therefore could help in implementing rational antibiotics use. But studies determining viral etiologies have not been studied much in developing countries like India.

Objectives To study viral etiology in children hospitalized with moderate to severe Acute Lower Respiratory Tract Infection (ALRTI) over a period of two years and to detect impact of co-infection on severity and duration of hospitalization.

Methods We performed a study in children of age group one month to five years admitted in PICU and HDU of a tertiary care hospital of eastern India, with moderate to severe respiratory symptoms from march 2018 to march 2020. Nasopharyngeal swabs were collected at the time of admission and analyzed by using Real time PCR. Eighty two children were enrolled for study, out of which 51 were detected positive for viral infections and they were analyzed for etiological, clinical and laboratory parameters.

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 parainfluenza 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

1262

GLUCOSE GEL IN THE DELIVERY ROOM REDUCES HYPOLYCAEMIA 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 $\geq 2.0\text{mmol/L}$.

Results

- Significant reduction in severe hypoglycaemia ($<1\text{mmol/L}$) on admission in babies <34 weeks from 15% to 6% ($p<0.05$)
- Reduction in overall admission hypoglycaemia ($<2.0\text{mmol/L}$) from 38% to 26% ($p=0.07$)
- Increase in mean BSL on admission from 2.3mmol to 2.9mmol ($p<0.05$)
- No increase in significant adverse events

Conclusions

Conclusion

- The prophylactic use of glucose gel for preterm babies in the delivery room may safe and effective in reducing the rate of severe hypoglycaemia on admission to the neonatal unit, and this practice is now incorporated into our units preterm stabilisation pathway
- PDSA cycles were an effective way to engage the whole team in designing our protocol

Paediatricians with Expertise in Cardiology Special Interest Group

1263

MANAGEMENT TRENDS AND OUTCOMES OF NEWBORNS DIAGNOSED WITH PERSISTENT PULMONARY HYPERTENSION OF THE NEWBORN IN A DISTRICT GENERAL HOSPITAL

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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 to 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 hypoxemia 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