Background

Diuretics are used in premature babies with chronic lung disease despite minimal evidence. The aim of this study was to assess the use of diuretics in neonatal units in England.

Method

An electronic survey using Survey Monkey was sent to 108 units in the Medicines for Children Research Network Neonatal Network.

Results

There were 66 responses with useable data from 55 unique units. 20% had a protocol for use. 49% would consider starting diuretics after 5 weeks of age and half would start diuretics in situations such as being unable to wean ventilation, unable to extubate, unable to wean off CPAP, chronic lung disease and chronic lung disease in the presence of a PDA. 70% had no rule when to stop diuretics, 22% stopped off supplemental oxygen and 8% off CPAP.

48% use chlorthiazide plus spironolactone in babies who are fully fed and 84% prefer furosemide in babies requiring intravenous treatment.

Conclusions

There is wide heterogeneity in the use of diuretics in England. The majority use chlorthiazide plus spironolactone in babies who are fed and furosemide intravenously.

Abstract 606 Table 1

<table>
<thead>
<tr>
<th>Dose (mg/kg)</th>
<th>Frequency (Hours)</th>
<th>Total daily dose (mg/kg/24h)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Min - Max</td>
</tr>
<tr>
<td>Furosemide</td>
<td>1</td>
<td>0.5–3</td>
</tr>
<tr>
<td>Spironolactone</td>
<td>1</td>
<td>0.5–10</td>
</tr>
<tr>
<td>Chlorthiazide</td>
<td>10</td>
<td>1–25</td>
</tr>
<tr>
<td>Hydrochlorothiazide</td>
<td>15</td>
<td>10–20</td>
</tr>
</tbody>
</table>

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Aim

To evaluate the risk factors for CLD in ≤32 weeks gestation preterm infants.

Methods

The study was developed in the Neonatology Dpt. of the Clinical County Emergency Hospital Sibiu between 01.01.2010–31.12.2011. The study group comprised 139 preterm infants with a mean GA of 30.26 ± 31.12.2011. The prospectively collected data were analysed using IBM SPSS 19.0 and were considered significant at a p<0.05.

Results

CLD occurred with an incidence of 7.91% in the study group. The preterm infants that developed CLD had significantly lower GA (p = 0.000), BW (p = 0.000), and Apgar score at 1 minute (p = 0.014). Significantly longer duration of the oxygen therapy (0.000), CPAP support (0.000), mechanical ventilation (p = 0.003) and hospitalization (p = 0.005) were found in those preterm infants that developed CLD compared with those without CLD. A significant association was found between CLD and apnea of prematurity, neonatal sepsis, nosocomial infection and ROP even after excluding deaths and outborn infants.

Conclusions

Low GA, BW, the severity of RDS but also the presence of perinatal infection were the main risk factors identified in preterm infants with CLD.
Introduction  Migration refers to the movement of persons or children from an origin place to a destination place across some predefined, political boundary. Since the 1990s after war, Bosnia and Herzegovina has continued being a country of mass children immigration from Sandjak, Kosovo, Serbia, Monte Negro and sporadic immigration from China.

Methods  The presence of tuberculosis disease in the Immigrants children or foreign-born child should prompt the pediatricians to collect appropriate specimens to recover an organism. We conducted a secondary data analysis focusing on immigrants children sampled in the 1995 through 2010 versions of the National Bosnian Children Health Records Survey.

Results  The increase in tuberculosis among Gypsy children in Sarajevo coincided with similar increases in immigration into Bosnia and Herzegovina. Medical records were available for review to assess adequately potential missed opportunities to prevent tuberculosis in children from Sandjak in only 1.5% of cases and Gypsies in 33% cases. Most children with drug-resistant tuberculosis were Gypsy (18.1%) or Chinese Asian (11.2%), and 16.4% of children or their parents were from a Bosnia and Herzegovina region in which tuberculosis is highly endemic as Sarajevo Canton mountain area.

Conclusions  Pediatricians should be aware of the special health problems as tuberculosis for which immigrant children are at risk. Immigration poses unique stresses on children and families. There were no significance difference between incidence of tuberculosis and resitence on therapy between children from Sandjak and Bosnia but that differences were higher in case of Gypsies children.

Abstract 610  Figure 1  TPN, redox potential and BPD

Conclusions  The duration of the oxidant load from TPN exacerbates the oxidative stress in preterm infants as observed with the more oxidized status of the redox potential in infants having received TPN for a longer time. The strong relation between severity of BPD and duration of TPN could be explained by this oxidative stress generated by the TPN.

OESOPHAGEAL ATRESIA AND ASSOCIATED ANOMALIES

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Background  In previous studies the incidence of associated congenital anomalies for infants with oesophageal atresia (OA) ranges between 40–57%. OA mostly associated with Tracheoesophageal fistula is a part of VACTERL association (Vertebral anomalies, Anal atresia, Cardiovascular anomalies, Tracheoesophageal fistula, Renal/ or radial anomalies, Limb defects).

Aim  To determine the incidence of associated anomalies in babies with oesophageal atresia.

Methods  32 babies treated for oesophageal atresia at our regional surgical neonatal unit between the period February 2007 to February 2012 were included in the study.

Results  Out of 32 babies, 17 were male and 15 were female infants with gestation ranging from 31–40 weeks. 10 babies (31%) were born in-utero and 22 babies were transferred from local neonatal units. Birth weights ranged between 1380g–4300g.

In total 15 babies (47%) had some form of cardiac anomalies associated with OA (5 babies with atrial septal defect, 6 babies with ventricular septal defect and 8 babies with patent ductus arteriosus (PDA)).

3 babies (9%) had associated anorectal anomalies. 10 babies (31%) had associated anomalies excluding isolated OA and 16 babies (50%) if isolated OA were included.

Conclusion  Association of anomalies with Oesophageal anomalies is well documented in literature. It is important to identify vertebral anomalies early for follow up as the risk of scoliosis is 10 fold after repair of OA in relation to general population. This small study showed incidence of 50% for babies with OA to be associated with other anomalies and supports current literature.

FEASIBILITY STUDY USING FACIAL ANALYSIS SOFTWARE TO DOCUMENT FACIAL FEATURES ASSOCIATED WITH FETAL ALCOHOL SYNDROME IN NEWBORN INFANTS

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