events were analyzed in a retrospective cohort of babies who were born <33 weeks and went on to have SNI. These babies were born between January 1, 2010 to December 31, 2019. Antenatal events reviewed were steroids, presence of chorioamnionitis or abruption; intrapartum events like MgSO₄, mode of delivery, fetal bradycardia. Postnatal events looked into were resuscitation, intubation, pain and temperature management, hemodynamic and ventilation strategies and hematological parameters like platelet count and sodium levels, till 72 hours of life. Babies with major congenital anomalies, antenatally diagnosed brain injury, and infants transferred after 72 hours of life were excluded.

Results Of the cohort of 134 babies that met inclusion criteria, 31.1% are outborn and 50% are ≤26 weeks. The median SNAP II score was 21. Through the 10 years, outborn babies were consistently seen to have significantly low incidence of antenatal steroids (p 0.001) and MgSO₄ (p 0.001) and were more likely to become hypothermic (p 0.017) or need multiple intubation attempts at delivery (p 0.009). The ≤26 weeks cohort who went on to incur a SNI, were significantly more likely to be hypernatremic (p 0.001), hypercarbic (p 0.010) with acidosis (p 0.013) requiring bi-carbonate infusion (p 0.002) and inotropic support (p 0.015). The rates of delayed cord clamping (DCC) could not be commented on as the documentation was variable with different definition of 'delayed' being used throughout the province.

Conclusions This study sheds light on practices carried out in a particularly populated province in Canada and highlights potential areas requiring focus so as to improve rates of SNI in this unit. It also aims to address areas to improve documentation like DCC in the CNN database. Timely maternal transfer to tertiary care and enhancing perinatal care in referral centers, specifically increasing use of MgSO₄ and reducing hypothermia, remain a priority in this province. Among infants <26 weeks higher rates of hypernatremia and hypercapnia were identified as somewhat modifiable risk factors associated with SNI. Considering half the cohort was >26 weeks, it is crucial to improve adoption of evidence-based neuroprotective strategies for all infants <33 weeks GA.

British Association of Perinatal Medicine and Neonatal Society

749

NICU ADMISSIONS FOR HYPOGLYCAEMIA DURING THE COVID-19 PANDEMIC AFTER CHANGES TO PRACTICE IN DIAGNOSIS OF GESTATIONAL DIABETES

¹Zoe Rooke, ²Rachael Hall, ¹Daniel Faith-Crothers, ³Hilary Conetta. ¹NHS GGC; ²Obstetrics and Gynaecology, Royal Alexandra Hospital, Paisley; ³Neonatology, Royal Alexandra Hospital, Paisley

10.1136/archdischild-2021-rcpch.178

Background Hypoglycaemia is a leading cause of admissions to neonatal units. A major risk factor for neonatal hypoglycaemia

is maternal gestational diabetes mellitus (GDM). Since 2013, diagnosis of GDM in the UK has relied upon the oral glucose tolerance test (OGTT) at 28 weeks of pregnancy. In response to the COVID-19 pandemic, however, guidance released by the Royal College of Obstetricians and Gynaecologists [RCOG] (2020) advised replacing OGTT with alternative measures such as HbA1C and random blood glucose (RBG) measurement.

Objectives 1. Compare the number of neonatal admissions for hypoglycaemia to a level two unit before and during the COVID-19 pandemic.

2. Detect differences in diagnostic modalities used for gestational diabetes in mothers of newborns admitted with hypoglycaemia before and during COVID-19.

3. Compare outcomes of neonates admitted with hypoglycaemia before and during COVID-19.

Methods Neonates admitted with hypoglycaemia to our unit during two time periods - April to August 2019 and April to August 2020 - were identified using an online portal and formed the two groups for auditing. Maternal and neonatal health records were then retrospectively reviewed to determine: (1) the presence of risk factors for GDM during pregnancy among mothers of neonates in both groups, and (2) the diagnostic methods for GDM performed in mothers of neonates in each group. We further collected data on selected outcomes for neonates, including length of stay, IV glucose delivery, umbilical venous cannulation (UVC) and parenteral feeding, in both groups.

Results The number of neonatal admissions with hypoglycaemia to the unit doubled during the COVID-19 pandemic (group 2 [n=32] vs group 1 [n=17]). Fewer newborns admitted during COVID-19 had a mother with a diagnosis of GDM (group 2 [15.6%] vs group 1 [23.5%]) despite mothers of newborns in this group being more likely to be at risk for GDM (group 2 [69.6%] vs group 1 [64.3%]). In all, less OGTTs were performed in mothers of neonates admitted with hypoglycaemia during COVID-19 than before (group 2 [31.3%] vs group 1 [35.3%]) and HbA1C and RBG measurements were more likely to be performed (group 2 [25%] vs group 1 [0%] and group 2 [15.6%] vs group 1 [11.8%], respectively). Nevertheless, median length of admission for newborns was shorter during the COVID-19 pandemic (group 2 [4 days; IQR 2–16] vs group 1 [7 days; IQR 3–11.5]) and the proportion receiving treatments such as intravenous glucose did not increase [53.1% vs 58.8%]).

Conclusions The number of admissions to NICU of newborns with hypoglycaemia increased considerably during the COVID-19 pandemic. This rise is likely, at least in part, to reflect missed diagnoses of GDM in pregnancy, resulting in less access to treatment for mothers and delays in identification of newborns at risk for hypoglycaemia. As there exists some overlap among our COVID-19 group as to when changes to maternal screening for GDM were introduced and when OGTT was still in use, we have extended this study and further data collection is underway which may reveal greater differences between our groups.