PREDICTING NEONATAL SKIN INJURY: COMPARISON OF THE CANBERRA NICU SKIN ASSESSMENT AND MANAGEMENT TOOL AND BRADEN-Q SCALE

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Background: Currently few skin risk assessment tools have been validated in the neonatal population; this has led to many neonatal units implementing the Braden-Q (BQS) paediatric scale. Over a five year period a skin care working group has developed and evaluated a skin risk assessment and management tool (SRAMT) tailored for neonates. The SRAMT has three elements, risk assessment score, assessment and management guidelines.

Aim: To evaluate the SRAMT as a predictor of skin injury in neonates compared to the BQS.

Methods: A prospective observational study was completed over a six week period in 2015. During the study clinicians scored neonate’s risk of skin injury on both tools. Neonates were categorised as to extreme risk without knowledge of the two tools (gold standard). Study demographics included: gestation, weight, type and cause of injury. Areas under (AUC) receiver operating characteristic (ROC) curves were used for comparison.

Results: 248 assessments were completed; 38% (96) recorded skin injuries. Median gestation and birthweight at assessment were 36.7(34.2-39.6) weeks and 1.6(1.2-2.7) kg. Bruising at venepuncture sites were most common injuries 38(36.5%) with 10(10.4%) pressure injuries recorded. Analysis highlighted the SRAMT had AUC (SE) of 0.94 (0.02) compared to 0.81 (0.03) for BQS (difference 0.013, p <0.001). The SRAMT and BQS had sensitivity of 73.0% and 62.9% and specificity of 96.9% and 93.1%.

Conclusion: This study has shown the SRAMT accurately predicts risk of skin injury in the neonatal population. A multi-site study targeting a diverse neonatal population is required to fully validate the SRAMT.

ARE LIFESTYLE INTERVENTIONS EFFECTIVE FOR TREATING WOMEN WITH GESTATIONAL DIABETES? A COCHRANE SYSTEMATIC REVIEW

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Background: Gestational diabetes (GDM) has adverse health consequences for mother and baby. Lifestyle interventions are used to treat women with GDM.

Method: Pregnancy and Childhood Group’s Trials Register (11/11/2015) and ClinicalTrials.gov (14/05/2016) were searched for randomised controlled trials (RCTs) comparing insulin and oral anti-diabetic agents for women with GDM. We used Cochrane methodology. Short- and long-term primary outcomes were hypertension, caesarean section, type 2 diabetes, perinatal death, large-for-gestation (LGA), composite measure of serious infant outcomes and neurosensory disability.

Results: We included 29 trials (4243 women; 3618 infants). Quality of the evidence ranged from ‘low’ to ‘moderate’. There was no evidence of a difference between insulin and oral anti-diabetic agents for pre-eclampsia (RR 1.16, 95%CI 0.85, 1.59; 9 trials, n = 1923); caesarean section (RR 1.02, 95% CI 0.91 to 1.14; 16 trials, n = 1756 women); type 2 diabetes (RR 0.72, 95% CI 0.41 to 1.26; 2 trials, n = 754); perinatal death (RR 0.85; 95% CI 0.29 to 2.49; 11 trials, n = 1463); being born LGA (RR 1.01, 95% CI 0.84 to 1.23; 13 trials, n = 2215); composite measure (RR 1.03, 95% CI 0.84 to 1.26; 2 trials, n = 760). No data were reported for neurosensory disability.

Conclusions: Insulin and oral anti-diabetic agents have similar effects on key health outcomes although long-term outcomes were poorly reported. Physician and maternal preference,