GLUCOSE GEL IN THE DELIVERY ROOM REDUCES HYPOGLYCAEMIA IN PREMATURE BABIES

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Background Background: Buccal glucose gel is a well-established treatment for hypoglycaemia in term and late preterm babies. Prophylactic use, and use in preterm babies, are poorly studied. Newborn preterm babies are vulnerable to hypoglycaemia after cord-clamping which is traditionally not addressed until IV cannulation on the neonatal unit.

After a retrospective audit highlighted high levels of hypoglycaemia on admission to the neonatal unit, a working group decided to explore glucose gel as a strategy to improve glycaemic control in the delivery room.

Objectives Objective to reduce hypoglycaemia in preterm babies <34 weeks through prophylactic administration of glucose gel during delivery room stabilisation.

Methods Methods We used PDSA cycles to implement and continually adapt a guideline for administering glucose gel in the delivery room. We collected data on 102 babies who received glucose gel, comparing to the initial retrospective cohort of 100 babies who did not. We classed an acceptable blood sugar as ≥ 2.0mmol/L.

Results Results The highest positivity rate was observed in children in age group 1-12 months (58.8%), 1-5 years (42.2%). Our study confirmed 62 percent viral etiology. Adenovirus was detected in 35.5% of samples; RSV in 25.5%, rhinovirus in 10%, co-infection in (17%) and remaining 18% included metapneumovirus, influenza, human corona and para influenza virus. Clustering of cases were observed in the months of September-October and January-February. Comparison between single and co-infection in terms of complications (p value 0.06), average duration of stay (p value 0.2) and inflammatory parameters (p value 0.47) were not significant.

Conclusions Adenovirus and RSV are the leading viral pathogens for ALRTI requiring HDU care. Vaccine and antiviral agents are required to reduce ARTI hospitalization.

British Association of Perinatal Medicine and Neonatal Society

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Background Persistent Pulmonary Hypertension of the Newborn (PPHN) affects around two infants out of 1000 live births and has significant morbidity (1). It develops due to sustained foetal circulation with raised pulmonary vascular resistance and normal or low systemic pressure. The usual presenting feature is labile hypoxaemia due to right to left shunting via patent ductus arteriosus. Common causes include meconium aspiration syndrome (MAS), sepsis. Aggressive and early treatment with inhaled nitric oxide and inotropic agents has been shown to have better outcomes and avoid the need for extracorporeal membrane oxygenation (ECMO) treatment.

Objectives The objectives of this audit were to review management and outcomes of babies treated for PPHN in a District General Hospital with a Level 2 Neonatal Unit.

Methods A retrospective search was carried out on Badger and local electronic patient record system to identify babies with diagnosis of PPHN during a period of 12 months. A structured proforma was used to collect and analyse the data.

Results During the 12 month period there were 20 babies that were coded for PPHN diagnosis. 16 of them were selected for further analysis (4 were excluded: 1 had congenital heart defect, 1 had pulmonary hypoplasia due to renal condition, 1 had hypoxaemia and systemic hypotension due to sepsis, and 1 was coded incorrectly) This unit delivers around 600 babies a year. 15 babies were born at term (>37 weeks of gestation) and one born at 32 weeks. 13 babies had meconium aspiration syndrome, 1 had sepsis and 2 had no clear cause for PPHN and were born by elective C section. 10 babies admitted to Neonatal unit within 1 hour of birth and 14 were...