

calprotectin in faeces was observed throughout treatment. Globally, probiotic supplementation exerted a strong influence on gut colonisation.

Neonatal Others

PO-0608 PAIN EVALUATION IN THE PRETERM

¹M Ahmed, ¹DN Sobithadevi, ¹S Mostafa, ¹P Pore, ²J Maiden, ²S Boswell, ¹M Molnar, ³T Reynolds. ¹Paediatrics, Burton Hospitals NHS Foundation Trust, Burton on Trent, UK; ²Research and Development, Burton Hospitals NHS Foundation Trust, Burton on Trent, UK; ³Clinical Chemistry, Burton Hospitals NHS Foundation Trust, Burton on Trent, UK

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Background Assessment of pain is a challenge in neonatal setting. Visual, behavioural and physiological pain scales are not always reliable in premature infants. Few studies with limited sample size have been published on the reliability and efficacy of Skin Conductance Algesimeter (SCA) in monitoring pain in infants and children.

Aim To identify the clinical usefulness of SCA as a reliable and valid measure of pain intensity and stress response in preterm infants.

Methods Parents of all preterm infants admitted to the neonatal unit were invited to participate in the study. The usefulness of SCA was compared with simultaneous measurement of 'Premature Infant Pain Profile' (PIPP) and 'Face, Legs, Activity, Cry and Consolability (FLACC) scores during invasive and/or painful procedures.

Results 85 measurements were recorded. PIPP and FLACC scores started low, increased during the procedure and decreased afterwards. For all SCA measurements, there was an increase in score pre-pro and a decrease in score pro-post. However, the standard deviation for variations was wider for some measurements than for others. Paired t-test comparing Delta pre-pro with Delta pro-post for all measurements {PIPP, FLACC, Area (small) and Peaks/sec} individually showed statistically significant differences ($p < 0.05$). For Area (small), there was no significant correlation between SCA data and PIPP/FLACC scores.

Conclusions SCA, PIPP and FLACC scores increased during the painful procedures. Although the SCA, PIPP and FLACC data is mathematically correlated, at a clinical level, the correlation is too imprecise to use the SCA to predict or measure behavioural responses to noxious stimuli in neonates.

PO-0609 DISSEMINATED RENAL VEIN THROMBOSIS MAY BEGIN IN UTERO

¹S Aktas, ¹S Unal, ¹C Turkyilmaz, ²C Damar, ²B Derinkuyu, ²O Boyunaga, ³E Sal, ³Z Kaya, ⁴Y Ozdemir, ⁴SB Ezgu. ¹Pediatrics Newborn Medicine, Gazi University School of Medicine, Ankara, Turkey; ²Pediatric Radiology, Gazi University School of Medicine, Ankara, Turkey; ³Pediatric Hematology, Gazi University School of Medicine, Ankara, Turkey; ⁴Pediatric Nephrology, Gazi University School of Medicine, Ankara, Turkey

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Introduction Renal vein thrombosis (RVT) in neonates is a rare condition that carries low mortality but high morbidity. Aetiology isn't fully understood; predisposing factors are dehydration, sepsis, asphyxia, polycythemia, maternal diabetes, traumatic delivery, congenital renal vein defects, umbilical catheterisation, prothrombotic conditions.

Case presentation 36 week baby was born by C/S to 32 year-old, gravida 2 mother. The only prenatal risk was gestational diabetes. She was born early because of fetal distress. Evaluation of the infant for jaundice revealed left flank mass and edematous left leg in the second day of life. No effusion was detected in the joints of hip and knee. Lower extremity doppler USG was normal. Abdominal USG showed enlarged left kidney. Doppler USG showed thrombus in the inferior vena cavae, extending to left renal vein, main iliac veins, right external iliac vein. Right renal vein drained to retroperitoneal collaterals. Abdominal tomography confirmed USG. Retrospectively antenatal history revealed enlarged left kidney determined by USG performed right before birth. Based on retroperitoneal collaterals and prenatal USG we think RVT probably began in utero. There was no evidence of sagittal sinus thrombosis. The neonate was treated with LMWH. The results of clotting studies of mother were normal; heterozygot mutation of factor V Leiden and MTHFR gene were found in the baby. Follow-up renal scan at 3 months documented a non-functioning left kidney.

Conclusion In neonatal period; when renal vein thrombosis and disseminated thrombosis is detected in the absence of other risk factors, prothrombotic conditions should be searched.

PO-0610 NEONATAL READMISSION FOR INDIRECT HYPERBILIRUBINEMIA IN AL AHSA, SAUDI ARABIA

¹A Al Omran, ²Z Al Salam, ³S Al-Abdi. ¹Pediatrics, Almana General Hospital, Al Hafoof Wal Mubarraz, Saudi Arabia; ²Pediatrics, AlRiyadh Military Hospital, Riyadh, Saudi Arabia; ³Pediatrics, King Abdulaziz Hospital for National Guard, Al-Ahsa, Saudi Arabia

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Background Causes and severity of neonatal indirect hyperbilirubinemia (IH) vary geographically. Understanding local differences may assist in prevention of complications.

Objective To study the causes and severity of IH in readmitted neonates in Al Ahsa district.

Methods Records of all neonates readmitted for IH to Almana General Hospital at Al Ahsa between 2009 and 2013 were reviewed. Data included: maternal and neonatal characteristics, laboratory results, associated causes of IH and interventions.

Results 323 neonates were readmitted for IH (gestational age: 38 ± 1.8 weeks, birth weight: 3023 ± 513 g and males: 66%). The age and weight at readmission were 125 ± 770 h and 2923 ± 508 g respectively. History of previous jaundiced sibling was documented in 15%. The most common cause for IH was G6 PD deficiency (39.9%), followed by ABO incompatibility (12%) and breast milk jaundice (11%). The cause could not be determined in 31%.

Based on 2004-AAP phototherapy guideline, 30% infants were categorised as at lower risk, 58% at medium and 14% at higher risk. The highest serum bilirubin during readmission was 322 ± 59 $\mu\text{mol/L}$ (range: 198–686 $\mu\text{mol/L}$). All infants received phototherapy, and 2 required blood exchange transfusions. One case of kernicterus was documented (highest serum bilirubin: 686 $\mu\text{mol/L}$) with no mortality. The median length of hospital stay was 2 days. 25(7.7%) required more than one admission.

Conclusions In Al Ahsa, the commonest cause of neonatal indirect hyperbilirubinemia is G6 PD deficiency. Screening for G6 PD deficiency and close postnatal follow up are recommended.