

Posters

NAME, D.O.B, Hospital number, Gestation, Background

Day, Current problems, Medications, Total fluids

Plan, To do

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A PRACTICAL GUIDE TO MANAGING PAEDIATRIC PROBLEMS ON THE POSTNATAL WARD

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Background: When a doctor embarks on their first paediatrics rotation covering the postnatal wards they often find that their training and previous experience leave them ill prepared for the task at hand.

Methods: It was decided that the above problem could be best addressed by the development of an iPhone application specifically tailored to junior doctors' needs. The application was developed by a team of paediatricians and an IT consultant. It is due to be distributed internationally via the iTunes store.

Results: The application developed can be divided into 3 main parts. Firstly, there is an electronic book which focuses on providing practical up to date advice on how to manage the most common problems the junior doctor will encounter on the postnatal wards. Secondly, there is an audiovisual section containing videos and audio presentations by experienced paediatricians on topics such as how to carry out a baby check and basic neonatal resuscitation. Finally, there is a calculator section containing a number of useful tools which will save time and reduce errors when for example a doctor needs to decide whether an infant requires phototherapy or an infant's feeding requirements need to be calculated.

Conclusions: We feel our product will fill the much needed gap in the market by providing junior doctors with the practical advice and tools that they need to feel confident about managing the common problems they will encounter on the postnatal wards.

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COMPARISON BETWEEN TRANSCUTANEOUS BILIRUBINOMETRY AND TOTAL SERUM BILIRUBIN MEASUREMENTS IN PRETERM INFANTS < 35 WEEKS GESTATION

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Background: Neonatal hyperbilirubinaemia is a common occurrence and is a treatable cause of brain injury. If required, the treatment for this condition is phototherapy on most occasions. The decision whether to use phototherapy is currently dependent upon serum bilirubin assay results. However, repeated blood sampling is not only traumatic but may also be a cause of anaemia, especially in preterm neonates.

Aim: We evaluated a transcutaneous bilirubin assay method to determine whether it was suitable for routine use in preterm infants.

Methods: One hundred and eighty three transcutaneous bilirubin measurements were taken contemporaneously with blood samples for laboratory measurement of serum bilirubin. The study was carried out with informed parental consent and approval by the local research ethics committee.

Results: Regression analysis showed $r = 0.8965$, $P < 0.005$. A least squares X on Y regression plot for transcutaneous bilirubin (Y) vs laboratory bilirubin (X) gave Intercept = $17.7 \mu\text{mol/L}$, slope = 1.059 . The transcutaneous bilirubin method (BiliChek®) exhibited a consistent positive bias compared to the laboratory bilirubin assay. Consequently, for a given detection rate, the transcutaneous method had a higher screen positive rate. There was a margin of safety in the transcutaneous bilirubin assay calibration.

Conclusion: The BiliChek® transcutaneous bilirubin assay is a safe alternative to laboratory bilirubin assay in deciding whether phototherapy is required in preterm neonates.