Berkshire & Surrey Pathology Services



A joint venture between Ashford and St. Peter's Hospitals NHS Foundation Trust, Frimley Health NHS Foundation Trust, Royal Berkshire NHS Foundation Trust and Royal Surrey County Hospital NHS Foundation Trust. Legal entity host Frimley Health NHS Foundation Trust

Network protocol for initial assessment of neonatal jaundice using the Draeger transcutaneous jaundice meter (JM103/105)

January 2019

The Drager JM103/105 Jaundice meter is NOT suitable for use on babies

- over 14 days old
- who have had phototherapy
- who have received a transfusion
- who have bruised, discoloured or keratinized skin in the area to be tested
- 1. Use a transcutaneous jaundice meter in well babies with a gestational age of 35 weeks or more and a postnatal age over 24 hours
- 2. Permit use in babies of all skin tones whilst acknowledging that over-estimation of serum bilirubin is more likely in the darker skinned patients
- 3. The jaundice meter must only be used on the sternum
- 4. If a transcutaneous jaundice meter is not available, measure the serum bilirubin
- 5. Take 3 consecutive readings from the sternum and use the highest reading to inform subsequent management
- 6. Compare all transcutaneous jaundice meter results to the age-appropriate bilirubin chart
- 7. If the transcutaneous measurement is within 50 μ mol/l below the phototherapy line, perform serum bilirubin measurement immediately OR repeat jaundice meter check in 6 12 hours dependent upon the clinical presentation
- 8. If the transcutaneous measurement is above the phototherapy line or greater than 250 μ mol/l, perform serum bilirubin measurement
- 9. Always use serum bilirubin measurement to determine the bilirubin level in babies with jaundice in the first 24 hours of life as assumed to be haemolysing
- 10. Always use serum bilirubin measurement for babies known to be at or above the relevant treatment threshold for their postnatal age, and for all subsequent measurement. This includes all babies that are undergoing or who have received phototherapy or exchange transfusion
- 11. Always use serum bilirubin measurement to determine the bilirubin level in babies less than 35 weeks gestational age

Protocol approved by BSPS POCT Specialty Lead and Neonatal Unit representatives from all Partner Trusts.