We have a dedicated LISA guideline which provides guidance on surfactant administration to babies on the Neonatal Unit, with surfactant deficiency who are self ventilating on non-invasive ventilation with nCPAP, optiflow or vapotherm.

Eligibility criteria are as follow:

- Babies 27 weeks and above (singletons)
- or 28 weeks and above of multiple births, who do not require invasive ventilation/transfer to tertiary centre, with surfactant deficiency are eligible for LISA.
- Babies 27 to 28 weeks gestation in $>30\%$ oxygen and rising at age 2 hours on nCPAP.
- Babies 29 weeks gestation and above in $>30\%$ oxygen and rising at age 6 hours on
- CPAP are likely to benefit from surfactant as they are at risk of CPAP failure. LISA can be considered.

Objectives

- To ascertain if departmental LISA guideline is being followed.
- To find out the effectiveness of LISA on NICU at Scunthorpe General Hospital.
- To highlight any complications with LISA.

Methods

- Neonates who received LISA from February 2019 to October 2020 were identified.
- Data were collected from patients' case notes using structured questionnaire and analysed using Excel.
- Variables such as Gestation age, Birth weight, age at decision for LISA, Mode of non-invasive ventilation prior to LISA, blood gas after 30 mins, oxygen requirement before & after LISA were assessed.
- Caffeine loading, NG Tube insertion, sedation prior to LISA and success rate of person performing LISA categorized by grade, were also assessed.
- Outcome were assessed and the results were compared with the departmental guideline

Results

- Ten babies were identified. The results showed that LISA had a success rate of 70%;
- 2 babies (20%) needed a 2nd dose.
- 3 babies (30%) failed LISA. One of those babies required mechanical ventilation following a LISA, as worsening of respiratory status.
- All the failed LISAs were performed by middle grades.
- Two babies had desaturation $<80\%$ needing increased FiO_2 ; no baby had bradycardia <80 .

Conclusions

- Adherence to LISA guideline was generally good.
- However, given that all the LISAs that failed were performed by middle grade doctors, training of doctors at this level is recommended.
- LISA was effective in reducing mechanical ventilation and should be encouraged.
- We also observed that our ventilation rate and transfer out of the unit, to a tertiary centre has reduced.
- This seemed to have a positive impact on the family centered care approach.
- We aim to re-audit in a year time to see the impact of LISA use on incidence of BPD.

British Society of Paediatric Gastroenterology, Hepatology and Nutrition

873

MAPPING THE CURRENT SERVICE AVAILABILITY IN PAEDIATRIC GASTROENTEROLOGY NETWORKS ACROSS THE UNITED KINGDOM: IS THERE A POSTCODE LOTTERY IN SERVICE PROVISION?

¹Sandra Fernandes Lucas, ²Himadri Chakraborty. ¹West Suffolk Hospital; ²Basildon and Thurrock University Hospitals Foundation Trust

10.1136/archdischild-2021-rcpch.251

Background Clinical Networks are formed by Network Centres (NC) and Lead Specialist Centres (LSC) for Gastroenterology and Nutrition to provide high quality, specialist care to the local population. According to the Quality Standards released by RCPCH and BSPGHAN, by definition Network Centres have at least one Consultant Paediatrician with a Special Interest in (SPIN) Paediatric Gastroenterology. It is important to understand the layout of service availability in secondary care and its uniformity across the United Kingdom (UK) to ensure delivery of high-quality care.

Objectives There is scarcity of information about the secondary care network for Paediatric Gastroenterology in the UK. The primary aim of the project was to quantify the secondary care trusts with at least one General Paediatrician with a Special Interest in Gastroenterology and comprehend how these specialists are distributed across the UK. Secondly, we aimed to look at the support these hospitals receive from Lead Specialist Centres in the form of outreach clinics. Finally, the last goal was to map the Paediatric Gastroenterology Clinical Networks in the UK.

Methods The list of hospitals providing Paediatric services in the UK was collected from the National Health Care systems' and Paediatric deaneries' websites for England, Wales, Northern Ireland and Scotland. We identified a number of centres providing Paediatric secondary and tertiary care services, and subsequently contacted them via telephone or e-mail. All the data was collected from Paediatric Doctors (Speciality Registrars or Consultants), Specialist Nurses or Secretaries working in Paediatrics over the period of one year, through standard verbal questionnaire or electronic survey.

Results We identified a total of 153 secondary care trusts providing specialist services to the Paediatric population across the UK. Approximately 63% of these centres had at least one Consultant Paediatrician with SPIN in Gastroenterology. The region with the largest percentage of secondary centres with SPIN doctors was KSS (Kent, Surrey, Sussex) with 91.7%, followed by Scotland with 83.3%. On the other hand, Northern Ireland and the North West of England had the lowest percentages. Southampton, Chelsea and Westminster and Bristol are the LSC which provide the highest number of outreach support. However, nearly a 1/3 of the LSC in the UK do not provide any outreach clinics.

Conclusions The results of this pioneering project highlight the wide variance in availability of SPIN doctors and outreach clinics in different regions across the UK. The lack of significant correlation amongst different analysed variables may suggest that this variability is secondary to unquantifiable factors such as geographical reach/constraints, intent and local funding

policies. We believe this information is valuable to local, regional and national service commissioning groups in the redirection of efforts and resources to target populations where more urgent intervention is required. Points can be learnt from the top performing regions to improve delivery and establish uniformity of care. This project not only identifies the need for continued work in this domain, but also provides a foundation and structure for further analysis of the current services offered in secondary care.

British Society of Paediatric Endocrinology and Diabetes

876 ENDOCRINE DYSFUNCTIONS IN TRANSFUSION DEPENDENT THALASSEMIC CHILDREN: AN OBSERVATIONAL STUDY

Sakshi Gupta, Ayesha Ahmad, Zeeba zaka-ur-rab, Muhammed Saleeq, Nazish Malik.
Jawaharlal Nehru Medical College, Aligarh Muslim University

10.1136/archdischild-2021-rcpch.252

Background Multiple transfusion therapy in Thalassemia Major has led to increased life expectancy but complications like endocrine dysfunction can occur due to secondary iron deposition especially in the endocrine organs despite chelation therapy.

Objectives The objective of this study was to determine the prevalence of endocrine dysfunctions in Transfusion dependent Thalassemic patients and correlation between serum ferritin levels and specific endocrine dysfunction.

Methods The study included Transfusion dependent Thalassemic patients between the age group 5 to 18 years receiving at least a year of chelation therapy with deferasirox in a tertiary care centre. After proper consent/assent and clearance from the ethical committee, patients' characteristics and investigations were recorded on a predesigned proforma. Patients were analysed for endocrine dysfunctions like Growth hormone deficiency, Hypothyroidism, Parathyroid dysfunction, dysglycemia and delayed puberty. Assessment for parathyroid dysfunction, dysglycemia and puberty was done in patients more than 10 years of age only. Data was expressed as Mean $\pm$ S.D. with 95% confidence Intervals. Correlation between endocrine dysfunctions and serum ferritin levels was investigated using Pearson's correlation and p value of <0.05 was considered significant.

Results A total of 50 patients completed the study, out of which 16 patients were more than 10 years of age. The mean age of the study participants was 8.3 ± 2.70 years with a male to female ratio of 2.8:1. The mean age of diagnosis was 16.87 ± 14.03 months and mean duration of chelation was 38.40 ± 26.71 months. Endocrine dysfunction was observed in 28 patients (56%). Evaluation for parathyroid dysfunction, dysglycemia and pubertal disorders was done in patients more than 10 years of age only while short stature and thyroid dysfunction was evaluated in all 50 patients completing the study. Maximum prevalence was of parathyroid dysfunction, observed in 10 patients (62.5%) followed by short stature in 17 patients (34%), Impaired Fasting Glucose/Impaired Glucose Tolerance in 4 patients (25%) and subclinical hypothyroidism

in 7 patients (14%). Pubertal delay and overt diabetes were not detected in any of the patients. Growth hormone deficiency on provocative stimulation test was observed in 8 patients out of 17 patients (47.05%) with short stature. The serum ferritin levels did not show a significant correlation with any of the endocrine dysfunctions.

Conclusions This study showed that 56% of the Transfusion dependent Thalassemics had at least one endocrinopathy. A statistically insignificant correlation of endocrinopathy with serum ferritin levels was observed in the study. Irrespective of chelation therapy, patients with transfusion dependent thalassemia can have a considerably high prevalence of endocrine complications. Serum levels of ferritin cannot be utilised as a predictor of endocrine dysfunctions. Therefore, all patients with Thalassemia requiring frequent transfusions should undergo regular monitoring for endocrinopathies.

British Association of Perinatal Medicine and Neonatal society

877 EFFECTS OF CONTINUED FOLIC ACID SUPPLEMENTATION DURING THE SECOND AND THIRD TRIMESTERS OF PREGNANCY ON CHILDREN'S NEUROCOGNITIVE DEVELOPMENT AT 11 YEARS

¹Mark Rollins, ²Aoife Caffrey, ²Helene McNulty, ²Kristina Pentieva, ³Tony Cassidy, ⁴Girijesh Prasad, ⁵James Dorman. ¹Paediatric Department Causeway Hospital; ²NICHE, School of Biomedical Sciences, Ulster University; ³Psychology Research Institute, Ulster University; ⁴Intelligent Systems Research Centre, Ulster University; ⁵Royal Jubilee Maternity, Belfast, UK

10.1136/archdischild-2021-rcpch.253

Background Peri-conceptional folic acid (FA) supplementation is known to prevent neural tube defects. It remains uncertain whether continuing FA after the first trimester has benefits for offspring neurodevelopment. A previously published follow up study of Mothers who had participated in a randomized trial of FA Supplementation in the Second and Third Trimesters (FASSTT) in pregnancy and who had received 400 micrograms/day FA or placebo from the 14th gestational week until the end of pregnancy showed their offspring at both 3 and 7 years scored significantly higher than the placebo group in word reasoning and cognition.

Objectives Follow up investigation of 11 year old children, whose Mothers had participated in a randomized trial of FA Supplementation in the Second and Third Trimesters (FASSTT) in pregnancy and received 400 micrograms/day FA or placebo from the 14th gestational week to determine if previous improvement in Cognitive performance and brain function persists in this age group.

Methods Mother - child pairs who undertook the FASSTT trial (healthy pregnant women aged 18–35 years with singleton pregnancy) and who had taken 400 micrograms/day of FA in the first trimester were randomized to receive FA supplements or placebo until the end of pregnancy. When the child was 11 years old Mother-child pairs were recruited by invitation to undergo assessment of the child's Cognitive performance by the Wechsler Intelligence Scale for Children (WISC-IV). Assessors were blinded to the treatment allocation of the