engaged with the posts relating to the topics that scored lowest in the pre-intervention assessment. The question that scored the lowest pre-intervention showed the most engagement on Facebook and biggest increase in score.

Conclusion Posting health related information to a Facebook group is not a replacement for face to face education but may serve as an adjunct to good diabetes care.

G423(P) UNCOMMON PRESENTATION OF SEPTO-OPTIC DYSPLASIA

A Jeyaraman, C Brew, V Mathew, S Gupta. *Paediatrics, Hull Royal Infirmary, Kingston upon Hull, UK*

10.1136/archdischild-2020-rcpch.365

Introduction Neonatal metabolic acidosis is a common presentation of wide range of causes varying from sepsis to rare metabolic and endocrine problems. Metabolic acidosis with normal anion gap help as to narrow down the cause as GI loss, RTA or adrenal insufficiency. We present a rare case of neonatal metabolic acidosis turned out to be due to adrenal insufficiency and subsequently diagnosed as SOD. Septo-optic dysplasia (SOD) is a rare congenital malformation syndrome characterised by a triad of optic nerve hypoplasia, midbrain abnormality and pituitary dysfunction.

Case Report 19 day-old girl baby presented with lethargy, poor feeding and poor weight gain. On examination, she was hypothermic, hypoglycaemic, hyperkalaemia with early shock and metabolic acidosis. She was treated as presumed sepsis with dextrose, fluid bolus and antibiotics. She had persistent metabolic acidosis with normal anion gap despite on full feeds. Her septic screening and initial metabolic screening were negative. She was noted to have adrenal insufficiency (cortisol <50), which was confirmed by synacthen test. Her cranial ultrasound was normal. She was sent home with steroid supplements. She was noticed as not fixing and following with roving eye movements at the age of 4 months. Found to have bilateral optic nerve dysplasia and later registered as blind. Further imaging of MRI head confirmed SOD with underdevelopment of optic nerve and hypoplasia of pituitary gland. She failed the dynamic growth hormone stimulation test. In view of her slow growth and low IGF, she was started on growth hormone treatment. She also has hypothyroidism on thyroxine supplements. She is making good progress in her growth and development with hormone supplements and MDT management.

Conclusion Clinical followed by hormonal evaluation and imaging can guide us to its appropriate diagnosis and treatment of SOD. Early recognition of SOD is paramount in order to reduce morbidity and to optimise management. Without adequate treatment, panhypopituitarism can have devastating effects on growth and neurodevelopment of children.

G424(P) RE-INTERPRETING THE APPROPRIATE GROWTH HORMONE RESPONSE TO HYPOGLYCAEMIA

¹UA Khan, ¹FY Wong, ¹S Azam, ²O Blake, ^{1,3}AM Murphy, ^{1,3}OM Neylon, ^{1,3}CS O'Gorman. ¹Dept of Paediatrics, University Hospital, Limerick, Ireland; ²Dept of Biochemistry, University Hospital, Limerick, Ireland; ³Dept of Paediatrics, Graduate Entry Medical School, University of Limerick, Limerick, Ireland

10.1136/archdischild-2020-rcpch.366

Aims 'Critical samples' consist of assessment of an individual's metabolic and endocrine status during a hypoglycaemia episode to evaluate for a pathological contributor towards aetiology of the episode. Growth hormone (GH) level is part of this work up to assess likelihood of GH deficiency. The aim of this study was to identify if the preset cut off value for growth hormone '7 microgram/Litre' during hypoglycaemia is appropriate and how likely values below this are to be indicative of growth hormone deficiency.

Methods The study population consisted of paediatric patients aged up to 16 years old who had critical samples sent during hypoglycaemia over a 12 month period from 1st Jan 2018 until 30th Dec 2018 inclusive at University Hospital Limerick. Retrospective review from a prospectively collected database of glucose and GH levels as well as other growth parameters.

Results Forty blood samples were collected during the study period during hypoglycaemia. One sample was insufficient for analysis of GH level and of the remaining 39, only three (7.6%) patients exhibited a 'normal' GH response to hypoglycaemia of ≥ 7 mcg/L and thirty-six patients (92%) had suboptimal GH levels. Data was skewed to the right with median GH reading of 3.19 mcg/L. The available data on the other parameters i.e. Insulin-like Growth Factor (IGF)-1 levels, Growth Velocity/Height centiles and Growth hormone stimulation test (GHST) was limited but normal.

Conclusion No patient had documented GH deficiency or loss of height centiles, despite only 7.6% (3/39) having 'adequate' GH response during hypoglycaemia. These data suggest that the optimal level for GH during hypoglycaemia should be re-evaluated in larger prospective studies, to reduce unnecessary evaluation for GH deficiency with attendant anxiety and cost generated therein.

G425(P) AVERAGE HbA1c LEVELS IN DIABETIC CHILDREN WITH INSULIN PUMPS AND MULTIPLE DOSE INSULIN

L Horne, Y Galal, R Wilson. *Paediatrics, Blackpool Teaching Hospital NHS Trust, Blackpool, UK*

10.1136/archdischild-2020-rcpch.367

Aims To correlate patient's average HbA1c scores to the modality of insulin therapy utilised to identify whether there is a statistically significant difference in the average HbA1c levels of patients who initially received multiple dose insulin (MDI) and then were commenced on continuous subcutaneous insulin infusions (CSCI). This information would then be used to deliver realistic counselling for patients changing from MDI to CSCI based on real data from our trust.

Methods Within this service evaluation, average HbA1c scores were calculated for all paediatric patients who were initially taking multiple dose insulin therapy and then subsequently commenced subcutaneous insulin infusions. The average HbA1c scores were reviewed at 1 year prior to CSCI and then 1 year and 2 years after the change in modality of insulin delivery. The service evaluation was conducted in 2017 and then again in 2019.

Results In 2017, a mean difference of in HbA1c of 2.03 (95% confidence interval 1.17–2.88) was seen with a significant difference of 0.033. This concludes that there was no significant difference between the average HbA1c of patients