

Case Presentation

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Introduction

Baby NN, 4 weeks old girl

HIV Exposed – Indeterminate HIV PCR @ birth

Currently on dual prophylaxis

No TB contact

Failure to thrive



Presentation

- Diarrhoea and vomiting for 2 days
- Feeding poorly
- Now weak
- Fast breathing
- Oral thrush
- No fever



Maternal History

- Diagnosed with HIV infection in 2014
- She defaulted multiple times
- On FDC (TDF/FTC/EFV)
- Unbooked in this pregnancy
- HIV-VL not known at the time of delivery (Maternal VL repeated)
- On Day 6 post discharge review
 - Maternal HIV-VL: 212000 cp/ml



Choice of feed and prophylaxis?

- Mom is on first line ART and has a unsuppressed HIV-VL
1. Continue breastfeeding and dual prophylaxis until mom is virologically suppressed
 2. Continue breastfeeding and dual prophylaxis for 12 weeks
 3. Change to replacement feeds and continue prophylaxis for 6 weeks
 4. Change to replacement feeds and continue prophylaxis for 12 weeks



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Risk of exposure

- LOW RISK : Infants born to HIV positive mothers started on ART >12 weeks prior to delivery with HIV-VL <1000 c/mL
- HIGH RISK : Other HIV exposed infants (scenario specified in table on next page)



SITUATION	COMMENT
LOW RISK NVP at birth and then daily for 6 weeks	
Mother on lifelong ART and VL <1000 copies/ml or ART started more than 12 weeks prior to delivery	<ul style="list-style-type: none"> • Do HIV PCR at birth. • Do HIV PCR at 10 weeks if first PCR test negative • Do infant HIV testing 6 weeks post-cessation of breastfeeding (either HIV PCR or ELISA depending on age). • Encourage maternal ART adherence, and • Monitor maternal viral load as per national guideline. • Provide counselling and support for safe infant feeding.

SITUATION	COMMENT
HIGH RISK NVP and AZT as soon as possible and daily for 12 weeks	
Mother newly diagnosed HIV-positive and did not start ART before or during delivery or <72 hours after delivery (irrespective of feeding choice) Breastfeeding mother diagnosed HIV positive > 72 hours after delivery	<ul style="list-style-type: none"> • Immediate initiation of maternal ART • Do infant HIV PCR at birth, if infant tests HIV PCR+, do repeat HIV PCR test and initiate ART while awaiting the second PCR test result • Do HIV PCR at 14 weeks if PCR negative • Do infant HIV testing 6 weeks post-cessation of breastfeeding (either HIV PCR or ELISA depending on age) • Encourage maternal ART adherence, and • Monitor maternal viral load as per national guideline. • Provide counselling and support for safe infant feeding.
Mother started ART less than 12 weeks prior to delivery.	<ul style="list-style-type: none"> • Do infant HIV PCR at birth, if infant tests HIV PCR+, do repeat HIV PCR test and initiate ART while awaiting the second PCR test result. • Do HIV PCR at 14 weeks if first PCR negative. • Do infant HIV testing 6 weeks post-cessation of breastfeeding (either HIV PCR or ELISA depending on age). • Encourage maternal ART adherence, and • Monitor maternal viral load as per national guideline. • Provide counselling and support for safe infant feeding.

SITUATION	COMMENT
HIGH RISK NVP and AZT as soon as possible and daily for 12 weeks	
Mother on ART with latest viral load >1000 copies/ml	<ul style="list-style-type: none"> • Do HIV PCR at Birth, if infant tests HIV PCR+, do repeat HIV PCR test and initiate ART while awaiting the second PCR test result. • Do HIV PCR at 14 weeks if first PCR negative. • Do infant HIV testing 6 weeks post-cessation of breastfeeding (either HIV PCR or ELISA depending on age). • If repeat maternal viral load > 1000 copies/ml then continue NVP and AZT if breastfeeding, refer /discuss. • Encourage maternal ART adherence, and • Monitor maternal viral load as per national guideline. <p>Infants of mothers on first line treatment failing:</p> <ul style="list-style-type: none"> • Provide counselling and support for safe infant feeding. <p>Infants of mothers on second or third line regimens and VL >1000 copies/ml:</p> <ul style="list-style-type: none"> • Counsel not to breast feed. • Arrange replacement feeding through dietician and counsel on correct replacement feeding. <p>• Virology hotline: 0800113000</p>
Mother on ART with no HIV Viral Load available	<ul style="list-style-type: none"> • Do Maternal HIV VL and review result. • If VL <1000 copies/mL change prophylaxis to Low risk protocol • If VL >1000 copies/mL manage as above • Provide counselling and support for safe infant feeding.



SITUATION	FEEDING ADVICE	COMMENT
<p>HIGH RISK NVP and AZT as soon as possible and daily for 12 weeks</p>		
<p>Mother on ART with latest viral load > 1000 copies/ml</p>	<p>Infants of mothers on 1st line treatment failing:</p> <ul style="list-style-type: none"> • Encourage breast feeding. <p>Infants of mothers on 2nd or 3rd line regimens and VL > 1000 copies/ml:</p> <p>Advise not to breast feed. Arrange replacement feeding through dietician.</p>	<ul style="list-style-type: none"> • Do HIV PCR at Birth, if infant tests HIV PCR+, do repeat HIV PCR test and initiate ART while awaiting the second PCR test result. • Do HIV PCR at 14 weeks. • Do infant HIV testing 6 weeks post-cessation of breastfeeding (either HIV PCR or ELISA depending on age). • If repeat maternal viral load > 1000 copies/ml then continue NVP and AZT if breastfeeding, refer /discuss. • Encourage maternal ART adherence.



Clinically

- Ill looking, irritable, high pitched cry, dehydrated
- WFH – Negative 2 z-score
- Pale, oral candidiasis
- Temp – 36.8 °C, P-180bpm, RR – 60bpm
- Small volume pulses, decreased skin turgor, CRT – 3sec
- Resp- NAD
- CVS – Normal S1 & S2
- Abd – 3cm hepatomegaly
- CNS – Normotensive AF , moving all limbs



Assessment and Management

- HIV exposed and **high-risk** ongoing exposure with an indeterminate HIV-PCR
- Acute GE with hypovolemic shock and severe dehydration
- Suspected sepsis
- Oral candidiasis

Management

- Shock treated, dehydration and electrolyte abnormalities corrected
- Broad spectrum antibiotics
- Caregivers adherence strengthened



What's the next step ?

1. Repeat HIV PCR
2. Repeat HIV PCR and do a CD4 count
3. Repeat HIV PCR and do a HIV VL
4. Repeat HIV PCR and do a CD4 count and HIV VL
5. Discuss with PIDU on **0800 00 66 03**



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5. Discuss with PIDU on 0800 00 66 03



On review (Baby now 6 weeks old)

- Noted to be gaining weight sub optimally
- Baby is still exclusively breastfed
- Baby still on dual prophylaxis
- HIV PCR – Indeterminate



What's the next step ?

1. Repeat HIV PCR
2. Repeat HIV PCR and do a CD4 count
3. Repeat HIV PCR and do a HIV VL
4. Repeat HIV PCR and do a CD4 count and HIV VL
5. Discuss with PIDU on **0800 00 66 03**



On review (Baby now 8 weeks old)

- Baby has been gaining weight
- Recurrent oral candidiasis
- Mom has been adherent to her treatment
- HIV -PCR – Positive
- HIV VL - LDL



What's the next step ?

1. Repeat HIV PCR
2. Repeat HIV PCR and do a CD4 count
3. Repeat HIV PCR and commence ART
4. Repeat HIV PCR and do a CD4 count and HIV VL
5. Discuss with PIDU on **0800 00 66 03**



What's the next step ?

1. Repeat HIV PCR
2. Repeat HIV PCR and do a CD4 count
3. Repeat HIV PCR and commence ART
4. Repeat HIV PCR and do a CD4 count and HIV VL
5. Discuss with PIDU on 0800 00 66 03



On review (Baby now 10 weeks)

- Baby on ART
- First HIV PCR- Indeterminate
- Second HIV PCR - Positive
- Third HIV PCR - Negative



What's the next step ?

1. Repeat HIV PCR and do a CD4 count
2. Repeat HIV PCR and do a HIV VL
3. Repeat HIV PCR and do a CD4 count and HIV VL
4. Interruption of ART and repeat HIV PCR and VL in 2 weeks
5. Discuss with PIDU via **0800 00 66 03**

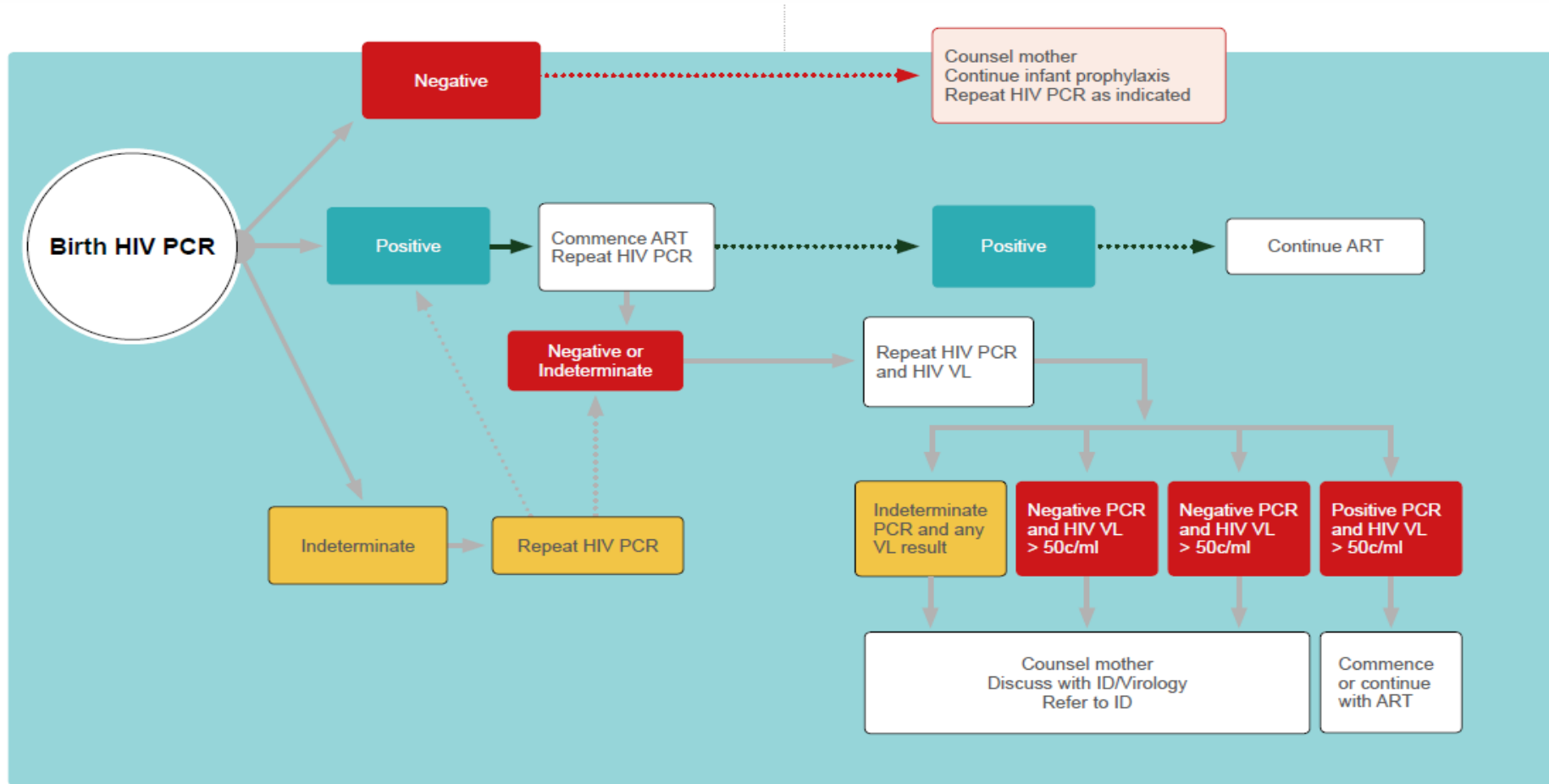


What's the next step ?

1. Repeat HIV PCR and do a CD4 count
2. Repeat HIV PCR and do a HIV VL
3. Repeat HIV PCR and do a CD4 count and HIV VL
4. Interruption of ART and repeat HIV PCR and VL in 2 weeks
5. Discuss with PIDU via 0800 00 66 03



Management of indeterminate/discordant HIV PCR_s



Review in PIDU

- Child gaining weight on ART
- No HIV stigmata
- HIV PCR and HIV VL repeated
- Results 2 weeks later
- HIV PCR – Indeterminate
- HIV VL – 39cp/ml



What's the next step ?

1. Repeat HIV PCR and do a CD4 count
2. Repeat HIV PCR and do a HIV VL
3. Repeat HIV PCR and do a CD4 count and HIV VL
4. Interruption of ART and repeat HIV PCR and VL in 2 weeks
5. HIV Infection confirmed – Continue ART



What's the next step ?

1. Repeat HIV PCR and do a CD4 count
2. Repeat HIV PCR and do a HIV VL
3. Repeat HIV PCR and do a CD4 count and HIV VL
4. Interruption of ART and repeat HIV PCR and VL in 2 weeks
5. HIV Infection confirmed – Continue ART



Take home message

- Choice of feeding
- Risk of exposure and prophylaxis
- Indeterminate and discordant results(effect of ART exposure)
- Any detectable viral load is significant

