British Association of Perinatal Medicine and Neonatal Society

**1657 NEONATAL DRUG WITHDRAWAL FROM INTRAUTERINE EXPOSURE TO ANTIEMETICS**

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Background Neonates exposed to a variety of substances in-utero can develop transient signs and symptoms of toxicity or withdrawal after birth. Whilst the neonatal abstinence syndrome (NAS), typically observed after gestational exposure to physically addictive substances such as opioids, benzo-diazepines and illicit drugs is well described, other substances affecting the central nervous systems (CNS) can also cause withdrawal but symptoms may differ from those observed in NAS. This is unsurprising given their different pharmacodynamic properties, yet clinical guidelines and scoring systems focus heavily on withdrawal from addictive substances.

There is a general lack of systematic data on medication during pregnancy, as pregnant women have traditionally been excluded from clinical trials. Current knowledge is thus largely based on data obtained from case reports and voluntary reporting systems such as the yellow card system. It is likely that toxicity or withdrawal from substances other than those implicated in classic NAS is under-recognized by health care professionals (HCP). This in turn will result in under-reporting, and may adversely affect clinical care through over-investigation of transient symptoms and parental anxiety due to diagnostic uncertainty and well as discon-cert within the team. Furthermore, symptoms clinically consistent with withdrawal, but not considered attributable to maternal medication history may result in suspected information withholding about maternal substance use with resulting negative consequences.

**Objectives** Review of cases of suspected neonatal drug withdrawal from intrauterine exposure to antiemetics and review of literature.

**Methods** Descriptive case series of neonates admitted to the neonatal unit in Crosshouse between August 2020 and November 2020, having been exposed to antiemetics in-utero and showing altered psycho-motor behaviour not explained otherwise.

**Results** Two babies were identified 1) A term baby had been exposed to regular metoclopramide, cyclizine and prochlorper-azine in-utero and developed severe respiratory distress requiring invasive ventilation shortly after birth. The baby was subsequently also noted to be hypotonic and jittery, with poor feed tolerance. Within a week all symptoms resolved and breastfeeding was established. 2) A baby was delivered at 32 weeks for maternal hypertension and had also been exposed to cyclizine in-utero. The baby required non-invasive respira-tory support for 3 days. Full enteral feeds were established within 5 days, and marked jitters was noted from day 2 of life but gradually resolved throughout the 2 weeks stay. Investigations to exclude other causes in both cases included cranial USS, CXR, blood tests for hypoglycaemia and electrolyte abnormalities, as well as investigations and treatments for suspected infection. Maternal history was scrutinized for exposure to other substances. The observed neonatal transient signs and symptoms were consistent with those previously described for drugs of the same drug group, namely jitters due to antihistamines (cyclizine; previous case report) and hypotonia, respiratory and feeding difficulties due to antipsychotics (prochlorperazine; summary of product characteristics).

**Conclusions** Whilst causality cannot be inferred from a case series, these cases highlight the need for more systematic research into medication during pregnancy to improve drug safety, and as well as the need to increase awareness and understanding of antenatal drug exposure amongst HCPs.

**1658 TRANSCUTANEOUS BILIRUBIN MONITORING CLINICAL PATHWAY FURTHER REDUCES SEVERITY OF HYPERBILIRUBINAEMIA AT READMISSION OF HEALTHY TERM JAUNDICED BABIES**

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**Background** Neonatal jaundice presents in approximately 60% of all term-babies. Management of jaundice contributes a significant proportion of up to 17.9/1000 babies readmitted in the first 28 day of life. In 2011 we adopted a unique whole systems approach for jaundice managing neonatal jaundice. This approach christened JETSET has been shown to reduce admissions, length of stay and severity of jaundice in healthy term jaundiced babies. In 2020, we implemented routine transcutaneous bilirubin (TcB) monitoring of jaundiced babies in community and hospital settings to complement our long-established clinical pathway.

**Objectives** We carried out a before and after study comparing the outcomes of jaundiced babies who met JETSET criteria and admitted to Transitional Care Unit but did not receive phototherapy.

**Methods** We retrospectively analysed data from Transitional Care Ward records for patients assessed for jaundice over 4-month time periods, 1 Aug to 30 Nov 2019 (pre-intervention) and 1 Aug to 30 Nov 2020 (post-intervention). Relevant demographic and clinical outcome details were collected and analysed. We used comparative statistical methods to compare the results from the two time periods. JETSET criteria were: Healthy term baby born at ≥36+0 weeks with a birth weight of ≥2500g who developed jaundice after 24 hours.

**Results** A total of 1423 (1372 ≥36+0 wk) babies were born between 1 Aug 2019 and 30 Nov 2019 compared with 1441 (1384) babies in 2020. 137 babies were admitted to the Transitional Care Ward in the 2019 cohort compared with 157 in 2020. A total of 51 babies (26.2%) patients were assessed for jaundice and admitted to the Transitional Care Unit across both time periods. 10 (19.6%) patients were excluded for incomplete data sets. Data from 41 babies were included in
Background

This retrospective audit over 4 years reviewed all neonatal deaths in a large tertiary neonatal unit (University Hospitals of Leicester NHS Trust).

Objectives

To review the potential for organ donation in patients that met the criteria for donation after death confirmed by neurological criteria (DBD) or circulatory death (DCD) in a large tertiary neonatal unit.

Methods

The perinatal mortality review database and BadgerNet were used to identify all early neonatal (END), late neonatal (LND) and infant deaths (ID) in the time period. Patients were identified that met the NHS Blood and Transplant (NHSBT) eligibility criteria for referral: >36 weeks corrected gestational age (CGA). BadgerNet data was used to review cause and modality of death to determine potential for organ donation.

Results

There were 125 END, LND and ID identified. 28 patients (22.4%) were identified as meeting the above mentioned NHSBT criteria. Out of these 28 patients, 9 patients were potential organ donors (2 potential DBD following neurological death testing and 7 for potential DCD). One patient was referred for DCD, but this did not proceed as the patient continued to gasp for a prolonged period of time.

Conclusions

This pilot audit shows that in a large tertiary neonatal unit, there were approximately 2 potential organ donors per year. A larger potential donor audit is required to establish national numbers and associated resources needed to offer organ donation routinely as part of end of life care for our patient population.

REFERENCE