NHS FORTH VALLEY
Management of HIV in Pregnancy
Care of mother and baby protocol

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NHS Forth Valley
Consultation and Change Record

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Distribution:
Forth Valley NHS

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<td>4/1/2013</td>
<td>Dr Kirsty Abu-Rajab</td>
<td>contact details for virology samples</td>
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<td>update regarding the timing of starting hiv treatment and</td>
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<td>which treatment to give depending on when the woman presents</td>
<td>3</td>
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<tr>
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<td>removed appendix 1 as not used/ relevant now</td>
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<td>4/2/2015</td>
<td>Dr Kirsty Abu-Rajab</td>
<td>Page 10 and 14 - Viral load criteria for when IV AZT should be given has changed.</td>
<td>4</td>
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<td></td>
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<td>Page 10 - If nevirapine is given to mum then 21 days of antiretroviral therapy should be considered to prevent NNRTI resistance (previously 7 days).</td>
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<td>Page 11 and 18 - new address for virology lab</td>
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Introduction

Note – Further guidance and references are available from the: British HIV Association guidelines for the management of HIV infection in pregnant women, 2012 (2014 interim review).

Antenatal opt-out HIV testing and more effective anti-retroviral treatments have resulted in more pregnancies that are affected by HIV.

The rate of mother to child transmission (MTCT) of HIV in the UK in 1993 was 25.6%. Between 2000-2006 rates of transmission had fallen to 1.2%. This has occurred through a variety of different interventions:

- An increase in antenatal testing for HIV
- Earlier diagnosis of maternal HIV
- Anti-retroviral therapy
- Testing and treatment of co-existent infections
- Guidance on the management and mode of delivery
- Avoiding breastfeeding
- Neonatal anti-retroviral therapy

Transmission to the infant was 0.1% (3 in 2117 live births) in the UK and Ireland cohort when maternal HIV viral load was <50 copies/ml.

Factors associated with increased transmission to the baby include mode of delivery, pre-term delivery before 32 weeks and duration of rupture of membranes. The risk of MTCT correlates with maternal viral load, although transmission can still occur when maternal viral load is below the lower detection limit of the assay (currently 40 copies/ml in West of Scotland).

Good care in pregnancy is facilitated by appropriate liaison between the responsible obstetrician, HIV physician, midwife, paediatrician and pharmacist. The multi-disciplinary team should arrange to meet at least once to discuss the care of the individual in order to provide a well integrated consistent and expert service. Further communication between the team and the patient should be frequent.

The HIV status of the woman can already be known pre-natally or may be diagnosed at various gestations depending on the situation. For those women known to be HIV negative at book-in, but at continued risk of infection, re-testing for HIV at appropriate times/in the third trimester should be strongly encouraged.

Testing for HIV should be re-offered at 28 weeks if initially declined.

Confidentiality

Confidentiality for all clients is an essential part of HIV care. Control of decisions about disclosure should remain with the patient. At “booking” the team midwife should discuss disclosure with other health care professionals.

It is not necessary to inform every person who comes into contact with the HIV positive woman because universal precautions are employed by staff.

The patient’s hand-held as well as hospital notes should have a record in file of HIV status in case of emergency. Information from both the antenatal and the HIV team will be put in
the hand-held notes to ensure up-to-date communication for the patient’s management. If the woman does not want information regarding her HIV status in her hand-held notes this should be made clear to all health care professionals involved in her care, and communication between the teams should be ensured through alternative methods.

Section 1 - Antenatal Care
Each member of the team has specific roles in the care of the patient:

Team Midwife
- The midwife will ensure that any newly diagnosed HIV positive patient has been directly referred and given a fast-track appointment to see the Consultant in HIV, NHS Forth Valley
- Ensure patient is booked with the designated Consultant Obstetrician for Blood borne viruses, NHS Forth Valley
- Discuss disclosure to other lead professionals and inform woman of the members of the multi-disciplinary team
- Discuss the importance of clear documentation of HIV status in hospital notes and ensure result is clearly documented in notes/ and as an ‘alert’ on the maternal computer database –MATSYS
- Discuss infant feeding and any additional support needs

HIV Medicine (Central Sexual Health Department)
- Medical care of the woman will be the responsibility of the HIV consultant, this includes viral load testing and anti-retroviral therapy prescription
- If required, therapeutic drug monitoring of anti-retroviral medication at steady state and in the 3rd trimester
- Routinely test for genitourinary tract infections at presentation (including testing for bacterial vaginosis). Re-test at 28 weeks
- Ensure tested for Hepatitis B/C and Syphilis. Re-test for Syphilis at 28 weeks
- Produce birth plan to put in patient’s handheld and maternity casenotes by 28 weeks
- RCOG notification
- Will put the appropriate blood forms (to be used for Viral Load at time of delivery) in patient’s maternity casenotes for use by the relevant midwife
- Request HIV genotype pre-therapy, at 6 weeks postnatal (and at any other relevant times)
- To ensure communication and multi-disciplinary meeting with other members of the team

Obstetrician
- In cases where the HIV diagnosis is made antenatally the HIV positive result will be given to the Consultant Obstetrician by a Consultant in Microbiology
- Inform Consultant Paediatrician of patient and date of delivery
- Provision of the most specific and sensitive non-invasive screening tests for Down’s syndrome together with appropriate counselling (this is likely to decrease the need for subsequent pre-natal invasive diagnostic testing)
- Invasive procedures such as amniocentesis or chorionic villus sampling should be covered by anti-retroviral therapy (in discussion with the HIV Consultant), and where possible when the viral load is <40copies/ml
- Women on HAART from booking should be screened for gestational diabetes
The obstetrician is responsible for prescribing appropriate antibiotic cover for labour and pre-labour rupture of membranes

Section 1
Antenatal Care

Specialist HIV Pharmacist
- By 36 weeks the Specialist HIV pharmacist will create the woman’s individual antiretroviral therapy schedule for delivery with a copy placed in the patient’s hand-held and hospital notes
- Responsible for ensuring supply of IV and oral zidovudine, oral nevirapine and oral raltegravir is stored in the labour ward in readiness for admission
- Ensure provision of appropriate formulations of neonatal therapy on the delivery/postnatal ward
- Responsible for ensuring an emergency supply of IV and oral zidovudine, oral nevirapine and oral raltegravir is stored in the emergency pharmacy cupboard. The emergency cupboard in FVRH is unmarked and on the 1st floor outside cardiology, overlooking the staff night entrance. Access is gained through SERCO
- Will ensure an emergency supply of the mother’s own regime is also in the emergency pharmacy cupboard (see above)

Paediatrician
- The patient should have the opportunity of meeting the Consultant Paediatrician to discuss post-natal care of their baby including follow-up tests and treatment
- Responsible for prescribing the infant anti-retroviral medication
- Ensures blood is taken from baby until final HIV status is confirmed
- Responsible for the HIV testing of any other potentially at-risk children of the patient

GP and Health Visitor
It is essential that communication with both the GP and Health Visitor about the woman’s continuing care and birth-plan is optimal. Communication will be provided to the GP from both the HIV and the Antenatal team.
Section 2
The HIV Viral Load
One of the main aims of giving anti-retroviral therapy during pregnancy is to achieve an undetectable viral load (<40 copies/ml) in advance of actual delivery. This substantially reduces the risk of transmission to the baby.

- The viral load is checked 2 weeks after initiation or change of therapy and at least once every trimester, at 36 weeks and at delivery
- The viral load at week 36 usually helps decide the mode of delivery
- If the viral load is detectable at 36 weeks, adherence should be assessed. Intensification with single dosing of nevirapine, double dose of tenofovir or raltegravir may be considered
- The viral load taken immediately after delivery can be important helping decide what anti-retroviral treatment and any PCP prophylaxis that the baby should receive

Anti-Retroviral Therapy (ART)
ART is prescribed during pregnancy with the aim of:
- Preventing onward transmission to the baby (Mother to child transmission-MTCT)
- In some situations it is prescribed for the mother’s own health as well

ART should be commenced by week 24, however if the viral load is >30,000 copies/ml then starting at the beginning of the 2nd trimester should be considered. Commencement may be earlier if the viral load is >100,000 copies/ml. The choice of ART depends on several factors which include the presence of any viral resistance, the viral load, patient preference, the health of the mother and the pregnancy gestation.

Zidovudine (AZT) monotherapy
Zidovudine monotherapy alone may be considered if several criteria are achieved:
1. Mother does not need ART for her own health (CD4 cell count of >350 cells/µL) AND
2. Viral load is consistently less than 10,000 copies/ml AND
3. Resistance testing shows wild-type virus – (fully sensitive virus) AND
4. This regime should be undertaken with a pre-labour caesarean section at 38 weeks, with zidovudine infusion (see Appendix 1) or continued oral dosing of zidovudine

HIV genotype should be taken at delivery on zidovudine monotherapy to detect any emergence of viral resistance.

Combination ART
Combination ART (usually 3 different drugs) can be recommended in two separate situations:

1. If the mother needs ART for her own health. In this situation the ART is usually continued after delivery

2. To prevent MTCT. Highly recommended when the VL>10,000 copies/ml or if any drug resistance is detected. Combination ART should be commenced by 24 weeks gestation and is usually stopped post delivery. When stopping HIV medication this is done with careful consideration of the half-life’s of each component (individual drugs may be stopped at different times)

Section 2
Anti-Retroviral Therapy

Therapeutic drug monitoring (TDM) should be considered for those prescribed protease inhibitors or other new agents and is usually taken at steady state and again in the 3rd trimester.

For those women on ART and whose viral load is detectable (>40 copies/ml) at 36 weeks, the following should be considered:

- Adherence to regime
- Other medications prescribed
- Review of drug regime – consider change or intensification
- TDM considered
- HIV genotype should be requested looking for resistance

LATE presenting women NOT ON TREATMENT

A woman who presents after 28 weeks should commence combination ART without delay.

For those women who present between 24-28 weeks the advantages of tailoring a regimen and more thorough assessment must be balanced with the advantages and risks of starting combination ART immediately.

Raltegravir should be considered as part of the regime where the viral load is unknown or >100,000 copies/ml.

Untreated woman presenting in labour at term:

- A single dose of nevirapine 200mg should be given immediately
- Combination ART should be commenced, usually with combivir and preferably raltegravir
- IV AZT should be given for the duration of labour and delivery

Nevirapine rapidly crosses the placenta and within 2 hours achieves and then maintains levels in the neonate for up to 10 days. If delivery occurs within 2 hours of the nevirapine dose then the neonate should also be dosed with nevirapine immediately.
Section 3 - Labour and Delivery

- Labour ward staff must be aware of a woman’s HIV status. This should be checked when the woman arrives in/ for labour
- The decision about the mode of delivery should involve the mother, obstetrician and the HIV physician and should be made by 36 weeks
- Only women with viral loads of less than 40 copies/ml should be offered a planned vaginal delivery
- When elective caesarean section is planned for prevention of mother to child transmission, this is usually arranged between 38 and 39 weeks gestation
- For women on combination ART with viral loads of less than 40 copies/ml where elective caesarean section is indicated for obstetric considerations, this should be performed between 39 and 40 weeks gestation
- Electronic fetal monitoring should be performed according to national guidelines
- Duration of labour/ duration of rupture of membranes and mode of delivery should be accurately and clearly recorded
- Proformas should be used for recording information/ ensuring all components of care are managed appropriately (see Appendix 3)
- Where the viral load at 36 weeks is >400 copies/ml – pre-labour caesarean section is recommended
- If the viral load at 36 weeks is between 40 and 400 copies/ml, pre-labour caesarean section should be considered taking into account the trajectory of viral load, length of time on treatment, adherence, obstetric factors and the woman’s views

VAGINAL DELIVERY

- When vaginal delivery is planned, spontaneous onset is preferable to induction
- When a woman presents in labour, her plan of care for delivery should be reviewed and her most recent viral load checked to ensure it is less than 40 copies/ml
- There should be a low threshold for caesarean section in the face of a slow or difficult labour. Amniotomy and oxytocin augmentation can be considered after discussion with on-call consultant. If progress is <1cm/hour or equivalent over 4hours post rupture of membranes, delivery should be by caesarean section
- Artificial rupture of membranes should be avoided or delayed as long as possible
- If an instrumental vaginal delivery is required in a woman with a viral load <40 copies/ml, then the type of instrument used should be the one the operator feels is most appropriate (while following national guidance) as in the non-HIV population

CAESAREAN SECTION

- A senior Obstetrician should perform all HIV affected caesarean sections
- The surgical field should be kept as haemostatic as possible
- Blunt needles should be used for the repair to reduce the trauma to maternal tissues which can increase the risk of transmission
- Membranes should remain intact for as long as possible
- Cord should be clamped early
In both types of delivery:
- Oral suction should be performed on the neonate at delivery to avoid ingestion of maternal body fluids
- The neonate should be washed with warm water as soon as possible to remove maternal body fluids
- The neonate’s eyes should be washed with saline
- The baby should not be put to the breast at any time although skin to skin contact with mother is encouraged

Antiretroviral Therapy during Labour
Anti-retroviral therapy given during labour usually depends on maternal viral load and the anti-retroviral regime given during pregnancy.
The patient does NOT need IV zidovudine during labour/ caesarean section if her viral load was undetectable (<40copies/ml) at 36 weeks and she has been adherent to her combination ART regime since her last viral load. The patient should continue her oral anti-retroviral regime as usual and at her normal times.

Intrapartum IV zidovudine should be given (see Appendix 1) in the following situations:
- Maternal viral load is >1,000copies/ml
- Untreated women where viral load is unknown
- The woman has received AZT monotherapy during pregnancy (Continued oral dosing may be considered)

If the viral load is between 40 and 1,000 copies/ml then IV AZT may be considered, continued oral doing of their current regime is a reasonable alternative.

Pre-term delivery Consult BHIVA guidance for more detailed guidance

- Pre-term delivery has been identified as a risk for mother-to-child-transmission of HIV
- There should be a multi-disciplinary discussion regarding any change in management. This should involve the Obstetrician, HIV consultant and the Paediatrician. If the HIV consultant is unavailable, then the Brownlee on-call team should be contacted (see contact details, section 5)
- The risk of HIV transmission should be set against the risk of pre-term delivery
- There is no contraindication to the use of short-term steroids to promote fetal lung maturation
- An infection source including genital infection screen should be sought in the mother
- If delivery is to be delayed erythromycin should be commenced if PPROM
- Maternal ART should be optimized to reduce the risk of transmission. Maternal nevirapine may be considered due to its highly effective placental transfer (unlike protease inhibitors). Maternal nevirapine results in a prolonged plasma concentration in the neonate that can be advantageous for a premature baby unable to take oral PEP. If nevirapine is used and then stopped, at least 21days of therapy should be prescribed to cover its long half-life “tail” (to prevent NNRTI-related mutations)
A double dose of tenofovir may also be considered to load the baby if the infant is unlikely to be able to absorb oral medications

**Term pre-labour spontaneous rupture of membranes**

Delivery should be expedited.

Studies have demonstrated a 2% incremental increase in transmission for every hour of ruptured membranes up to 24 hours.

Labour induction is recommended if the viral load is <40 copies/ml and there are no obstetric contraindications.

If the last measured viral load is between 50-999 copies/ml consider immediate caesarean section, taking into account the trajectory of viral load, length of time on treatment, adherence, obstetric factors and the woman’s views.

If maternal viral load is >1000 copies/ml immediate caesarean section is recommended.

There should be a low threshold for treatment of intrapartum pyrexia.

**Specific Bloods to be taken after delivery**

In addition to any routine haematology/biochemistry the following bloods **must** be taken:

**NEONATE:**
- 2mls EDTA venous blood for HIV RNA testing taken 0-48hrs after birth
- The blood should be taken Monday-Friday and sent **with the** mother’s sample (as below)
- Keep the blood in the fridge if arrival cannot be guaranteed before 5pm that day and send the next working day
- **Send to the, West of Scotland Specialist Virology Centre**
  Level 5, New Lister Building, Glasgow Royal Infirmary, 10-16 Alexandra Parade, Glasgow G31 2ER via the FVRH microbiology lab (01324 566692)
- Phone the Specialist Virology Centre on 0141 211 0080 and let them know blood is on the way

**MOTHER:**
- Viral load (10mls EDTA)
Section 4 – Care of the neonate
See HIV Pathway & Protocol for Management of Infants born to HIV positive mothers in NHS Forth Valley

- The neonate should be commenced on post-exposure prophylaxis as soon as possible after the birth, certainly within 4 hours (see Appendix 2)
- Zidovudine (AZT) monotherapy is usually prescribed for 4 weeks and is appropriate when there is a very low risk of HIV transmission (maternal viral load <40 copies/ml OR following pre-labour caesarean section with maternal AZT monotherapy)
- For neonates unable to tolerate oral medication the only HIV drug available for IV use is AZT
- Three drug ART may be given to the baby as post-exposure prophylaxis in certain situations, such as the mother’s HIV status being discovered only after delivery; persistent maternal viraemia on combination ART or unplanned delivery before the viral load has become undetectable. There have been very few studies of combination therapy in neonates. This would usually involve zidovudine, lamivudine and nevirapine, although may be a different combination based on resistance testing
- Mother should be supported in bottle feeding.
- Before discharge the mother should be confident and able to administer medication to her baby
- The neonate will be followed up by paediatrics at regular intervals, and will be tested for HIV at birth (within 48 hours), 6 weeks, 3 months of age and finally at 18 months.
- Septrin prophylaxis for Pneumocystis pneumonia should be prescribed to all infants born to mums at high risk of HIV transmission (includes those neonates with an initial positive HIV test and those where maternal viral load is >1000 copies/ml at delivery. This would be prescribed by the paediatrician after the first 4 weeks of birth, when ART has finished

Section 5 – Postnatal Stopping/ Continuing ART

The decision about the mother’s antiviral medication after delivery will be made on an individual patient basis. This will be written in the patient’s birth plan and communicated to members of the team. If there is doubt or confusion about whether she should stop her medication the best plan would be to continue with all of the anti-retrovirals, at the same dose and timing until the actual plan is confirmed.
Postpartum suppression of lactation with 1mg orally stat of cabergoline within 24 hours of birth may assist in those cases where suppression of breastmilk production is required.

**Contraception post delivery**
Effective long acting contraception should be considered and discussed prior to and after delivery, and the discussion documented in the notes (the mother should see the sexual and reproductive health team while on the ward to discuss effective contraception).

Before discharge the mother should have had arranged for her:
- A 6 week appointment with the HIV service
- A 6 week assessment with Obstetrics
- Paediatric follow-up

### Section 6 - Links/ Contact Details

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Details</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUM/HIV Consultant, NHS Forth Valley Dr Kirsty Abu-Rajab</td>
<td><a href="mailto:Kirsty.abu-rajab@nhs.net">Kirsty.abu-rajab@nhs.net</a></td>
<td></td>
</tr>
<tr>
<td>GUM/ HIV Secretary, Carol Davis</td>
<td>01324 673555</td>
<td><a href="mailto:cdavis1@nhs.net">cdavis1@nhs.net</a></td>
</tr>
<tr>
<td>Obstetric Consultant, Dr Huda</td>
<td>Via FVRH switchboard</td>
<td><a href="mailto:Shahzya.huda@nhs.net">Shahzya.huda@nhs.net</a></td>
</tr>
<tr>
<td>Paediatric Consultant Dr Al-Hourani</td>
<td>Via FVRH switchboard or Paediatric secretary</td>
<td></td>
</tr>
<tr>
<td>HIV adult pharmacist Isabel Marwick</td>
<td>FVRH, Page 1506</td>
<td><a href="mailto:Isabel.marwick@nhs.net">Isabel.marwick@nhs.net</a></td>
</tr>
<tr>
<td>Oncall pharmacist</td>
<td>Via bed manager</td>
<td></td>
</tr>
<tr>
<td>Specialist Virology lab, Glasgow</td>
<td>0141 211 0080</td>
<td></td>
</tr>
<tr>
<td>Immunology lab, Glasgow</td>
<td>0141 301 7752</td>
<td>CD4 counts</td>
</tr>
<tr>
<td>NSHPC – National Study of HIV in pregnancy and children</td>
<td><a href="http://www.nshpc.ucl.ac.uk">www.nshpc.ucl.ac.uk</a></td>
<td>UK and Ireland’s surveillance system for obstetric and paediatric HIV</td>
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<td>British HIV Association (BHIVA) website</td>
<td><a href="http://www.bhiva.org">www.bhiva.org</a></td>
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<td>The Children’s HIV Association (CHIVA) website</td>
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<td>Information on HIV and AIDS</td>
<td><a href="http://www.aidsmap.com">www.aidsmap.com</a></td>
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<tr>
<td>Anti-retroviral pregnancy register</td>
<td><a href="http://www.apregistry.org">www.apregistry.org</a></td>
<td>Summary of mutagenesis, teratogenesis, carcinogenesis data for all licensed antiretrovirals. Women registered anonymously, updated twice a year.</td>
</tr>
<tr>
<td>Sexual health Lead Nurse, Alison Sturrock</td>
<td>01324 673564</td>
<td><a href="mailto:alisonsturrock@nhs.net">alisonsturrock@nhs.net</a></td>
</tr>
</tbody>
</table>
Appendix 1 – Intrapartum maternal zidovudine (AZT) treatment

Anti-retroviral therapy should continue until after delivery. Patients should bring their anti-retroviral therapy into hospital with them.

AZT infusion is not required for the mother if she has an undetectable viral load (<40 copies/ml), and has been adherent to her combination ART regime.

IV AZT should be given where:
- AZT has been used by itself during pregnancy, or
- When the mother has presented late and the viral load is unknown, or
- When the mother’s viral load is known to be >1,000 copies/ml.

**NOTE:** For those women on oral AZT monotherapy undergoing a pre-labour caesarean section, continued oral dosing is an alternative.

When required, AZT infusion should be started 4 hours before an elective caesarean section or as soon as patient presents with rupture of membranes or spontaneous labour. AZT should be administered as a slow IV infusion. The infusion should be continued until the baby is delivered and the umbilical cord clamped.

**AZT intravenous infusion for intrapartum cover – maternal dose**

It is very important that there is no gap between giving the loading dose of zidovudine and the maintenance infusion dose. The same infusion bag is used to give both the loading and maintenance dose, it is **the rate** which is changed. If there is a gap of more than 15 minutes between administration of the loading dose and changing to the maintenance infusion, the loading dose should be repeated before commencing the maintenance infusion dose.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Intrapartum Loading dose*</th>
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<th>No. of doses</th>
<th>Route</th>
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<td>Zidovudine</td>
<td>Intrapartum Loading dose*</td>
<td>2 mg/kg</td>
<td>1 dose</td>
<td>IV infusion over 1hr</td>
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<tr>
<td></td>
<td>Maintenance dose given until cord clamped</td>
<td>1 mg/kg/hour</td>
<td>Continuous</td>
<td>IV infusion</td>
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</tbody>
</table>

* For planned caesarean section, start IV infusion 4 hours before operation

**Preparation of infusion – to make zidovudine 2mg/ml 500ml infusion**

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**UNCONTROLLED WHEN PRINTED**
- Withdraw 100 ml of glucose 5% from a 500 ml bag using 2 x 50 ml syringes and discard
- Draw up the contents of 5 vials of zidovudine (each 200mg in 20mls) into 2 x 50 ml syringes
- Add the contents of the 5 vials to the bag – this gives a solution containing 1000 mg zidovudine in 500 ml i.e. 2 mg/ml
- Dilution should be carried out preferably immediately prior to administration

The solution is stable for 24 hours at room temperature

**Calculation of infusion rate**

- A loading dose of 2 mg/kg AZT is given over 1 hour
  
  \textit{E.g. for 80 kg woman, loading dose is 160 mg which will be 80 ml of 2 mg/ml solution given over 1 hour}

- After 1 hour a continuous infusion of 1 mg/kg/hr is started
  
  \textit{E.g. for 80 kg woman, dose is 80 mg per hour which will be 40 ml of 2 mg/ml solution per hour}

- For an 80 kg woman the 500 ml infusion bag will last for 11 hours

**After delivery**

Consult individual care plan concerning continuations/ discontinuation of maternal ART.

**Appendix 2 – Zidovudine (AZT) dosing regime for the neonate**

- The baby should receive AZT oral solution within 4 hours of delivery
- The dose for a well, term infant (>34weeks gestation) is 4 mg/kg every 12 hours and this should be continued for 4 weeks
- AZT (Retrovir) oral solution contains 50 mg in 5 ml and is supplied as a 200 ml bottle. One bottle will be sufficient for a 4 week course and this will be stored in the Labour Ward
  
  \textit{E.g. for 3.5 kg baby, dose will be 14 mg (1.4 ml) every12 hours}

- When the baby is ready for discharge the bottle of AZT and the discharge prescription should be sent to pharmacy for labelling
- If the baby (>34weeks gestation) cannot take oral AZT, it can be administered intravenously at a dose of 1.5 mg/kg every 6 hours by IV infusion over 30 minutes
- To prepare the infusion, draw up 2 ml (20mg) AZT injection and make up to 10 ml with glucose 5% - this gives a 2 mg/ml solution
- Calculate the required dose and volume of infusion
  
  \textit{E.g. for 2 kg baby, dose will be 3 mg (1.5 ml) of the diluted 2mg/ml solution}

**Treatment of Premature Infants**

- For premature infants born <30 weeks gestation the oral dose of AZT should be 2mg/kg bd for 4 weeks
- For premature infants born at 30 – 34 weeks the oral dose of AZT should be 2mg/kg bd for 2 weeks then 2mg/kg tds for a further 2 weeks

\textbf{For premature infants unable to tolerate oral medication}

- AZT 1.5mg/kg IV every 12 hours
Appendix 3 – *HIV in pregnancy proformas*

**Vaginal Delivery**

**Patient Name:** [ ]

**DOB:** [ ]

**CHI Number:** [ ]

**Date:** [ ]

Trial of vaginal delivery may be a reasonable option if all criteria fulfilled:

- [ ] Viral load undetectable currently (<40 copies/ml)
- [ ] Mother on combination anti-retroviral therapy
- [ ] Reasonable prospect of vaginal delivery
- [ ] Maternal choice

**Mode of delivery:** [ ]

**Duration of labour:** [ ]

**Duration of ROM:** [ ]
- Inform paediatrician in advance of delivery
- Contact paediatrician at delivery in all cases
- Confirm immediate postpartum management
- Baby’s eyes must be bathed at delivery
- Baby must be bathed in labour ward

**HIV in Pregnancy data sheet (hand-held notes)**

Obstetrician ___________                  HIV Consultant ___________

Patient Name:                      DOB:

CHI Number:

EDD:

<table>
<thead>
<tr>
<th>Date</th>
<th>Gestation</th>
<th>Viral Load</th>
<th>CD4</th>
<th>ART Medication</th>
<th>Signature</th>
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</table>
Anti-retroviral therapy (select one):

- Already on prior to conception and to continue after delivery
- Started during pregnancy and to continue
- For prevention of MTCT only and to stop post delivery

Other relevant information:

Post-delivery mum

Breast-feeding contra-indicated

Patient Name: DOB:

CHI Number: Date:

☐ Maternal Viral Load taken (10mls EDTA) and sent to Specialist virology centre, Glasgow Royal Infirmary with baby's blood (see below). See page 12 of full document for further details

☐ Ensure anti-retrovirals prescribed/ discontinued appropriately

☐ Inform HIV Consultant of delivery 01324 673555

☐ Ensure follow-up appointment 6 weeks HIV consultant

☐ Ensure follow-up appointment 6 weeks Postnatal

☐ Contraception discussed

Contraception commenced

Yes ☐ No ☐

Document follow-up plan

☐ Discharge letter dictated

Post-delivery baby

Breast-feeding contra-indicated

Baby’s Name: DOB:

CHI Number: Time of birth:

☐ Baby's eyes bathed at delivery Time eyes bathed: ____________

☐ Baby bathed in Labour ward Time baby bathed: ____________

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UNCONTROLLED WHEN PRINTED
Paediatrician contacted immediately after delivery

Baby HIV bloods taken (2mls EDTA-**NOT** cord blood) for RNA testing (with mums blood, see above)

Baby HIV medication prescribed

Baby’s first medicine dose within 4 hours of delivery  
Time given: __________

Baby’s discharge medication prescribed

Mum taught to give medication to baby

Ensure follow-up appointment Paediatrics

GP informed  
Health Visitor informed

Discharge letter dictated
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