Editorial

Mother-to-child transmission of the HIV: old concepts, new perspectives?

I read very carefully the interesting article by Barcellos et al. on human immunodeficiency virus (HIV) vertical transmission in the postnatal period through breastfeeding. The authors explained in a very elucidating and detailed way the cases of postnatal infection, as well as the clinical and epidemiological aspects. In this regard, we could look into a number of questions about HIV diagnosis, HIV pre and post-exposure prophylaxis, and antiretroviral adherence in women living with HIV[1].

HIV postnatal transmission through breastfeeding has been described since the 1980s[2], and 30 years later we are still seeking greater beliefs for this scenario. How to deal with this problem? Although we do not have definitive solutions, we can rehearse some answers and at least aim for satisfactory results after 30 years of study.

The high rates of HIV infection in the population, as described by Barcellos et al.[1], and especially in Brazilian women, highlight the need for early diagnosis and management of patients with HIV infection and those at risk of acquisition[3]. In this scenario, the pregnant/puerperal partner should actively participate during pre and post natal care, especially with HIV testing in conjunction with the patient. A recent study conducted in Porto Alegre, Rio Grande do Sul, Brazil, investigated partners of pregnant women with HIV negative results in the antenatal period. From 663 partners who accepted HIV testing, four (0.6%) were diagnosed for HIV infection[4], enhance the importance of partner's testing for the prevention of maternal seroconversion, especially in the postnatal period. Thus, early HIV identification makes it possible to reduce the risk of maternal-fetal transmission with the initiation of antiretroviral treatment, use of intrapartum zidovudine, cesarean section, and orientation not to breastfeed the child[5].

The present study reports that more than two-thirds of mothers were sexually exposed as a way of HIV infection[1]. Thus, interventions that reduce the risk of maternal primary infection would be decisive for the prevention of infection in the late breastfeeding baby. Combined prevention is a strategy that makes use of different approaches to HIV transmission prevention, with structural, behavioral and biomedical interventions. There were two prominent measures in recent years: pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) for HIV[6]. Both strategies have been shown to be safe and available in the public health system. The use of antiretroviral drugs in the mentioned situations would benefit the mother and the infant, even though the child is under breastfeeding, since the studies, although limited in number, mostly show a positive impact for the infant of mother under active use of antiretroviral therapy. This measure would prevent maternal HIV infection through the use of PrEP or PEP when indicated[7].

Another aspect to be considered is the adherence to antiretrovirals by patients living with HIV. Vertical postnatal transmission of HIV depends on factors related to the mother and the infant, such as the mother's viral load. Hence reducing the HIV burden to undetectable levels is the most effective way to prevent the occurrence of new cases in newborns, indirectly from an HIV-positive partner, and directly when the mother is living with HIV[8]. In Brazil, it is estimated that adherence to antiretroviral treatment is around 75%[9]. Ensuring that these patients achieve therapeutic success through regular use of antiretrovirals should be a compromise between managers, patients and society[8].

Finally, the present article brings to light a neglected topic today: vertical HIV transmission in the postnatal period through breastfeeding. Recognizing patients at risk of primary infection and intervening with effective HIV education and prevention measures, such as the use of condoms, PrEP and PEP; testing mother and partners periodically for HIV; and stimulating adherence to antiretrovirals by patients living with HIV are determinants for modifying this adverse scenario in our country. We must intensify our efforts to ensure exclusive breastfeeding as a healthy and developmental reference for the mother-baby binomial, bringing security to all involved and favorable perspectives on their horizon.

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