Is urine culture essential in prolonged jaundice screening in the UK? Time to rethink

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Background: Prolonged jaundice (PJ) is a common presentation in pediatric units. The National Institute of Health and Care Excellence (NICE) recommend routine urine culture for infants with prolonged jaundice. However, research suggests that screening for UTI's is unnecessary due to the low incidence of cases. We aimed to assess the need for urine culture in well infants with prolonged jaundice.

Method: We performed a retrospective study of all PJ screening in our Children's assessment Unit in a District General Hospital from 2011-15. Nurse-led prolonged jaundice screening (PJS) was introduced in 2011. The screening included history and examination with investigations including urine culture as per the proforma. Urine samples were obtained through clean-catch and UTI was defined as the presence of >5×10^6/l white cells and growth >10^6/ml of a single organism in the urine.

Results: A total of 191 infants aged 14 days to 73 days had PJS screening. All these infants were thriving and clinically well. The urine culture in 110 infants out of 191 (57.6%) had normal microscopy and showed no growth. Fifty-five (55) infants (28.8%) had mixed growth but no growth on repeat culture. Twenty-six (26) infants (7.8%) had growth of single organism, most commonly E. coli (10) followed by Enterococcus (5) but only two infants had positive microscopy. Two (2) infants showed positive microscopy and grew E. coli on repeat testing and were treated as UTI (1% of all PJ screen). The remaining 24 infants did not present with any further episodes of UTI during the study period. All of the infants were clinically well and no other pathological causes of PJ were identified.

Conclusion: Our study of 191 infants presenting with PJ shows only 1% had positive urine culture. We recommend that testing for UTI should be reconsidered when screening well infants with prolonged jaundice in the UK.

Biography

Emily Brockbank is currently a Foundation Year 2 Doctor in Wales Deanery. She has worked in Pediatrics for more than a decade and presented numerous papers in international conferences. Her clinical interest is in Neonatology and is very keen on advocating evidence based neonatology and providing child and family centered care.

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