ASHFORD & ST PETER'S HOSPITALS NHS TRUST

Prolonged Jaundice Screening (PJS)

Prolonged jaundice is defined as jaundice:

>14 days in term babies (> 37 weeks)

>21days in preterm babies (< 37 weeks)

Management of a baby with prolonged jaundice:

- Most PJS referrals are sent through electronic referral system using BADGERnet. NICU receptionists print out the referral form and will ask NICU short day registrar/senior SHO /ANNP to do the blood forms on ICE
- Occasionally, telephone referrals are made by GP's or Health visitors. They should ring switchboard 01932872000 and bleep HDU /LW SpR on 5302 to discuss the referral. Please have baby's details including hospital or NHS number and GP when referring for PJS. If so, NICU short day registrar/senior SHO /ANNP should take a history and complete the referral form with all details for phlebotomy clinic, including parents telephone details and the referrers phone details – to notify if any change in clinic times
- Once referral is accepted, and appointment made on Phlebotomy folder, the NICU receptionists will send out an appointment letter to the family. If it is a short notice, NICU doctor/ANNP should ring the family to provide the details of the appointment, as the letter may be delayed in post.
- The blood forms should be requested in ICE as soon as possible and not wait for the day before clinic, so its ready for Phlebotomy clinic. No need to print the forms.
- The phlebotomy clinic happens in Ashford hospital in the Children's out-patient department every Monday morning.
- Babies will not be seen by a doctor in phlebotomy clinic, so only well babies should be referred for blood tests.
- Babies should not go to A&E for blood tests unless they are acutely unwell.
- If a baby is over 4 weeks of age at referral, and we are unable to provide an appointment within 1 week, please refer baby to Paediatric team for review and blood tests, as necessary.
- If the baby needs a clinical review, they will be booked in the neonatal rapid access clinic, which happens on a Tuesday afternoon.
- Results are reviewed by the SpR and electronic letter done to GP and parents within a week
- If results abnormal, they should be discussed with the HDU consultant and a plan for further appointment made according to the guidelines
- **Pale stools or Conjugated hyperbilirubinaemia must be discussed urgently with the attending or named consultant**. The causes, such as biliary atresia are potentially serious and should prompt early discussion with a specialist liver unit. These discussions can be initiated even while awaiting the results of first line investigations. The BSPGHAN Investigation of Neonatal Conjugated Hyperbilirubinaemia - https://old.bspghan.org.uk/sites/default/files/guidelines/2016_guideline_for_the_investigation_of_neonatal_conjugated_jaundice.pdf (Appendix 1) document should be printed and inserted in the baby's notes, using its table of investigations for further guidance.
- **Persistent prolonged unconjugated jaundice** – Investigate as per guidelines and arrange follow up appointment in Neonatal rapid access clinic.

References:

Hannam S, McDonnell M, Rennie JM: Investigation of Prolonged Neonatal Jaundice, Acta Paediatr 2000; 89:694 – 7
NICE guidelines Oct 2016: Neonatal Jaundice
BSPGHAN Liver Steering Group Dec 2016: Investigation of Neonatal Conjugated Hyperbilirubinaemia

September 2010 /Dr. Tracy Lawson
Amended May 2012 /Drs T Lawson; T Otunla
Updated November 2014 (T Otunla)
Amended April 2016 (V Ponnusamy)
Amended Sep 2021 (V Ponnusamy)

Investigations for and management Prolonged Jaundice Screen

We divide investigations into 3 groups:
Baseline investigations for all babies with visible prolonged jaundice;
Further investigations if significant unconjugated or conjugated bilirubin is detected (see below);

Investigations	Who should have them?	Tests to be requested
Baseline	All referred infants at the time of referral In addition, if clinical concerns	• Total and Conjugated bilirubin (Do not request additional blood tests without clear reason documented in the booking form)
Significant unconjugated hyperbilirubinaemia	Babies with total bilirubin >250 micromols/ litre & conjugated bilirubin <25micromols/ litre	• G6PD • Baby's blood group (if not already known) • DAT (if not already known) • Hb and reticulocytes • blood film (for evidence of haemolysis) – this must be discussed with the laboratory • Thyroid function tests – only if Neonatal blood spot not done **Arrange phlebotomy clinic for the above tests and book in Neonatal rapid access clinic (NRAC) – first available appointment if baby needs a review**
Conjugated hyperbilirubinaemia on blood tests or babies with history of chalky stool/dark urine	Babies with conjugated bilirubin >25 micromols/litre and / or > 25% of the total bilirubin or Babies with chalky stool/dark urine, the infant should be investigated promptly for possible underlying liver disease.	These additional investigations should be considered after senior discussion +/- discussion with Liver Team at King's The BSPGHAN Investigation of Neonatal Conjugated Hyperbilirubinaemia (Appendix 1) document should be printed and inserted in the baby's notes, using its table of investigations for further guidance. **Discuss with consultant and arrange for review in Neonatal rapid access clinic (NRAC) – first available appointment** **Arrange to have above blood tests in phlebotomy clinic, ideally prior to NRAC if possible** **Arrange to have ultrasound as OP prior to NRAC**

Blood Bottles for specific tests: (As per Surrey Pathology Services)

LFTs, Bilirubin, TFTs	1 yellow
Group + DAT	1 pink
G6PD	1 lavender
Hb + reticulocytes	1 lavender

PROLONGED JAUNDICE REFERRAL FORM

ONLY TO BE ACCEPTED FOR BABIES >14 DAYS IN TERM BABIES AND >21 DAYS IN PRETERM BABIES (UNLESS SPECIFIC CLINICAL CONCERNS)

Date of referral: _____
Referrer's name: _____
Referrer's position: MIDWIFE ☐ GP ☐ HEALTH VISITOR ☐ OTHER _____
Referrer's contact number: _____

Name of Baby	Name of Mother Maternal DOB:
Date of birth	Contact no:
NHS no:	ADDRESS:
Hospital No (if born at SPH):	GP details:
Gestation at birth: Current age in days:	Where was the baby born?

HISTORY

Mode of feeding (please tick) BREAST ☐ FORMULA ☐ MIXED ☐

	YES	NO
Is the baby considered to be well?	☐	☐
Is baby feeding well?	☐	☐
Is baby's weight gain acceptable?	☐	☐
Is baby's stool pale?	☐	☐
Is baby's urine dark?	☐	☐
Has a new born blood spot screen been performed?	☐	☐
Are there any other concerns?	☐	☐

Please state your concerns:

_____
_____
_____

Baby referred to Phlebotomy on Oak Ward? YES ☐ NO ☐

- Book baby a clinic slot in the clinic sheet and inform referrer of details
- Complete electronic ICE blood forms for total and conjugated serum bilirubin.
- Babies not born at SPH need – INFORM NICU ward clerk ASAP to create new notes and register on PAS
- Chase maternal Blood group on system …….

DOCTOR TAKING REFERRAL _____

DATE OF PHLEBOTOMY CLINIC APPOINTMENT _____Time: _____

REVIEW OF RESULTS AND OUTCOME

RESULTS:

Total Bilirubin ……. Conjugated Bilirubin…….

If insufficient bloods or haemolysed bloods – please book again in Phlebotomy clinic – complete new referral sheet and a note to phlebotomy on the clinic sheet

Details……..

ASSESSMENT

Normal blood test results YES ☐
Letters done and approved YES ☐
Discharged YES ☐

Abnormal results:- Details:

……

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Outcome:

Booked for further tests in Phlebotomy clinic ☐ Details ……..

Booked in Neonatal rapid Access clinic ☐ Details ……..

Booked in Consultant Clinic ☐ Details ……..

Admit to paediatric ward ☐ Details ……..

DOCTOR completing the review _____ Date: _____
(Name and Signature)