Jaundice - Quick Reference Guide

Transcutaneous Bilirubin (TcB) Guideline

**Note:** TcB should be performed in infants ≥ 35 weeks gestation and ≥ 2000 grams. 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 hours</td>
<td>_____</td>
<td>Perform SBR</td>
</tr>
<tr>
<td>24-48 hours</td>
<td>&gt;140 µmol/L</td>
<td>Perform SBR</td>
</tr>
<tr>
<td>48-72 hours</td>
<td>&gt;200 µmol/L</td>
<td>Perform SBR</td>
</tr>
<tr>
<td>&gt; 72 hours</td>
<td>&gt;260 µmol/L</td>
<td>Perform SBR</td>
</tr>
</tbody>
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**Phototherapy Nomogram for the Newborn Infant ≥ 35 Weeks Gestation**¹
Approach to Jaundice in the Infant ≥35 w Gestation
All infants should be clinically evaluated for jaundice every 8-12hrs

High Risk

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

At Delivery:
- Cord blood: DAT*, SBR, FBP
- SBR 4-6 hrly initially to obtain 'rate of rise'
  *High risk: 10μmol/L/hr
- Discuss with Paed SR / Consultant

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
  - Phototherapy strategy
  - Repeat SBR in 4-6 hrs

- No
  - Repeat SBR in 6-12 hrs until 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

Discharge Planning
- Consider SBR day after discharge for DAT(+) jaundice needing PhotoRx (VMS collect 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

needs PhotoRx?

- Yes
  - Start PhotoRx
  - SBR, DAT following day*
  - Daily weight
  - Attention to feeding

- No
  - Inspect for jaundice daily
  - TcB / SBR if jaundiced

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