

## Management of suspected chorioamnionitis

<b>Key Document code:</b>	WAHT-TP- 094	
<b>Key Documents Owner/Lead:</b>	Miss L Veal	Consultant Obstetrician & Gynaecologist
<b>Approved by:</b>	Maternity Governance Meeting/ Medicines Safety Committee	
<b>Date of Approval:</b>	20 <sup>th</sup> May 2022	
	20 <sup>th</sup> May 2025	

### Key Amendments

Date	Amendments	Approved by
20/5/2022	Change in antibiotic regime	Obstetric Governance

### Introduction

Chorioamnionitis is infection of the fetal membranes and amniotic cavity. Evidence is emerging that chorioamnionitis is a significant contributor to permanent neurological damage and cerebral palsy. The relative risks for periventricular leucomalacia and cerebral palsy are 3.0 and 1.9 respectively when a pre term birth is complicated by chorioamnionitis.

Remember that fetus will have a temperature of 1-1.5°C higher than maternal core temperature.

Maternal temperature > 37.8°C in labour due to infection combined with hypoxia may increase the risk of cerebral palsy by 80 fold.

### Clinical findings of chorioamnionitis

- Increased fetal or maternal heart rate (remember that each may happen in isolation)
- Abdominal pain
- Altered vaginal loss (blood/meconium/offensive discharge)
- Pyrexia
- Uterine pain and tenderness

Symptoms can vary from a non-specific feeling of being unwell to those of overwhelming sepsis.

### Investigation

- FBC - rising WCC with neutrophilia
- CRP (serial values may be useful)
- MSSU for culture
- Low vaginal swab for culture and sensitivity
- Peripheral blood cultures

### Management

On suspicion of a diagnosis of chorioamnionitis:

- Maternal observations - pulse every 15 minutes, temperature hourly
- Control maternal pyrexia:
  - Prescribe regular paracetamol.
  - Fan/cool sponging for maternal comfort
- Maintain maternal hydration (IV fluids may be required)
- Commence antibiotics

### Antibiotics

- **No allergy to penicillin**

- IV Benzylpenicillin 2.4g QDS + IV metronidazole 500mg IV TDS + IV Gentamicin (dose and monitoring as per Trust prescribing guideline – <http://www.worcsacute.nhs.uk/antibiotic-treatment-guidelines-adults/>)
- **Non-severe penicillin allergy**
  - IV Cefotaxime 2g 6 hourly and IV metronidazole 500mg 8 hourly.
- **Severe allergy to penicillin (anaphylaxis, angioedema, urticaria or respiratory distress)**
  - IV Vancomycin + IV metronidazole 500mg TDS + IV Gentamicin (dose and monitoring as per Trust Guidelines)

Vancomycin 1g every 12 hours. The fastest recommended rate is 10mg/min (diluted in at least 200ml of sodium chloride 0.9% or glucose 5%) – so for a 1g dose this is 100mins although Medusa recommends 120 minutes (Any administration faster than this triggers histamine release and risk of red-man syndrome).

In the absence of retained products and as long as symptoms have resolved, intravenous antibiotics can be discontinued once afebrile for 24 hours. If converting to oral antibiotics co-amoxiclav 625mg TDS is appropriate if not penicillin allergic.

In the patient with a penicillin allergy the alternative is metronidazole 400mg TDS and co-trimoxazole 960mg BD (Please inform the patient if breastfeeding that there is a small risk of kernicterus in jaundiced infants and of haemolysis in G6PD-deficient infants (due to sulfamethoxazole))

- Fetal Observation - continuous CTG. NB: Fetal blood sampling contra-indicated.
- Consider delivery by the best possible route - discuss with consultant on call
- Always inform neonatal unit staff
- Paediatrician should be present at delivery
- Send placental swabs post delivery for MC&S (Include clinical history and antibiotic use)
- Send swabs from the infant as requested by the paediatrician

## CHORIOAMNIONITIS ANTIBIOTIC GUIDANCE

### **NO PENICILLIN ALLERGY**

Benzympenicillin 2.4 g IV QDS  
AND  
Metronidazole 500mg IV TDS  
AND  
Gentamicin IV\*

### **PENICILLIN ALLERGY WHICH IS NON SEVERE (severe allergy is defined as anaphylaxis, angioedema, respiratory distress or urticaria)**

Cefotaxime 2g IV QDS  
AND  
Metronidazole 500mg IV TDS

### **SEVERE PENICILLIN ALLERGY (anaphylaxis, angioedema, urticarial or respiratory distress)**

Vancomycin 1g IV BD\*  
AND  
Metronidazole 500mg IV TDS  
AND  
Gentamicin IV\*

\*For Vancomycin the fastest recommended rate is 10mg/min (diluted in at least 200ml of sodium chloride 0.9% or glucose 5%) – so for a 1g dose this is 100mins although Medusa recommends 120 minutes (Any administration faster than this triggers histamine release and risk of red-man syndrome).

\*Gentamicin – dose and monitoring as per Trust prescribing guideline – <http://nww.worcsacute.nhs.uk/antibiotic-treatment-guidelines-adults/>

**In the absence of retained products and as long as symptoms have resolved, intravenous antibiotics can be discontinued once afebrile for 24 hours – please see guideline on management of suspected chorioamnionitis for oral antibiotic choice.**

## **Supporting Document 1 - Equality Impact Assessment Tool**

To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;



**Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form**  
Please read EIA guidelines when completing this form

**Section 1 - Name of Organisation** (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

<b>Name of Lead for Activity</b>	<b>Laura Veal</b>
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<b>Details of individuals completing this assessment</b>	<b>Name</b>	<b>Job title</b>	<b>e-mail contact</b>
	Laura Veal	Consultant O&G	lveal@nhs.net
<b>Date assessment completed</b>	<b>26/7/2022</b>		

**Section 2**

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	<b>Title:</b> <b>Management of suspected chorioamnionitis</b>			
What is the aim, purpose and/or intended outcomes of this Activity?	To have prompt recognition and treatment of possible chorioamnionitis in labour.			
Who will be affected by the development & implementation of this activity?	<input type="checkbox"/>	Service User	x	Staff
	X	Patient	<input type="checkbox"/>	Communities
	<input type="checkbox"/>	Carers	<input type="checkbox"/>	Other _____
	<input type="checkbox"/>	Visitors	<input type="checkbox"/>	

Please note that the key documents are not designed to be printed, but to be used on-line. This is to ensure that the correct and most up-to-date version is being used. If, in exceptional circumstances, you need to print a copy, please note that the information will only be valid for 24 hours and should be read in conjunction with the key document supporting information and/or Key Document intranet page, which will provide approval and review information.

Is this:	<input checked="" type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity <input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.)	NICE guidance
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Liased with consultant microbiologist
Summary of relevant findings	Antibiotic choice changed in this review in keeping with NICE guideline from 2021

### Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.** Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		X		
Disability		X		
Gender Reassignment		X		
Marriage & Civil Partnerships		X		
Pregnancy & Maternity	X			Will hopefully reduce the number of babies being admitted to NNU with sepsis
Race including Traveling Communities		X		
Religion & Belief		X		
Sex		X		
Sexual Orientation		X		
Other Vulnerable and		X		

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Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
<b>Disadvantaged Groups</b> (e.g. carers; care leavers; homeless; Social/Economic Nodeprivation, travelling communities etc.)				
<b>Health Inequalities</b> (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		X		

#### Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
	N/A			
<b>How will you monitor these actions?</b>				
<b>When will you review this EIA?</b> (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)				

#### Section 5 - Please read and agree to the following Equality Statement

##### 1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

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<b>Signature of person completing EIA</b>	Laura Veal
<b>Date signed</b>	26/7/2022
<b>Comments:</b>	
<b>Signature of person the Leader Person for this activity</b>	Laura Veal
<b>Date signed</b>	26/7/2022
<b>Comments:</b>	



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