

### Appendix 3: Suggested birth plan

Local birth plans may also be used provided they are informed by these guidelines.

#### GENITAL HERPES BIRTH PLAN

Copies to Genitourinary medicine (GUM), Midwife, Obstetrics, Neonatology, and GP (with patient permission)

#### MOTHER'S / BIRTHING PARENT'S DETAILS

Name \_\_\_\_\_ DOB \_\_\_/\_\_\_/\_\_\_

Address \_\_\_\_\_

Mobile \_\_\_\_\_

Hospital number \_\_\_\_\_ GUM number \_\_\_\_\_

Consent given to record GUM number in hospital records

Estimated date of delivery \_\_\_/\_\_\_/\_\_\_

#### MOTHER'S / BIRTHING PARENT'S HERPES DIAGNOSIS

##### Diagnosis (based on PCR)

Genital HSV-1       Genital HSV-2       Presumed genital HSV (type unknown)

Oro-labial cold sores (HSV-1), (PCR confirmation not required)

##### Serology results

HSV-1 IgG positive  HSV-2 IgG positive  serology awaited  serology not done

**Date of acquisition**

Prior to pregnancy  1<sup>st</sup> trimester  2<sup>nd</sup> trimester  3<sup>rd</sup> trimester

If acquired in pregnancy: date of first lesions: \_\_\_/\_\_\_/\_\_\_ at gestation \_\_\_/40

**MOTHER'S / BIRTHING PARENT'S HERPES MANAGEMENT**

**Antiviral suppression in pregnancy**

*Standard:*

Aciclovir 400mg 3 times a day orally from 32 weeks

Valaciclovir 500mg 2 times a day orally from 32 weeks

*High risk of preterm delivery:*

Aciclovir 400mg 2 times a day orally from 22 weeks, then 3 times a day orally from 32 weeks

Valaciclovir 500mg once a day orally from 22 weeks, then 2 times a day orally from 32 weeks

*Preterm prelabour rupture of membranes:*

Aciclovir 5mg/kg IV every 8 hours

Aciclovir 400mg 3 times a day orally from 32 weeks

Valaciclovir 500mg 2 times a day orally from 32 weeks

None: No antiviral suppression has been taken

Other: \_\_\_\_\_

**Planned delivery method**

Vaginal delivery       Planned Caesarean section on \_\_\_ / \_\_\_ / \_\_\_

**POST DELIVERY URGENT MANAGEMENT**

Infants risk:    highest                     high                     low                     lowest

See management for baby for assessing risk, immediate investigations and management at end of document in the neonatal management section

Post natal advice has been given to the parents on seeking urgent medical review if their baby is unwell up to 6 weeks post birth and informing the clinician that their baby has potentially been in contact with HSV

**Contact details for clinical teams**

Specialty	Name	Email	Telephone
Genitourinary medicine consultant			
On call genitourinary medicine			
Obstetrics consultant			
On call obstetrics			
Midwife			
Delivery suite			
Neonatal consultant			
On call neonatology			

Paediatrics infectious diseases consultant (may be regional)			
On call paediatric infectious diseases (may be regional)			

## NEONATAL MANAGEMENT

### Immediate investigations and management

- All cases of possible neonatal HSV should be discussed urgently with the regional Paediatric Infectious Diseases Team [IV, C].
- Any positive HSV test from an infant must be managed as highest risk [IV, C].

Risk	Highest	High	Low	Lowest
<b>Delivery method</b>	<p>All infants with symptoms consistent with HSV infection regardless of delivery method</p> <p>Babies with <u>any</u> positive HSV test even if this is suspected to be detection of maternal HSV</p> <p>Babies born by vaginal delivery in the presence of active <b>initial</b> herpes lesions</p> <p>Birthing mother or parent</p>	<p>Pregnant parent had an initial HSV infection within the previous 6 weeks and baby is asymptomatic and born by:</p> <ul style="list-style-type: none"> <li>• Vaginal delivery</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Caesarean section regardless of duration of rupture of membranes</li> </ul>	<p>Asymptomatic babies born by any delivery method in the presence of active <b>recurrent</b> herpes lesions</p> <p>Asymptomatic babies born at &lt;37 weeks by any delivery method with no active lesions at delivery and a history of HSV infection more than 6 weeks previously</p>	<p>Asymptomatic babies born at &gt;37 weeks by any delivery method with (99) with no active lesions in birthing woman or person at delivery <b>AND a history of</b> HSV infection more than 6 weeks previously</p>

	<p>systemically unwell with possible HSV</p> <p>Birth mother or parent presents post-partum with active primary herpes lesions within 4 weeks of delivery</p>			
<b>Clinical assessment</b>	<p>Urgently inform the neonatal team</p> <p>Urgent assessment soon after birth, bearing in mind that the presentation of neonatal HSV may be non-specific and that skin lesions may not be present</p> <p>Isolate infant from other babies and nurse using barrier methods to reduce the risk of postnatal transmission to other babies. Isolation should continue until neonatal herpes has been excluded or treatment completed in the event of neonatal HSV being confirmed.</p> <p>Ophthalmology review.</p>	<p>Urgently inform the neonatal team</p> <p>Urgent assessment soon after birth bearing in mind that the presentation of neonatal HSV may be non-specific and that skin lesions may not be present. If evidence of neonatal HSV is found, investigate as per symptomatic infants.</p> <p>Isolate infant from other babies and nurse using barrier methods to reduce the risk of postnatal transmission to other babies. Isolation should continue until neonatal herpes has been excluded or treatment completed in the event of neonatal HSV being confirmed.</p>	<p>Urgently inform the neonatal team</p> <p>Urgent assessment soon after birth bearing in mind that the presentation of neonatal HSV may be non-specific and that skin lesions may not be present. If evidence of neonatal HSV is found, investigate as per symptomatic infants.</p>	<p>Inform the neonatal team</p> <p>No investigations required</p> <p>Normal postnatal with a neonatal examination at 24 hours of age, after which the baby can be discharged from the hospital if well and feeding is established</p>
<b>Timing of investigations</b>	Urgent (note maternal or birth parent HSV may still be detected on surface swabs,	24 hours post-delivery (note maternal or birth parent HSV may still be detected on surface	24 hours post-delivery (note maternal or birth parent HSV may still be detected on surface swabs	

	and therefore should be repeated if taken <24 hours of life)	swabs, and therefore should be repeated if taken <24 hours of life)	taken <24 hours of life)	
<b>HSV PCR swab</b>	Any visible lesions Throat swab Nose swab Conjunctival swabs Rectal swab	Throat swab Nose swab Conjunctival swabs Rectal swab	Throat swab Nose swab Conjunctival swabs Rectal swab	
<b>Bloods</b>	HSV PCR (1mL EDTA required) (note may take >24 hours for sufficient HSV replication to occur for a positive result to occur, and so a negative test does not exclude infection, may need to be repeated) (106)  Full blood count Liver function tests Coagulation screen	HSV PCR (1mL EDTA required) (note may take >24 hours for sufficient HSV replication to occur for a positive result to occur, and so a negative test does not exclude infection, may need to be repeated) (106)  Full blood count Liver function tests Coagulation screen	HSV PCR (1mL EDTA required) (note may take >24 hours for sufficient HSV replication to occur for a positive result to occur, and so a negative test does not exclude infection, may need to be repeated) (106)	
<b>Lumbar puncture for CSF</b>	If clinically safe, undertake lumbar puncture for CSF and send for: <ul style="list-style-type: none"> <li>• HSV PCR</li> <li>• Protein</li> <li>• Glucose</li> <li>• Cell count, microscopy and culture</li> </ul>	If clinically safe, undertake lumbar puncture for CSF and send for: <ul style="list-style-type: none"> <li>• HSV PCR</li> <li>• Protein</li> <li>• Glucose</li> </ul> Cell count, microscopy and culture		
<b>Other tests</b>	As guided by the infant's clinical condition (for example chest X-ray)			

	In cases where drug resistance is a concern, discuss with a virologist and consider sending samples for drug resistance testing (available at the UK HAS laboratory at Collingdale)			
<b>Management</b>	<p>Urgently start aciclovir 20mg/kg IV without waiting for results. In cases where there is concern around possible aciclovir resistance or there is a shortage of IV aciclovir, IV foscarnet or cidofovir may be considered.</p> <p>Duration of treatment:</p> <ul style="list-style-type: none"> <li>• All results are negative, and no other cause identified: 10 days</li> <li>• Skin, eye and mouth disease only: 14 days</li> <li>• CNS or disseminated disease, or no CNS obtainable but other positive HSV tests: 21 days. Send blood and CSF (if previously positive) on day 17-20 (near as possible to day 21 depending on</li> </ul>	<p>Urgently start aciclovir 20mg/kg IV without waiting for results. In cases where there is concern around possible aciclovir resistance or there is a shortage of IV aciclovir, IV foscarnet or cidofovir may be considered.</p> <p>Duration of treatment:</p> <ul style="list-style-type: none"> <li>• All results are negative, and baby remains asymptomatic: 10 days</li> <li>• Positive skin swab from completely intact skin: 10 days.</li> <li>• Positive skin swabs from areas of trauma without vesicles should be treated as per highest risk.</li> <li>• If baby becomes symptomatic or if any test is positive manage as per highest risk</li> </ul> <p>A long line may be considered</p>	If any HSV test is positive, manage as per highest risk	

	<p>duration of laboratory result return times) for HSV PCR to ensure negative prior to stopping treatment on day 21. If CSF remains positive, continue IV aciclovir for a further week and repeat blood and CSF prior to stopping IV aciclovir. IF a further positive test is obtained, provide a further week of IV aciclovir.</p> <p>A long line may be considered to avoid extravasation of IV aciclovir.</p> <p>Oral aciclovir prophylaxis at 300mg/m<sup>3</sup> TDS for 6 months to start post IV therapy for all infants with CNS or disseminated disease and considered in infants with skin, eye and mouth disease to reduce risk of CNS recurrences.</p>	<p>to avoid extravasation of IV aciclovir.</p>		
<b>Advice to</b>	Practice good hand hygiene and take care to reduce risk of postnatal infection from maternal genital secretions or other sources including anyone			



<b>parents and carers</b>	with oral HSV-1. Seek urgent medical help if they have concerns regarding their baby in the next 6 weeks, in particular: <ul data-bbox="448 255 1008 414" style="list-style-type: none"><li>• Skin, eye and mucous membrane lesions</li><li>• Lethargy/irritability</li><li>• Poor feeding</li><li>• Fever</li></ul>
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