findings. Secondly, all other things being equal, a patient undergoing x-ray will spend longer in ED than one who does not. This potentially has an impact on patient flow, even more important with the current need for social distancing.

We plan to use this data as a baseline for future quality improvement work with the aim of reducing chest X-ray use in patients unlikely to benefit.

British Association of Perinatal Medicine and Neonatal Society

803 RETINOPATHY OF PREMATURITY: INCIDENCE AND RISK FACTORS: A HOSPITAL BASED STUDY

Ankur Gupta, Vidya Sukumar, Leicester Royal Infirmary Leicester UK; Sree Narayana Institute of Medical Sciences, Chalakudy, Kochi, Kerala, India

Background Survival rate of preterm neonates have reported to be higher compare to previous due to recent advancement in neonatal care with subsequent increase in the number of babies affected by retinopathy of prematurity (ROP). This study evaluates the incidence of ROP and estimates associated potential risk factors.

Objectives To evaluate the risk factors predisposing to severity of retinopathy of prematurity (ROP) in a level III neonatal unit. ROP screening was done by experts from Aravind Eye Hospital, Coimbatore, Kerala using RETCAM. Treatment was offered for Type I ROP and aggressive posterior retinopathy of prematurity (AP-ROP) with intravitreal Injection Bevacizumab (Avastin) and LASER.

Methods Prospective study on infants fulfilling the screening criteria admitted to Neobless (Neonatal Unit, Moulana Hospital Coimbatore, Tamil Nadu) between November 2017 to April 2018.

Results Out of the 91 babies, who fulfilled the screening criteria, were included in the study. Out of 91 infants screened 8 were treated with intravitreal injection of Bevacizumab (Avastin) and only one case required Laser treatment. All of them had good outcome on subsequent follow ups.

Conclusions There was found to be significant association between duration of oxygen therapy (p value <0.001), sepsis (p value <0.001) and blood transfusions (p value 0.001) with Severity of ROP.

805 CONGENITAL DISORDER OF GLYCOSYLATION WITH FIBULAR HEMIMELIA

Süleyman Yıldız, Sibel Tanrıverdi Yılmaz, Sabahattin Ertugrul, İbrahim Değer, İllyas Yolbaş, Mardin Denk State Hospital; Dicle University Faculty of Medicine Neonatology Department

Abstract 801 Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>CAP</th>
<th>Effusion</th>
<th>Cardiac</th>
<th>Wheeze</th>
<th>Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>62%</td>
<td>13%</td>
<td>7%</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td>2018</td>
<td>55%</td>
<td>3%</td>
<td>6%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>2019</td>
<td>45%</td>
<td>5%</td>
<td>2%</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Abstract 801 Table 2

<table>
<thead>
<tr>
<th>Year</th>
<th>CAP</th>
<th>Cardiac</th>
<th>VMI/Asthma</th>
<th>URTI</th>
<th>Bronchiolitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>43%</td>
<td>4%</td>
<td>8%</td>
<td>15%</td>
<td>2%</td>
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<tr>
<td>2018</td>
<td>31%</td>
<td>0%</td>
<td>15%</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>2019</td>
<td>26%</td>
<td>0%</td>
<td>13%</td>
<td>8%</td>
<td>15%</td>
</tr>
</tbody>
</table>

ROP was graded into stages and Zones as per International Classification of ROP (ICROP). Type I ROP or Threshold ROP, is defined as Zone 1 any stage ROP with plus disease.

Zone 1 stage 3 ROP without plus disease and zone II stage 2 or 3 ROP with plus disease. Aggressive Posterior ROP (APROP) is defined as severe plus disease, flat neovascularization in Zone I or Posterior Zone II, intra-retinal shunting, hemorrhages and rapid progression to retinal detachment. Type I ROP and APROP have been grouped into Severe ROP Group, who required treatment for ROP. Type 2 ROP or pre-threshold ROP is defined as zone 1 stage 1 or 2 ROP without plus disease and zone II stage 3 ROP without plus disease. ROP screening was done by experts from Aravind Eye Hospital, Coimbatore using RETCAM.

Treatment was offered for Type I ROP and APROP with intravitreal Injection Bevacizumab (Avastin) and LASER.

Results Out of the 91 babies, who fulfilled the screening criteria, were included in the study. Out of 91 infants screened 9 (9.8%) were diagnosed as Severe ROP and required treatment, the remaining 82 babies (90.2%) did not require treatment (Non ROP group). Out of the 9 cases with Severe ROP, 8 were treated with intravitreal injection of Bevacizumab (Avastin) and only one case required Laser treatment. All of them had good outcome on subsequent follow ups.

Conclusions There was found to be significant association between duration of oxygen therapy (p value <0.001), sepsis (p value <0.001) and blood transfusions (p value 0.001) with Severity of ROP.

British Inherited Metabolic Disease Group
Methods The Illumina Trustight One Sequencing Panel was used for sequencing over 4800 genes known to be associated with a clinical phenotype and spanning 12 Mb of genomic content. The panel studied contains 125,000 probes based on the NCBI37/hg19 human reference genome. X-ray and MRI imaging were performed for fibular hemimelia.

Results The patient was born by elective cesarean section at 38 weeks with 2805 grams. He was the fourteenth pregnancy and ninth living baby of the 32-year-old mother. The infant’s birth length was 45 cm, and the head circumference at birth was 35 cm. Physical examination of the patient revealed median angulation in the right lower extremity from the knee, clubfoot deformity in the foot, and polydactyly in the left foot. There was no associated facial dysmorphism nor other associated anomalies apart from polydactyly. Abdominal, hip, and transfontanel USG and echocardiography were normal. Fibular hemimelia was found in the patient on x-ray and MR imaging. PMM2 and MEFV gene mutations were found in the gene analysis.

The patient was consulted to the orthopedic unit. Although limb amputation was recommended by surgeons, we investigated possible alternatives. As a result, the patient was referred to an external center for a tibial lengthening procedure.

Conclusions Congenital disorders of glycosylation are a group of hereditary diseases and they may present with different extremity anomalies.

Paediatricians with Expertise in Cardiology
Special Interest Group

806 EFFECT OF SERUM CHLORIDE AND SERUM SODIUM DERANGEMENTS ON DIURETIC RESPONSE IN CHILDREN ON CHRONIC FUROSEMIDE THERAPY

Alyaa Kotby, Nancies Soliman, Menat Allah Shaaban, Issra Matrawy. Ain Shams University

Background Electrolyte disturbances are not uncommon in patients on chronic Furosemide therapy. The individual effect of both hypocholermia and hyponatremia has been studied in adults but not in the children with congenital heart disease and chronic congestive state.

Objectives We aimed at studying the occurrence of serum Chloride (Cl) and Serum Sodium (Na) abnormalities in children on prolonged Furosemide therapy and the possible relation of these abnormalities to the diuretic response in this population.

Methods The study included forty-five children, with congenital left to right shunts causing chronic congestive state which necessitated chronic Furosemide therapy. Patients in need to an increase in their Furosemide dose were recruited in the study. We assessed serum Cl and serum Na as well as parameters of diuretic responsiveness; net fluid output and change in body weight/40 mg Furosemide, and change in urinary Na/K ratio. These parameters were assessed initially and at day 3 after increasing Furosemide dose.

Results Median age of patients was 0.75 years, with 27 (60%) male patients and 8 (40%) female patients. According to serum levels of Cl and Na, patients were divided into four groups; isolated hyponatremia (15 patients, 33.3%), isolated hypocholesteremia (9 patients, 20%), combined hypocholesteremia and hyponatremia (12 patients, 26.7%), and normal serum electrolytes (9 patients, 20%). Patients with combined hyponatremia and hypocholesteremia and those with isolated hypocholesteremia showed minimal clinical and radiological signs of decongestion as well as lowest changes in urinary Na/K ratio, fluid output and weight change/40 mg Furosemide and augmenting the diuretic dose, unlike the hyponatremic patients who had near normal parameters with no evidence of diuretic resistance.

Conclusions Both hypocholesteremia and hyponatremia are common in patients on prolonged Furosemide therapy. Hypercholesteremia is associated with a poor diuretic response, unlike isolated hyponatremia which does not seem to affect the diuretic response. Concomitant occurrence of hyponatremia and hypocholesteremia is associated with poor diuretic response as well which can be worse than that seen in isolated hypocholesteremia.