3.1 QUICK REFERENCE GUIDE – JAUNDICE

Transcutaneous Bilirubin Guideline

**Note:** TcB should be performed in infants ≥35 w gestation and ≥2000gm. Infants at risk of aggressive haemolysis require a low threshold for TcB and/or SBR. TcB should not be relied upon for monitoring serum bilirubin levels following commencement of phototherapy.

<table>
<thead>
<tr>
<th>Jaundice onset</th>
<th>TcB</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;24 hrs</td>
<td>-------</td>
<td>Perform SBR</td>
</tr>
<tr>
<td>24-48 hrs</td>
<td>&gt;140 µmol/L</td>
<td>Perform SBR</td>
</tr>
<tr>
<td>48-72 hrs</td>
<td>&gt;200 µmol/L</td>
<td>Perform SBR</td>
</tr>
<tr>
<td>&gt;72 hrs</td>
<td>&gt;260 µmol/L</td>
<td>Perform SBR</td>
</tr>
</tbody>
</table>

Phototherapy nomogram for the newborn infant ≥35 w gestation.¹
Approach to Jaundice in the Infant ≥35 w Gestation
All infants should be clinically evaluated for jaundice every 8-12 hrs

- **High Risk**
  - Any of:
    - Rh iso-immunisation
    - In-utero blood Tx, IVIG
    - Rh(-) mother, Ab(+)
    - High in utero Ab titre to any antigen

- **Moderate Risk**
  - Any of:
    - Maternal Group O, Rh(-)
    - Maternal minor antigens identified
    - No antenatal Ab screen

- **Low Risk**
  - All of:
    - Term ≥38 w
    - Jaundice onset ≥48 hrs
    - Ensure no maternal RFs
    - Non-O Blood group
    - Anti-D given to Rh(-)
    - No minor antigens

**At Delivery:**
- Cord blood:
  - DAT*, SBR then SBR 4-6 hrly initially to obtain rate of rise
  - Cap/venous blood: FBP
  - High risk: 10μmol/L/hr
  - [Discuss with Paed SR/Cns]

**Within 24hrs of birth:**
- Perform DAT*
  - TcB or SBR if jaundiced
  - TcB/SBR 12-24hrly initially, especially if DAT(+)

**If Jaundiced:**
- TcB / SBR
  - Repeat TcB/SBR 12-24hrly
  - Low threshold for:
    - DAT*
    - TcB / SBR 6-12hrly
    - PGL, CRP, FBP

**Consult Phototherapy Chart**
See ‘QRG’ for TcB and SBR Phototherapy Guidelines

- **Needs PhotoRx? or DAT (+)**
  - Yes
    - Discuss with Paed Consultant/SR;
    - ?SCN Admission
    - PhotoRx strategy
    - Repeat SBR in 4-6 hrs
  - No
    - Repeat SBR in 6-12 hrs if rate of rise clear
    - If below treatment range at 24 hours treat as per moderate risk

- **Needs PhotoRx?**
  - Yes
    - Start PhotoRx
    - SBR, DAT next day*
    - Wean PhotoRx daily
    - Consider request for SBR day after discharge to monitor ‘rebound’
  - No
    - TcB / SBR in 12-24 hrs

- **Needs PhotoRx?**
  - Yes
    - Start PhotoRx
    - SBR, DAT following day*
    - Daily weight
    - Attention to feeding
  - No
    - Inspect for jaundice daily
    - TcB / SBR if jaundiced

**Discharge Planning**
- Consider SBR day after discharge for DAT(+) jaundice needing PhotoRx (VMS collection or in EC)
- Physiological jaundice may be monitored by parents / VMS at home. SBR may be performed pm
- Continuing admission for 24 hours after stopping PhotoRx is not required if the infant is feeding well, weight is <10% below BW and monitoring (via VMS or CHN) is available post-discharge
- Haemolytic jaundice (e.g. ABO, minor antigen or Rh incompatibility) is more likely to ‘rebound’, has more prolonged course and on occasion may result in anaemia in the weeks after discharge.

* Direct Antibody Test (DAT) should be done on all infants at risk of haemolysis and any infant requiring phototherapy.