Abstract 801 Table 1 Stated indications

	CAP	Effusion	Cardiac	Wheeze	Foreign Body
2017	62%	13%	7%	7%	1%
2018	55%	3%	6%	3%	2%
2019	45%	5%	2%	5%	10%

Abstract 801 Table 2 Discharge diagnoses

	CAP	Cardiac	VIW/Asthma	URTI	Bronchiolitis
2017	43%	4%	8%	15%	7%
2018	31%	0%	15%	17%	15%
2019	26%	0%	13%	8%	15%

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

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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 Perinthalamana, Kerala, India) between November 2017 to April 2018.

Babies admitted to Neobless who met the following criteria for ROP screening, according to Neobles guidelines for screening, were included in the study.

(a) < 34 weeks gestation, (b) ≤1800 g of birth weight, (c) Babies >1800 g or born after 34 weeks with unstable clinical course requiring cardio respiratory support.

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 that 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

805 CONGENITAL DISORDER OF GLYCOSYLATION WITH FIBULAR HEMIMELIA

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Background Congenital disorders of glycosylation (CDG) are a group of hereditary diseases characterized by the deficiency of enzymes involved in proteins glycosylation. CDG are multisystem diseases, caused by more than 140 different genetic defects in glycoprotein and glycolipid glycan synthesis. The most known CDG is PMM2-CDG, in which the genetic defect leads to the loss of phosphomannomutase 2 (PMM2), the enzyme that catalyzes the conversion of mannose-6-phosphate into mannose-1-phosphate.

Fibular hemimelia is also a congenital lower extremity anomaly characterized by complete or partial absence of the fibula. This deformity may consist of only fibular shortening or maybe together with femur, tibia, ankle, and foot deformities. Although rare in occurrence, it is the most common congenital absence of long bone of the extremities. Fibular hemimelia is usually an isolated anomaly and occurs sporadically. However, in our case, it occurred together with congenital disorders of glycosylation.

Objectives We aim to share the clinical features of a patient diagnosed with congenital disorders of glycosylation which has fibular hemimelia and contribute to an increase in the awareness of this 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 medial 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

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

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Background Electrolyte disturbances are not uncommon in patients on chronic Furosemide therapy. The individual effect of both hyponatremia and hypochloremia 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

hypochloremia (9 patients, 20%), combined hypochloremia and hyponatremia (12 patients, 26.7%), and normal serum electrolytes (9 patients, 20%). Patients with combined hyponatremia and hypochloremia and those with isolated hypochloremia 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 on augmenting the diuretic dose, unlike the hyponatremic patients who had near normal parameters with no evidence of diuretic resistance.

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

British Society for Rheumatology

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PROSPECTIVE UK AND IRELAND POPULATION-BASED STUDY OF JUVENILE-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Juvenile-onset systemic lupus erythematosus (JSLE) is a rare, multi-system autoimmune disease. SLE most frequently affects adults but onset is in childhood in up to 20% of cases. Where onset is in childhood, disease can be more severe, leading to significant associated morbidity and damage. **Objectives** This British Paediatric Surveillance Unit (BPSU) study of JSLE aims to describe presenting features, classification criteria, initial management and disease damage in the UK and Ireland population.

Methods BPSU methodology was used to identify new diagnoses of JSLE in children <18 years of age between September 2017 and September 2019. Relevant adult clinicians (including adolescent and adult rheumatologists, dermatologists and nephrologists) were also asked to report cases using parallel methodology. Data was collected at diagnosis and at one year follow-up. Data was analysed descriptively. McNemar's test was performed to compare sensitivities of different classification criteria.

Results 253 cases were reported with 131 incident cases included to date (122 exclusions: 60 duplicates; 26 diagnosed outside study period; 15 case definition not met; 19 no clinical information; 2 diagnosis removed at one year). Systemic Lupus International Collaborating Clinics (SLICC-2012) classification criteria were more sensitive for classifying patients with JSLE than American College of Rheumatology (ACR-1997) classification criteria (86.3% vs 75.6%, $p < 0.05$). European League Against Rheumatism/ACR (EULAR/ACR)-2019