

Transcutaneous Bilirubin Measurement Correlation with Total Serum Bilirubin in Healthy Newborns

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Objective: To evaluate the relation between the transcutaneous bilirubin (TcB) measurement and the total serum bilirubin (TSB) measurement in the newborns in Bahrain.

Setting: Salmaniya Medical Complex and Jidhafs Maternity Hospital, Bahrain.

Design: A Prospective Study.

Method: Newborns from May to September 2015 were included in the study. Serial transcutaneous bilirubin (TcB) measurements were obtained utilizing the Dräger Jaundice Meter JM-103. Simultaneously, TSB measurements were performed for comparison.

Result: Eighty-eight newborns were included. One hundred twenty-eight transcutaneous bilirubin TcB measurements were paired with TSB measurement. The mean \pm SD of (TcB–TSB) difference for the 128 paired measurements was 1.09 ± 2.16 mg/dL, with differences ranging from 6.18 mg/dL to 7.00 mg/dL. The correlation between the paired measurements was 0.75 (P-value < 0.0005).

Conclusion: TcB measurement is a viable tool for bilirubin screening in newborns.

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