PMTCT Intelligence Report
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Design of the bibliographic retrieval of this issue

Databases: Current Contents Life Sciences, Clinical Medicine, Social & Behavioral Sciences (weeks # 03 to 05: January 20, 2003 to February 3, 2003; coverage: journal and book citations)

10th Conference on Retroviruses and Opportunistic Infections, 10-14 February 2003, Boston USA.

Number of citations screened for this issue: 782

News Groups: AFRO-NETS, AMEDEO, CABA, Kaiser, Medscape, ProCAARE, RHO

Number of citations selected for this issue: 3 + Conference summary

Subject Headings/Subheadings

Conference summary
Contraception
Gynaecology
Infant feeding/Breastfeeding
MTCT (Mother-to-Child Transmission)
Obstetrics
PMTCT/ARV (Prevention of Mother-to-Child Transmission/AntiRetroVirals)
Primary prevention of sexual transmission/VCT (Voluntary Counselling and Testing)
Termination of pregnancy/Abortion

Citation format (by alphabetical order of the authors)

Author(s). Title. Source.
Notes (prepared by the Bordeaux Working Group)
Author address, if available (for reprints)
URL, if available (link to author abstract/full text/journal TOC)
Subject Headings
and their evolution, but these findings can already help to identify early pediatric cases of postnatal transmission to lymphadenopathy (ORa = 26.5). One limitation of this study was the lack of information on duration of clinical signs associated with PHI: MLI (adjusted odds ratio, ORa = 8.30), dermatitis (ORa = 5.99), and generalized lymphadenopathy (95.5%). Multiple logistic regression found in the final model three independent clinical factors to estimate the frequency of clinical acute retroviral syndrome and the association between these symptoms and primary HIV infection (PHI). The authors estimated the sensitivity (Se) and specificity (Sp) of clinical symptoms. For the Mononucleosis-like illness (MLI), Se was 73% and Sp 59%. The most specific symptom for PHI was generalized lymphadenopathy (95.5%). Multiple logistic regression found in the final model three independent clinical factors associated with PHI: MLI (adjusted odds ratio, ORa = 8.30), dermatitis (ORa = 5.99) and generalized lymphadenopathy (ORa = 26.5). One limitation of this study was the lack of information on duration of clinical signs and their evolution, but these findings can already help to identify early pediatric cases of postnatal transmission to define better care strategies in these circumstances.

Address: Meda N, Ctr MURAZ, 01 POB 390, Bobo Dioulasso 01, BURKINA FASO

PMTCT/ARV


Notes: Rouet et al conducted in Abidjan, Côte d'Ivoire a matched case control study in children HIV infected postnatally. The 22 HIV infected infants were recruited in the Ditreame ANRS 049 clinical trial and in an open-label Zidovudine Cohort. This study compared the clinical features in these 22 infants with those of 44 uninfected infants to estimate the frequency of clinical acute retroviral syndrome and the association between these symptoms and primary HIV infection (PHI). The authors estimated the sensitivity (Se) and specificity (Sp) of clinical symptoms. For the Mononucleosis-like illness (MLI), Se was 73% and Sp 59%. The most specific symptom for PHI was generalized lymphadenopathy (95.5%). Multiple logistic regression found in the final model three independent clinical factors associated with PHI: MLI (adjusted odds ratio, ORa = 8.30), dermatitis (ORa = 5.99) and generalized lymphadenopathy (ORa = 26.5). One limitation of this study was the lack of information on duration of clinical signs and their evolution, but these findings can already help to identify early pediatric cases of postnatal transmission to define better care strategies in these circumstances.

Address: Rouet F, CHU Treichville, Programme PAC CI, CeDRes, BP V3, Abidjan, COTE IVOIRE

MTCT, Infant feeding/Breastfeeding


Notes: This group located at the Californian Primate Research Center works on a macaque animal model of simian immunodeficiency virus (SIV) infection to study active immunization strategies relevant for the development of neonatal HIV vaccine. They used in this experiment two vaccine candidates and immunized the animal neonates at birth and three weeks of age. Then, they challenged them orally at four weeks of age with virulent SIV. All animals became infected. The immunized animals had better antibody response, controlled better the virus levels and had a longer disease-free survival. Maternal antibodies did not significantly reduce the efficacy of the modified vaccinia
virus Ankara vaccine preparation. It is still unclear whether vaccines eliciting early but stronger immune responses may be able to prevent infection or clinical disease, especially in human neonates.

**Address:** Marthas ML, Univ Calif Davis, California Natl Primate Res Ctr, Sch Vet Med, Davis, CA 95616 USA
**URL:** [http://jvi.asm.org/cgi/reprint/76/12/6083](http://jvi.asm.org/cgi/reprint/76/12/6083)

**PMTCT**

10th Conference on Retroviruses and Opportunistic Infections, 10-14 February 2003, Boston USA.

**Notes:** The conference had more than 900 presentations, 30 only dealt with MTCT and PMTCT. We highlight here the key findings of four of then.

1. **Read JS, Newell ML, Leroy V, Dabis F.** Late Postnatal Transmission of HIV in Breastfed Children: An Individual Patient Data Meta-analysis (The Breastfeeding and HIV International Transmission Study). This meta-analysis of 10 trials (4,343 breastfed children singletons with HIV diagnostic testing) estimates the contribution of late postnatal transmission (LPT) of HIV through breastfeeding to the overall risk of mother-to-child transmission of HIV; characterizes the timing of breastfeeding transmission; and identifies determinants of LPT. LPT occurs throughout breastfeeding with a cumulative LPT rate of 9.4 cases per 100 child-years of breastfeeding (95% CI: 8.2-10.7) and represents a significant proportion of overall HIV transmission (42%). The risk of LPT was lower for girls and lower maternal CD4+ was associated with higher risk of LPT.

2. **Dabis F, Ekouevi DK, Bequet L, Rouet F, Horo A, Fassinou P, Dequae-Merchadou L, Leroy V, ANRS PACCI DITRAME Plus Study Group.** A Short Course of Zidovudine + Peripartum Nevirapine is Highly Efficacious in Preventing Mother-to-Child Transmission of HIV-1: The ANRS 1201 DITRAME-Plus Study, Abidjan, Côte d'Ivoire. This study evaluated the efficacy of a combined short course ZDV and peripartum NVP in a PMTCT package in Abidjan, Côte d'Ivoire. Between March 2001 and August 2002, 402 HIV+ pregnant women were included. Of the 375 children with 4-6 wk follow-up, 22 have been diagnosed with HIV infection. The MTCT rate is 6.2% (95% CI: 3.7-9.7%), a 59% reduction compared to the ZDV MTCT rate in a historical cohort enrolled in the same population (p = 0.007 adjusted on maternal CD4). However, MTCT rate is still 17.1% with CD4 < 200 vs 21.5% with ZDV alone (p = 0.76).

3. **Chaowanachan T, Chotpitayasunondh T, Vanprapar N, Leelawiwat W, Culnane M, Jetsawang B, Tanaseneeyapan T, Mock P, Tappero JW, Simonds RJ.** Resistance Mutations Following a Single-dose Intrapartum Administration of Nevirapine to HIV-infected Thai Women and Their Infants Receiving Short-course Zidovudine The authors assessed the development of genotypic resistance mutations in pregnant HIV-infected women and their infants receiving short-course ZDV therapy and single-dose intrapartum/newborn NVP. Of the 133 ARV naive women receiving short-course ZDV + intrapartum NVP, 20 demonstrated NVP genotypic resistance mutation at 1 month post partum and one a ZDV resistance profile. Of the 3 HIV-infected infants tested, one demonstrated NVP resistance.

4. **Watts DH, Balasubramanian R, Maupin R, Delke I, Cunningham C, Dorenbaum A, Fiore S, Newell ML, Delfraissy JF, Gelber RD, Mofenson L, Culnane M, Sullivan J, the PACTG 316 Study Team.** Maternal Toxicity and Pregnancy Outcome According to Antiretroviral Therapy during Pregnancy: An Analysis of the PACTG 316 Study This study evaluated rates of maternal toxicity, adverse pregnancy outcomes and maternal peripartum morbidity according to the type (monotherapy, combination without PI, combination with PI) and duration of ART taken during pregnancy. Data from the PACTG 316 randomized clinical trial were analysed. Outcomes were defined based on signs/symptoms, diagnoses, laboratory result forms prospectively collected for the study purposes at enrollment, delivery and 6 wks postpartum. Of the 1,409 women included, 5.5% presented vaginal bleeding, 2.7% nausea/vomiting, and 2.2% headache, 1.8% anemia (< 8 g/dL) and 1.1% ALT elevations (> 2.5 x ULN). Event rates did not differ by antiretroviral group. Peripartum complication rates were low and depended on delivery mode.


Conference summary