Aetiology

HIV transmission risk during breast feeding was greatest during the early months of life


QUESTION: In HIV positive mothers, what is the risk for HIV infection in their breast feeding infants?

Conclusions

In HIV positive mothers, the risk for HIV transmission to their breast feeding infants was greatest during 1 to 5 months of age. Higher parity and older maternal age were associated with a lower risk for transmission.

COMMENTARY

The prospective cohort study by Miotti and colleagues evaluated the risk for HIV transmission from breast feeding mothers to infants who were negative for HIV DNA at their first 6 week postnatal visit. The most important finding in this study was that the risk for transmission was highest during the first 6 months of life; high parity and older maternal age were protective. The lack of data about transmission during the first 6 weeks is unfortunate because immaturity of the newborn immune system and increased cell counts in early breast milk may facilitate HIV transmission. The study setting did not allow the authors to evaluate other potentially important risk factors as gestational age at birth and maternal immunological and virological status.

The World Health Organisation (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) estimate that an HIV positive mother has a 15% risk for transmitting HIV to her breast fed child. The risk for HIV transmission may be particularly high in resource poor areas where HIV testing is not available and little access to safe breast feeding alternatives exists. The recent WHO, United Nations Children’s Fund (UNICEF), and UNAIDS statement incorporates recommendations for HIV positive mothers. Options include use of commercial formulas; wet nursing; use of heat treated, expressed breast milk; or exclusive breast feeding with abrupt early weaning. Further study of these issues and subsequent public health recommendations will be challenged by global variations in breast feeding practices, cultural beliefs, and economics.