UNC SCHOOL OF MEDICINE

UNC Protocol for Infant Feeding for Individuals with HIV

This protocol outlines factors for consideration in clinical care and management of breastfeeding dyad using current evidence and guidelines to inform patient-provider decision-making.

"Breastfeeding" describes feeding a child one's milk (either directly or with expressed milk). When counseling individuals with HIV about infant feeding, providers should use inclusive, affirming language around gender in healthcare settings. Some gender-diverse individuals may prefer "chestfeeding."

Summary of Recommendations: The following recommendations are based on the Perinatal HIV Clinical Guidelines on Infant Feeding for Individuals with HIV in the United States.[1]

People with HIV should receive evidence-based, patient-centered counseling to support shared decision-making about infant feeding. Counseling should begin early in pregnancy (before conception, if possible) and be reviewed throughout pregnancy and after delivery**.**
People with HIV should be informed that: o **Replacement feeding** with formula or donor human milk from a milk bank **eliminates** the risk of postnatal HIV transmission to the infant**.** o Achieving and maintaining **viral suppression through ART** during pregnancy and postpartum decreases ***breastfeeding transmission risk to less than 1%, but not zero*****.**
Replacement feeding with formula or donor human milk is recommended to eliminate the risk of HIV transmission through breastfeeding when people with HIV are not on ART and **do not have a suppressed viral load** during pregnancy and at delivery**.**
People with HIV who are on ART with a sustained undetectable viral load (i.e., ≤50 viral copies/mL) should receive counseling on formula feeding, donor milk, or breastfeeding options. People who choose to breastfeed should be supported in this decision.
People with HIV who choose formula feeding should be supported in this decision**.**
Engaging Child Protective Services is not an appropriate response to the infant feeding choices of an individual with HIV**.***
Consult the national Perinatal HIV/AIDS hotline (1-888-448-8765) as needed with questions.

***Such engagements can be harmful and are often disproportionately applied to minoritized individuals.[2-3]

Overview of Counseling and Management: *Healthcare providers are encouraged to invite their patients to evidence-based, patient-centered counseling, allowing for non-judgmental shared decision-making about infant feeding. These conversations should take place in a private setting and take the following factors into consideration: risk of HIV transmission, cultural acceptability, feasibility, affordability, and safety.*

- Inequities and health disparities should be considered as part of counseling and support for infant feeding decisions.
    - Some parents may need more access to safe water[4] and have difficulty obtaining formula.
- Social, cultural, and emotional factors and concerns about HIV-related stigma should also be discussed.
    - Some parents, especially those from a country or cultural background where breastfeeding is the norm, may fear that not breastfeeding can lead to the disclosure of their HIV status.[5]
- If breastfeeding is chosen, exclusive breastfeeding up to 6 months of age is recommended over mixed feeding (i.e., breast milk and formula).[6]
- Breastfeeding provides numerous health benefits to the infant (e.g., asthma, gastroenteritis, and otitis media) and the parent (e.g., reduction in hypertension, type 2 diabetes, and breast and ovarian cancers). Solids should be introduced as recommended at six months, but only after.[7]
- Recommend a lactation consult.
- Support the parent's ART adherence through:
    - Access to a supportive clinical team (OB, pediatrics, and lactation) and peers in the postpartum period is beneficial in promoting medication adherence and viral load monitoring.
    - Screen and provide support for postpartum depression and other mental health conditions that are highly prevalent among new parents and may affect ART adherence.[8]
- Guide good breast care.
- Document sustained viral suppression.
    - No data exist to inform the appropriate frequency of viral load testing for the breastfeeding parent. One approach is to monitor the plasma viral load of the parent every 1 to 2 months during breastfeeding.[9] Submit standing orders at a lab that is convenient for the patient.
- All pediatric treatment recommendations should be adhered to when breastfeeding. This includes but is not limited to:
    - If a person chooses to breastfeed, close consultation with a pediatric ID specialist concerning breastfeeding plans is needed. Contact Tom Belhorn (Peds ID) and Laura Gallaher (Peds ID SW) antepartum so outpatient consultation can be arranged prior to delivery.
    - Administration of appropriate infant antiretroviral (ARV) prophylaxis for at least 2-4 weeks. Recommendations regarding the administration of infant ARVs beyond 4 weeks is evolving and will be individualized based on shared decision-making between Peds ID and parent.

- If prescribed, continue prescribed (ARV) prophylaxis until thirty days after the infant is fully weaned.
- Regular HIV testing every three months during breastfeeding or as a pediatrician recommends. Submit standing orders at a lab that is convenient for the patient.

Situations that may Require Stopping or Modifying Breastfeeding
Situations may arise in which there is a need to stop or modify breastfeeding, such as the breastfeeding parent having a detectable viral load or developing mastitis, thrush, cracked, or bleeding nipples. Some options to consider include the following:

- Giving previously-stored expressed milk from a date when the person was virally suppressed while encouraging pumping and discarding breastmilk from the affected breast to ensure that breastfeeding can resume
- Pumping and flash heating* breastmilk before feeding it to the baby
- Providing replacement feeding with formula or pasteurized donor human milk
- Permanent cessation of breastfeeding

*Flash heating involves placing a sample of milk in a glass container within a small pot of water, heating the water to a boil, and removing the milk from the heated water when the water has boiled.[10] Milk can be given to the baby once cooled to room temperature. In the case of mastitis, cracked, or bleeding nipples, pump and either flash heat or discard milk from the affected breast while continuing to feed or pump from the unaffected breast.

In the case of a detectable viral load in a breastfeeding parent, breastfeeding should be temporarily stopped, using one of the above options, while the viral load is repeated. If the repeat viral load is undetectable, breastfeeding may resume. If the repeat viral load remains detectable, immediate cessation of breastfeeding should be recommended, as there is a high risk of postnatal transmission associated with viremia during breastfeeding. Consider consultation with Lisa Rahangdale (OB) or the Perinatal HIV hotline 888-448-8765.

Infant HIV Infection: In the event of HIV transmission via breastfeeding, consult pediatric ID for prompt initiation of a complete ART regimen for the infant. If an infant acquires HIV, breastfeeding may be continued.

Safety of Antiretroviral Drugs During Breastfeeding: Parents may be concerned about infant exposure to ARV drugs through breast milk. Overall, the rates of serious adverse events among infants exposed to ARV during breastfeeding are low. Studies to date have examined short-term adverse events, and few data are available on whether there might be long-term consequences. Parents should be advised to discuss all concerns with their maternal healthcare providers and pediatricians. For additional details on the passage of ARV drugs into breast milk, providers may reference the individual drug sections in the HIV Perinatal Clinical Guidelines.[11]

References:

1. Infant feeding for individuals with HIV in the United States: NIH. Infant Feeding for Individuals with HIV in the United States | NIH. Accessed June 18, 2023. https://clinicalinfo.hiv.gov/en/guidelines/perinatal/infant-feeding-individuals-hiv-united-states?view=full.
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9. Koay WLA, Rakhmanina NY. Supporting mothers living with HIV in the United States who choose to breastfeed. *J Pediatric Infect Dis Soc*. 2022;11(5):239.
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11. Table 14. antiretroviral drug use in pregnant people with HIV: Pharmacokinetic and toxicity data in human pregnancy and recommendations for use in pregnancy: Overview: NIH. Table 14. Antiretroviral Drug Use in Pregnant People With HIV: Pharmacokinetic and Toxicity Data in Human Pregnancy and Recommendations for Use in Pregnancy | Overview | NIH. Accessed June 18, 2023. https://clinicalinfo.hiv.gov/en/guidelines/perinatal/safety-toxicity-arv-agents-drug-use-pregnant-overview?view=full.

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.

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