

reliable indicator. Also, bilirubin (especially at high levels) is not uniformly distributed in the skin. The nurse should observe the infant in natural daylight for a true assessment of color.

The TcB is a useful screening device and is used to detect neonatal jaundice in full-term infants. Because phototherapy reduces the accuracy of the instrument, its value is limited to assessments made before the initiation of phototherapy. Institutions in which the device is used set up their own criteria based on their experience with their particular instrument. Blood samples are also taken for the measurement of bilirubin in the laboratory.

With short hospital stays, jaundice may appear after discharge. A careful history from the parents may reveal significant familial patterns of hyperbilirubinemia (e.g., older siblings who had jaundice). Other considerations in assessment include the ethnic origin of the family (e.g., higher incidence in Asian infants); type of delivery (e.g., induction of labor); and infant characteristics, such as weight loss after birth, gestational age, sex, and the presence of any bruising. The method and frequency of feeding are assessed. Prevention of jaundice may be possible with early introduction of feedings and frequent nursing without supplementation. Every effort is made to provide an optimum thermal environment to reduce metabolic needs.

Nursing Alert

While blood is drawn, phototherapy lights are turned off. Blood is transported in a covered tube to avoid a false reading as a result of bilirubin destruction in the test tube.

Quality Patient Outcomes

Neonatal Hyperbilirubinemia

Total serum bilirubin level will be maintained below high-risk critical value (as determined on the hour-specific total serum bilirubin nomogram).

Nursing Alert

Evidence of jaundice that appears before the infant is 24 hours old