Worldwide, an estimated 1.7 million people contracted HIV for the first time [8]. In recent years, the coronavirus epidemic producing COVID 19 has completely eclipsed the awareness of HIV [9]. Like other coronavirus infections, COVID 19 is probably present and will eventually go away, with survivors going back to normal, healthy lives. On the other hand, HIV appears a person who contracts the virus will have to live with the repercussions of having it for the rest of their lives because there is currently no known treatment for it or vaccination to prevent it [10].

Discussion

The prevalence of HIV is among the greatest in Sub-Saharan Africa, where more than 60% of all new infections occur. Asia, Latin America, the Caribbean, Eastern Europe, and Central Asia are some areas that now have an elevated burden of diseases. In most high-income nations, the prevalence in the antenatal population varies, however in certain low-income countries; it may reach as high as 29%. However, these patterns appear to be reversing due to the worldwide response to HIV/AIDS. HIV infection during pregnancy affects both parties. The mother and child if untreated, necessitating appropriate prenatal, intrapartum, and postpartum treatment. Preventing mother-to-child transmission of the virus, preserving maternal health, and providing a safe and healthy delivery environment for both mother and child

are the key goals of treating HIV infection in pregnancy. Due to the fact that there is currently no effective treatment for HIV infection or vaccine, screening during pregnancy involves more than just a routine blood test. In HIC nations, the majority of women would be aware of their HIV status prior to conception, but others may discover it for the first time during pregnancy. For instance, in the UK, between since the diagnosis of HIV infection is associated with varying rates of unfavourable pregnancy outcomes, 85% of the deliveries of the pregnancies in HIV-positive women were to women who knew their HIV status prior to pregnancy. Around 50% of these women were also expecting their second or subsequent child.

Conclusion

Increased spontaneous miscarriages, stillbirths, perinatal death, intrauterine growth restriction, low birth weight, and chorioamnionitis are a few of the documented adverse consequences. HIV can have a negative impact on the frequency and progression of many infections during pregnancy due to immunosuppression, including genital herpes simplex, human papillomavirus, vulvovaginal candidiasis, bacterial vaginosis, syphilis, trichomonas vaginalis, cytomegalovirus, toxoplasmosis, hepatitis B and C, malaria, urinary tract infections, and Additionally, HIV-related opportunistic illnesses including pneumocystis jirovecii pneumonia and parasite infestations appear to be common during pregnancy in the puerperium. Pregnancy does not appear to have a negative impact on the development, survival, or course of HIV infection. Haemodilution is responsible for the decrease in CD4 cell count that occurs in pregnant HIV-positive women that resolves frequently in the postpartum period. During pregnancy, HIV RNA levels appear to be steady, despite some research pointing to an increase in viral load after delivery. HIV infection is an uncommon

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cause of maternal death in HIC nations due to the availability of specialised healthcare treatments, but it is a major cause of maternal morbidity and mortality in LIC countries, particularly in sub-Saharan Africa.

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Conflict of Interest

None

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