Postpartum Care of HIV+ Women and Neonates

Breastfeeding is not recommended for HIV+ women in the US. Considerations regarding continuing ARVs after delivery are the same as for non-pregnant adults—degree of immunosuppression, adherence, side effects, partner HIV status, and childbearing plans.

Discuss additional childbearing intentions, include counseling on reproductive and contraception options.

Reasons support services, the postpartum period poses unique challenges to adherence.

Women who are found to be HIV-infected during pregnancy require comprehensive medical assessment, counseling, and follow-up.

Neonatal Care
Give newborn ARV prophylaxis and continue through 6 weeks of age.

* Standard ARV prophylaxis: ZDV syrup 4mg/kg po BID, through 6 wks. as soon as possible and within 6-12 hrs. of birth.

† Combination ARV prophylaxis: ZDV syrup 4mg/kg po STAT BID through 6 weeks plus 3 doses of NVP (at birth, 48 hrs., and 96 hrs.).

Consult guidelines for neonatal NVP weight-based dosing.

Neonatal ZDV is recommended regardless of maternal ARVs or resistance history.* Consult Guidelines for ZDV dosing in premature infants (<35 weeks).

†‡ Consult guidelines for neonatal NVP weight-based dosing.

Clarify mother’s HIV status if still unknown.

Recommended rapid HIV testing of infant or mother as soon as possible after birth, of positive, start combination ARV prophylaxis* for infant STAT.

Send confirmatory HIV test as soon as possible. If confirmatory test is negative, discontinue ARV prophylaxis.

Follow-Up Care For Infants Born To Mothers With HIV Infection

Neonatal ARV prophylaxis regimen should be discussed with and taught to mother. Perform CBC at baseline and then monitor for hematologic abnormalities, consult Guidelines for timing.

HIV DNA PCR or HIV RNA assays are the preferred virologic assays.

HIV virologic testing is recommended within 14-21 days of birth, at 1-2 months, and at 4-6 months.

Confim first positive virologic test with second viral test as soon as possible.

HIV is diagnosed by 2 positive HIV virologic tests on separate blood samples.

HIV infection can be presumptively excluded in a non-breastfed infant with 2 or more negative virologic tests, one obtained at age ≥24 days and one at ≥2 months or one negative virologic test at ≥2 months, or negative HIV antibody test at ≥6 months.

Define exclusion of HIV infection is based on 2 or more negative virologic tests performed at ≥1 month and ≥4 months (or 2 or more negative HIV antibody tests at ≥6 months).

If infant HIV infection is confirmed, refer to pediatric HIV specialist for ongoing treatment and care.

TMP-SMX for PCP prophylaxis should be started at 4-6 wks. of age for all infants exposed to HIV until deemed to be uninfected or presumptively uninfected.

Monitor all infants exposed to ARVs for signs of mitochondrial dysfunction (especially neurocognitive problems).

Updates to the Pamphlet (2012)

In general, HIV-infected women receiving antiretroviral treatment (ART) who present for care during the first trimester should continue treatment during pregnancy, assuming the regimen is tolerated and effective in suppressing viral replication (A1).

Elavir may be continued in pregnant women receiving efavirenz-based ART who present for antenatal care in the first trimester provided the regimen is resulting in virologic suppression (C1).

Intrapartum intravenous ZDV is not required in women on combination ART who have a viral load less than 400 copies/ml near delivery (B1).

ATV/R is now a preferred agent in pregnancy.

Dosing is now available for nevirapine prophylaxis in premature infants.

Perform screening for tuberculosis in initial evaluation as well as history of side effects on therapies from prior antiretroviral drug regimens.

Recommended ARV prophylaxis: ZDV syrup 4mg/kg po BID, through 6 wks. as soon as possible and within 6-12 hrs. of birth.

• Combination ARV prophylaxis: ZDV syrup 4mg/kg po STAT BID through 6 weeks plus 3 doses of NVP (at birth, 48 hrs., and 96 hrs.).

• Consult guidelines for neonatal NVP weight-based dosing.

To obtain the most current guidelines, visit www.aidsinfo.nih.gov

Guidelines for Use of HIV Antiretroviral Therapy in Pregnancy

This educational material was developed by the François-Xavier Bagnoud (FXB) Center.

The full perinatal guidelines are available at http://www.aidsinfo.nih.gov/
GUIDELINES: Use of Antiretroviral Drugs in Pregnancy

1 Providing antiretroviral (ARV) drugs during pregnancy and labor to the infant is recommended for optimum prevention of HIV transmission.

2 ARV therapy and ARV prophylaxis for prevention of perinatal HIV transmission is recommended to all pregnant women with HIV infection regardless of HIV RNA (viral load) or CD4 count. Highly active ARV combinations, containing at least 3 drugs, are used in the standard of care.

3 Start ARVs as soon as possible in pregnant women who require treatment (Rx), including in the first trimester. Start ARVs without delay after the first trimester or earlier for pregnant women who require ARVs for prophylaxis. ARVs are more effective when given for a longer duration.

4 All 3-drug combinations should include 1 or more NRTIs known to cross the placenta (ZDV, T1C, emtricitabine, stavudine, tenofovir, abacavir); ZDV and 3TC are preferred, to cross the placenta (ZDV, 3TC, TDF). LPV/r or NVP (if CD4 ≤ 250) initiation may be more effective as soon as possible or after 1 trimester. However, earlier initiation may be more effective (preferred combination ARVs are ZDV-FTC with either LPV/r or NVP (if FTC≤250)).

5 Use NVP as part of ARV regimen for women with CD4 > 250 only. (Benefit outweighs risk).

6 Women currently on ARVs: Continue regimen if viral load (VL) undetectable (including NRTI suppressive), see: http://www.aidsinfo.nih.gov/ contentfiles/Adult_OI_041009.pdf

7 If fixed dose combination ARV regimen includes ZDV, continue other drug(s) orally while ZDV is given IV.

8 If on ARV back IV < 1000 copies, scheduled C/S recommended before labor and membrane rupture.

9 Give newborn standard antibiotic at the time of C/S as prophylaxis for mother with an unknown or positive HIV result.

10 If on ARV back IV < 1000 copies, scheduled C/S recommended before labor and membrane rupture.

11 Give newborn standard antibiotic at the time of C/S as prophylaxis for mother with an unknown or positive HIV result.

12 Counselling regarding delivery method should be discussed with HIV+ women on ARV Rx. Recommendations for use of ARVs:

a) For HIV+ women on ARV Rx

i) A fixed dose combination ARV regimen includes ZDV, continue other drug(s) orally while ZDV is given IV.

ii) If on ARV back IV < 1000 copies, scheduled C/S recommended before labor and membrane rupture.

iii) Give newborn standard antibiotic at the time of C/S as prophylaxis for mother with an unknown or positive HIV result.

b) For HIV– women on ARV Rx (continued)

i) If fixed dose combination ARV regimen includes ZDV, continue other drug(s) orally while ZDV is given IV.

ii) If on ARV back IV < 1000 copies, scheduled C/S recommended before labor and membrane rupture.

iii) Give newborn standard antibiotic at the time of C/S as prophylaxis for mother with an unknown or positive HIV result.

iv) Counselling regarding delivery method should be discussed with HIV– women on ARV Rx: Scheduled C/S can be recommended based on results of HIV testing during pregnancy.

v) Give newborn standard antibiotic at the time of C/S as prophylaxis for mother with an unknown or positive HIV result.

vi) Women of unknown HIV status should be counselled about the potential benefits for the newborn.

Antepartum care

Indication of degree of immunodeficiency (CD4 + count/mL):

Viral load (VL):

Accurate history (hx) of ARV therapy or ARV prophylaxis

HIV resistance testing and results of prior resistance testing

Baseline CBC, renal, liver function tests

HIV surface antigen, HCV screening: Guidelines for management of positive.

Treating OI prophylaxis, including starting or continuing TDF-3TC + EFV if mother is on ARVs (for current guidelines, see: http://www.aidsinfo.nih.gov/ contentfiles/Adult_OI_041009.pdf)

Evaluation of immunization status

Caution for smoking, exercise, sexual abstinence, avoidance of alcohol/hard drugs

Discuss importance of ARV adherence

Women with hx of ARVs

1) Obtain accurate hx of all prior ARVs, obtain resistance testing before starting ARV prophylaxis or Rx to inform ARV choice

2) Assess adherence and tolerability issues

3) Start combination ARV regimen based on results of resistance testing (if available)

4) Consult with HIV expert for choice of ARV for women previously treated

5) Use NVP as part of ARV regimen for women with CD4 > 250 only. (Benefit outweighs risk).

Monitoring during pregnancy

1) CD4 count at least every 3 months

2) VL at 2-4 weeks after starting or changing ARVs, then monthly until undetectable, then every 3 months

3) Avoid d4T/ddI combination

4) HIV resistance testing if detectable viremia (1000-10000 copies/mL) to inform possible change to regimen

5) HIV+ women with hx of ARVs not currently on ARVs:

a) Obtain accurate hx of all prior ARVs, obtain resistance testing before starting ARV prophylaxis or Rx to inform ARV choice

b) Assess adherence and tolerability issues

c) Start combination ARV regimen based on results of resistance testing (if available)

d) Consult with HIV expert if VL not suppressed after adequate period

Acute HIV infection in pregnancy

If suspected perform HIV antibody screen and HIV-1 diagnosis

Confirmatory results required for LPV/r immediately, pending ARV adherence

HIV+ women on ARV Rx

1) Continue ARV prophylaxis or Rx on schedule during labor and prior to scheduled C/S

2) If on ART, stop during labor as IV ZDV is running.