

What's New in transcutaneous bilirubin (TcB) screening?

December 9th, 2015- New transcutaneous bilirubin meters (JM 103 and JM105) are now being used by the nurses on the Maternal & Newborn Care Unit and Healthy & Home. All newborn (>35 weeks) will be screened using a TcB meter. All TcB meters used by the program have undergone accuracy and precision testing in SHR and a customized TcB nomogram (n>1000) has been developed. **(‘BILI TOOL’ NOT INTENDED TO BE USED WITH TcB SCREENING)**

The nomogram will indicate when a serum TSB is necessary. DATs will be done on all newborns requiring a serum TSB. Nurses will use a clinical algorithm adapted from the Canadian Paediatric Society’s (CPS) guidelines to determine follow-up. Please note that you will have the option to begin to phototherapy, prior to discharge, if the TSB is within 20-30 points of treatment range

TcB screening readings are determined from a painless flash of light onto the infant’s sternum from a hand held instrument called a jaundice meter. The light measures optical densities in the blue and green wavelength regions which have been shown to have a linear correlation with serum bilirubin concentration.

The CPS guidelines for screening, prevention and management (reaffirmed 2011) recommend repeat clinical assessment of infants for jaundice during the first 24 hours of age and universal screening with serum or cutaneous testing by 72 hours of age. In addition, follow-up by a health provider able to obtain prompt testing 24-48 hours after discharge is recommended. Eligible babies from within SHR will receive follow-up TcB testing by Healthy & Home.

Why use TcB screening?

- Objective, accurate, quick, painless, point-of-care testing

Who is eligible for TcB screening?

- Newborns ≥ 35 week gestation
- Less than 14 days of age, > 18 hours of age
- Never having received exchange transfusion or phototherapy

When is TcB screening performed?

- Prior to Newborn Metabolic Screen (PKU >24hrs)
- Prior to discharge 18-24 hours of age
- Daily in hospital and within 4 hours of discharge
- After TSB testing when follow-up is indicated; a TcB will always be done first
- Any time based on clinical assessment and/or risk factors
- Transfers from NICU to Maternal Newborn Unit
- H & H visits will include screening per protocol

Which babies will have TSB/DAT drawn?

- TSB & DAT will be drawn if jaundice appears before 24 hours
- TSB & DAT will be drawn if indicated by the TcB nomogram
- If further testing is required, TcB will be repeated within 24-48 hours and TcB nomogram used to direct need for repeat TSB
- TSB will be drawn if testing required and jaundice meter unavailable

When is the Physician notified?

- MRP/Roster notified of abnormal TSB and DAT results and will direct care using CPS endorsed TSB algorithm
- TcB results can be faxed to you upon your request.

Questions about the TcB program?

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