

# **Prolonged Jaundice Neonatal Clinical Guideline**

**V3.0**

**March 2022**

## 1. Aim/Purpose of this Guideline

- 1.1. To provide a pathway for investigation of prolonged jaundice (>14 days in a term infant (>37 weeks), > 21 days in a preterm infant).
- 1.2. This version supersedes any previous versions of this document.

### **Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation**

The Trust has a duty under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team

Royal Cornwall Hospital Trust [rch-tr.infogov@nhs.net](mailto:rch-tr.infogov@nhs.net)

## 2. The Guidance

### 2.1. Background

In accordance with current NICE guidance and after thorough review of the supporting evidence this guideline outlines investigations required for babies with prolonged jaundice. It is important to establish whether the baby is clinically well or unwell to determine the extent of screening tests required.

Please complete form CHA 4169 –Appendix 3 for each patient seen.

### 2.2. History:

- Gestation and current age
- Birth weight and current (recent) weight – check baby is gaining weight
- Feeding Type
- Treated for jaundice as an inpatient?
- Day 5 Newborn Blood Spot Screening test sent

- Stool – look out for pale chalky stools
- Urine – look out for urine that stains the nappy

### 2.3. Investigations/discharge:

As per flowcharts.

- Measure the conjugated bilirubin; a conjugated bilirubin level greater than 25 micromol/litre may indicate serious liver disease.
- Full blood count
- Blood group (mother and baby) and DAT (Coomb's test)
- Urine culture – if infants are not at/over birth weight
- Ensure the routine metabolic screening (Day 5-8 NBBS) has been performed

#### Urine Culture:

Clinically well babies with reassuring histories do not require routine urine microscopy and culture, as there is insufficient evidence to support this practice<sup>1</sup>. The other two studies referenced by NICE to support current guidance, also did not have any data to support an association between clinically well jaundiced neonates at 2-3 weeks of age, with urinary tract infection<sup>2,3</sup>.

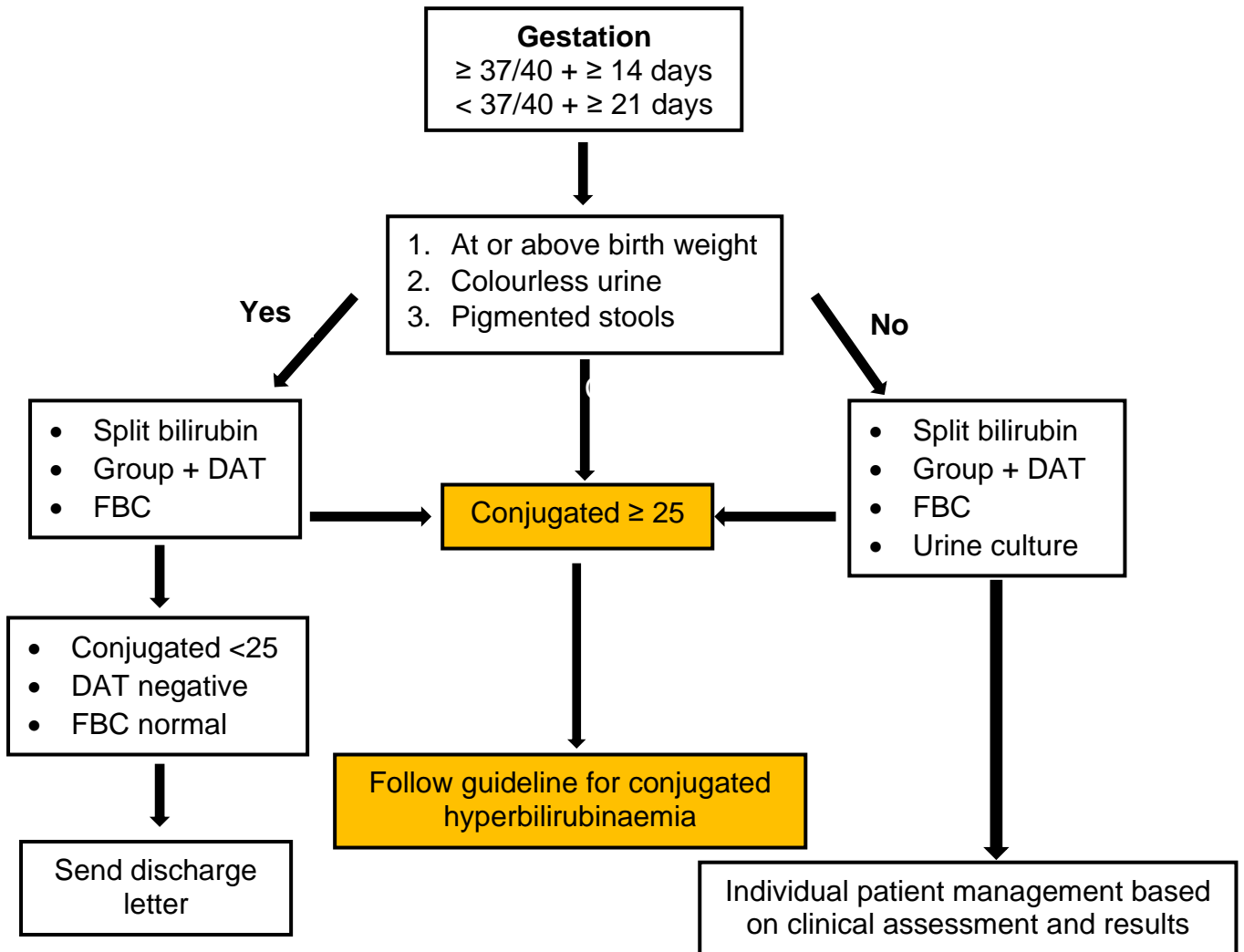
Urine cultures should be performed on infants who have not reached their birth weight by the day of prolonged jaundice.

- 2.3.1. If unremarkable history and clinically well baby, discharge home with advice pre-results.
- 2.3.2. Inform parents we will telephone within 24 hours if abnormal results, otherwise letter to be sent in post informing of normal results and discharge from clinic.

### 2.4. Please see flowchart on next page

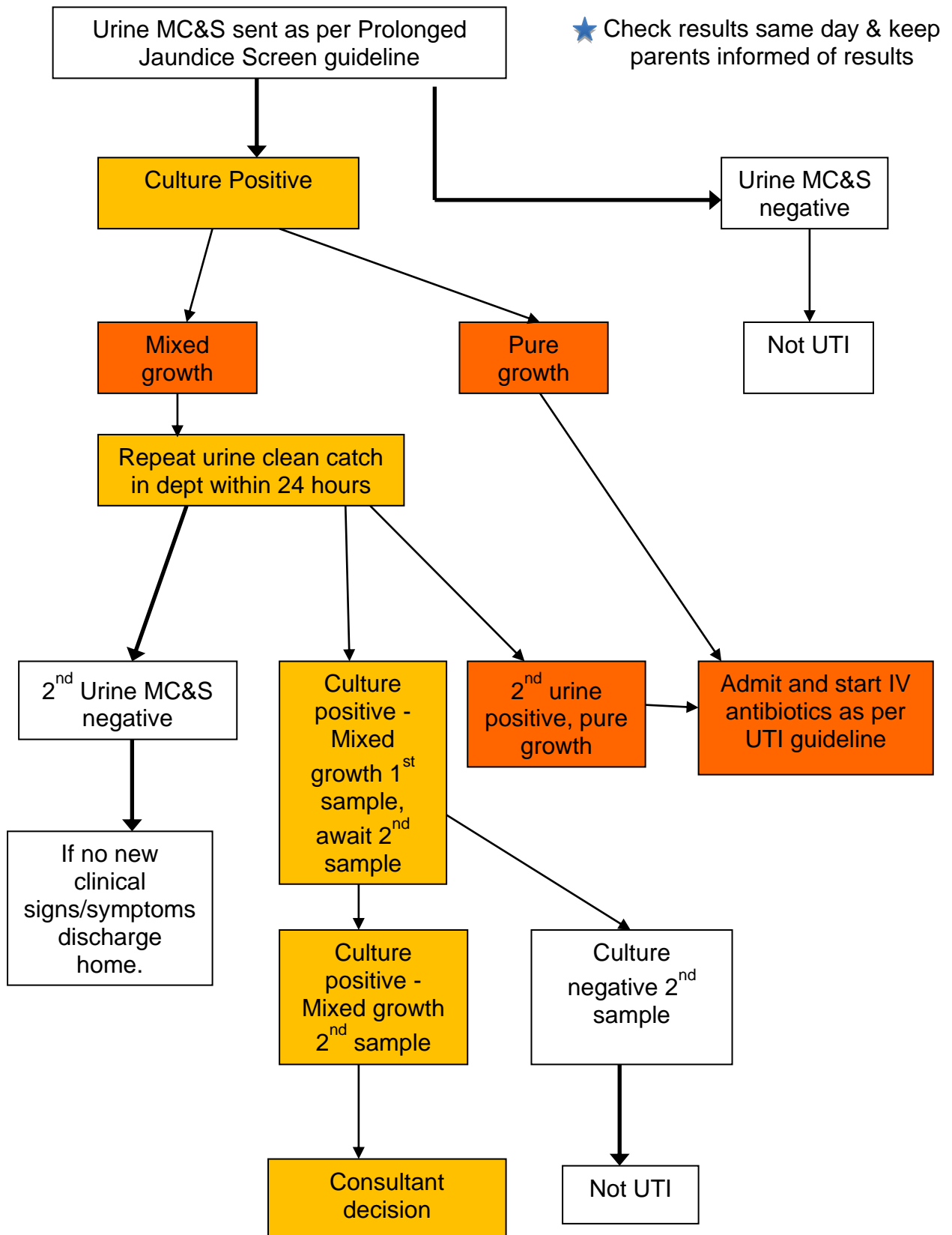
## 2.4. FLOWCHART

### Prolonged Jaundice Screen



Any other concerns/positive results, discuss with Registrar or Consultant or refer to relevant guideline. \*\* Consider partial sepsis screen

## 2.5. Pathway for Prolonged Jaundice Screen Urine Results Action Pilot Protocol



### 3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Key Changes to practice
Lead	Neonatal guidelines lead
Tool	Audit using a WORD or Excel template. To be included in the Neonatal Clinical Audit Programme. Findings reported to the Neonatal Audit and Guidelines meeting.
Frequency	As dictated by audit findings
Reporting arrangements	Neonatal Audit and Guidelines meeting
Acting on recommendations and Lead(s)	Neonatal guidelines lead
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within 3 months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders

### 4. Equality and Diversity

- 4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Inclusion & Human Rights Policy'](#) or the [Equality and Diversity website](#).
- 4.2. Equality Impact Assessment  
The Initial Equality Impact Assessment Screening Form is at Appendix 2.

## Appendix 1. Governance Information

Information Category	Detailed Information
<b>Document Title:</b>	Prolonged Jaunice Neonatal Clinical Guideline V3.0
<b>This document replaces (exact title of previous version):</b>	Prolonged Jaundice Neonatal Clinical Guideline V2.0
<b>Date Issued/Approved:</b>	February 2022
<b>Date Valid From:</b>	March 2022
<b>Date Valid To:</b>	March 2025
<b>Directorate / Department responsible (author/owner):</b>	Lel George; Advanced Neonatal Nurse Practitioner
<b>Contact details:</b>	01872 252667
<b>Brief summary of contents:</b>	This guideline is designed to provide direction on prolonged jaundice pathway for investigation and management.
<b>Suggested Keywords:</b>	Neonatal. Jaundice. Prolonged. Neonate.
<b>Target Audience:</b>	RCHT: Yes CFT: No KCCG: No
<b>Executive Director responsible for Policy:</b>	Medical Director
<b>Approval route for consultation and ratification:</b>	Neonatal Audit and Guidelines Meeting
<b>General Manager confirming approval processes:</b>	Mary Baulch
<b>Name of Governance Lead confirming approval by specialty and care group management meetings:</b>	Caroline Amukusana
<b>Links to key external standards:</b>	<a href="https://www.nice.org.uk/guidance/cg98">https://www.nice.org.uk/guidance/cg98</a>

Information Category	Detailed Information
<b>Related Documents:</b>	<ol style="list-style-type: none"> <li>1. Hannam S, McDonnell M, Rennie JM. Investigation of prolonged neonatal jaundice. Acta Paediatrics. 2000; 89: 694-7<sup>2</sup></li> <li>2. Tiker F, Tarcan A, Kilicdag H and Berkan G. Early onset conjugated hyperbilirubinaemia in newborn infants. Indian Journal of Paediatrics. 2006; 73: 409-12<sup>3</sup></li> <li>3. Sarlik Y. Prolonged jaundice in newborns: what is it actually due to? Gazi Medical Journal. 2003; 14:147-151<sup>4</sup></li> </ol>
<b>Training Need Identified?</b>	No
<b>Publication Location (refer to Policy on Policies – Approvals and Ratification):</b>	Internet & Intranet
<b>Document Library Folder/Sub Folder:</b>	Clinical/ Neonatal

### Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
12.2.15	V1.0	Initial Issue and formatting	Dr J Anderson Neonatal Formatted by Kim Smith
21.08.18	V2.0	Full review. Removed need to phone screening lab for TSH result, add FBC. Minor formatting changes	Dr P Munyard
May 2021	V2.1	Changed conjugated threshold for further screening to 25 from 20 (in line with conjugated hyperbilirubinaemia guideline) Minor changes to format, moved results and outcome sections from main body of the guideline to the appendices. Changed wording to 'within 24 hours' from 'the same day' in section 2.6.2 Urine chromatography removed from investigations required for 'full' prolonged jaundice screen. Flow diagrams 2.7 and 2.8 amended and simplified.	L George; ANNP



Date	Version Number	Summary of Changes	Changes Made by
Feb 2022	V3.0	Guidance updated to be in line with current NICE guidance on PJS; including removal of additional investigations previously undertaken outside of guidance	Jess Milling; ANNP

**All or part of this document can be released under the Freedom of Information Act 2000**

**This document is to be retained for 10 years from the date of expiry.**

**This document is only valid on the day of printing**

### **Controlled Document**

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

## Appendix 2. Equality Impact Assessment

### Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity & Inclusion Team  
[richt.inclusion@nhs.net](mailto:richt.inclusion@nhs.net)

Information Category	Detailed Information
<b>Name of the strategy / policy / proposal / service function to be assessed:</b>	Prolonged Jaundice Neonatal Clinical Guideline V3.0
<b>Directorate and service area:</b>	Neonatal
<b>Is this a new or existing Policy?</b>	Existing
<b>Name of individual completing EIA</b> (Should be completed by an individual with a good understanding of the Service/Policy):	Neonatal Audit and Guidelines Group
<b>Contact details:</b>	01872 252667

Information Category	Detailed Information
<b>1. Policy Aim - Who is the Policy aimed at?</b> (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To provide a pathway for investigation of prolonged jaundice (>2 weeks in a term infant, > 3 weeks in a preterm infant). The guidance is aimed at medical and nursing staff.
<b>2. Policy Objectives</b>	As above
<b>3. Policy Intended Outcomes</b>	Evidence based and standardised practice.
<b>4. How will you measure each outcome?</b>	See section 3
<b>5. Who is intended to benefit from the policy?</b>	Neonatal patients

Information Category	Detailed Information
<b>6a. Who did you consult with?</b> (Please select Yes or No for each category)	<ul style="list-style-type: none"> <li>• Workforce: Yes</li> <li>• Patients/ visitors: No</li> <li>• Local groups/ system partners: No</li> <li>• External organisations: No</li> <li>• Other: No</li> </ul>
<b>6b. Please list the individuals/groups who have been consulted about this policy.</b>	<b>Please record specific names of individuals/ groups:</b> Neonatal Audit and Guidelines Group
<b>6c. What was the outcome of the consultation?</b>	Approved- 16 <sup>th</sup> February 2022
<b>6d. Have you used any of the following to assist your assessment?</b>	<b>National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys:</b> <b>No</b>

## 7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
<b>Age</b>	No	
<b>Sex</b> (male or female)	No	
<b>Gender reassignment</b> (Transgender, non-binary, gender fluid etc.)	No	
<b>Race</b>	No	Any information provided should be in an accessible format for the parent/ carer needs- i.e., available in different languages if required/access to an interpreter if required

Protected Characteristic	(Yes or No)	Rationale
<b>Disability</b> (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	Those parent/ carer with any identified additional needs will be referred for additional support as appropriate- i.e., to the Liaison team or for specialised equipment.  Written information will be provided in a format to meet the family's needs e.g., easy read, audio etc.
<b>Religion or belief</b>	No	All staff should be aware of any beliefs that may impact on the decision to treat and should respond accordingly
<b>Marriage and civil partnership</b>	No	All staff should be aware of any marital arrangements that may have an impact on care (for example: separated parents).
<b>Pregnancy and maternity</b>	No	
<b>Sexual orientation</b> (e.g. gay, straight, bisexual, lesbian etc.)	No	

**A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.**

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Neonatal Audit and Guidelines Group

**If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here: [Section 2. Full Equality Analysis](#)**

## Appendix 3. CHA form 4169

[CHA4169: Prolonged Jaundice Screen Form - Paediatrics \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)

## Appendix 4 Letter contents for parents/guardians

One + all | we care



To the Parent of \_\_\_\_\_

Thank you for attending our Prolonged Jaundice clinic. I am pleased to let you know that our assessment indicates that your baby's jaundice does not have a serious cause. In most cases prolonged jaundice is harmless, and due to immaturity of the body's processes for dealing with the yellow substance bilirubin. We expect that the jaundice will gradually fade and disappear over the next few weeks.

If the jaundice fades away as expected and your baby remains well, there is no need for any further follow-up in hospital. A further review would be necessary if the jaundice is not fading or is increasing, or if your baby develops dark urine, pale stools, or is not thriving. If you think your baby has any of these problems or if you have any other concerns, please seek advice from your health visitor and GP.

Yours Sincerely,