friendly whilst still prompting the prescriber to meet prescribing gold standards and improve prescription safety.

G129(P) AN UNUSUAL CASE OF NEONATAL METABOLIC ALKALOSIS CAUSING SEIZURES

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10.1136/archdischild-2018-rcpch.125

Introduction Metabolic alkalosis in neonates is very rare and attributed to gastric fluid losses, diuretics and congenital chloride diarrhoea (CCH). There were four cases reported: due to maternal bulimia and Bartter's, vomiting and CCH. None of them had seizures.

Case report A new-born was born in good condition by emergency LSCS for IUGR, preeclampsia and suboptimal CTG. She developed desaturation of 80% at 30 min of age followed by apnoea and seizures. Antenatally, Mother had persistent vomiting for last one month, cocaine and amphetamine abuse and active Hepatitis C infection. The examination revealed irritability and hypertonia. Rest of the history and examination weren't significant. Mother and the baby showed hypochlorhaemic metabolic alkalosis with deranged renal function and electrolytes except potassium of 3.5 and 2.4 in baby and mother respectively; urine was positive for opiates and cocaine. CFAM showed seizure activities. EEG and MRI head were unremarkable. Infections and metabolic screening remained negative.

She was ventilated and treated with designer electrolytes solution, antibiotics and anticonvulsants. Due to renal impairment acyclovir was not given. Both made uneventful recovery.

Because of maternal substance abuse baby was discharged to grandparents with supervised access to parents.

Discussion

- Maternal hypochloremic metabolic alkalosis was likely secondary to prolonged vomiting
- The placental simple diffusion and haemodialysis effects explain the similar levels of electrolytes and renal function in mother and New-born except potassium.
- Initial normal (3.5 mmol/L) and later low (2.4 mmol/L) potassium levels are explainable by unidirectional placental potassium fluxes and intracellular shifting in alkalosis respectively.
- Desaturation and apnoea were due to shift of oxygen dissociation curve to left and hypoventilation by alkalosis.
- Early onset seizures were likely secondary to neuromuscular effect of alkalosis.
- This case illustrates the importance of close follow up of new-borns with maternal deranged electrolytes and renal impairment.

REFERENCES

1. Paediatric Metabolic Alkalosis. <http://emedicine.medscape.com/article/906819-overview>
2. Voyame J, Terrier P, Guignard JP, Cachat F. Transient hypokalemic metabolic alkalosis in a newborn mimicking Bartter's syndrome. *J Pediatr* 1999;**134**:794.
3. McNanley T, Woods J. *Glob. libr. women's med* (ISSN: 1756-2228) 2008; doi:10.3843/GLOWM.10195
4. Stocker M. Metabolic alkalosis in a newborn infant. *Swiss Society of Neonatology*. www.neonet.ch/webmaster@neonet.ch

G130(P) AN UNUSUAL CAUSE OF DELAYED WALKING: A CASE PRESENTATION

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10.1136/archdischild-2018-rcpch.126

We present a case of a 22-month-old girl who was found to have an underlying metabolic bone disease as a cause for delayed gross motor development.

The patient was referred to a district general hospital outpatient department as she was not yet cruising and had possible speech delay. However, she was crawling and had no fine motor or social developmental concerns. She had a normal birth history with no past medical or family history of note, her immunisations were up-to-date and she was on no medication. Examination showed her weight was on the 2nd-9th centile and her length was on the 0.4th centile. She had prominent notched clavicles with splayed wrists, mild scoliosis and a small thorax. She appeared to be in significant pain on hip abduction.

Bloods showed a significantly raised alkaline phosphatase (5882), but low corrected calcium and phosphate. Her 25(OH)D₃ was normal but her parathyroid hormone was raised. Radiographs were consistent with features of rickets and she had femoral, radial and ulnar fractures. After 1,25(OH)₂D₃ was returned as slightly low at 47, a diagnosis of 1-alpha-hydroxylase deficiency was made. She was commenced on oral alfacalcidol, calcium gluconate and phosphate. Upon review at 3 months, her biochemical markers were improved and she had made marked developmental progress.

1-alpha-hydroxylase deficiency was first identified in 1961 and is thought to be autosomal recessive with a mutation in the CYP27B1 gene, which prohibits conversion of 25(OH)D₃ metabolite to the active 1,25(OH)₂D₃. Biochemical disturbance includes: moderate hypophosphataemia, severe hypocalcaemia, elevated parathyroid hormone and alkaline phosphatase, normal 25(OH)D₃, and low 1,25(OH)₂D₃. Treatment aims to maintain corrected calcium levels within normal range by using large doses of 1,25(OH)₂D₃. The main concerns with treatment are nephrocalcinosis and intraocular calcification. Therefore, recommendations for monitoring are performing a bone profile, kidney function, parathyroid hormone and urinary calcium/creatinine ratio every 3 months and ophthalmology assessment, renal tract ultrasound and hand radiographs once per year.

G131(P) ASSESSMENT OF INJURIES UNDER 1 YEAR OF AGE WITHIN A PAEDIATRIC EMERGENCY DEPARTMENT

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10.1136/archdischild-2018-rcpch.127

Aims To review our assessment of infants discharged directly from the emergency department who had presented with an injury under 1 year of age. To review adherence of usage of the injury under 1 proforma. To ascertain the number of children who had more than 1 injury under 1 year of age. To

compare results with the first loop of the audit in August 2014

Methods This was a retrospective audit reviewing case notes of all infants who presented to the emergency department with an injury during the 6 month period of May- October 2016. We compared our results to a smaller audit completed in 2014.

Results A total of 440 patients under 1 were discharged following a presentation due to injury during the 6 month period. Of the 440 patients 50 (11.4%) did not have correct proforma completed (table 1).

Abstract G131(P) Table 1 Total injuries under 1 and further re-attendances over 12 months of age

	Number	% of total
1 injury<12 months of age only	390	88.6%
2 injuries<12 months of age	48	10.9%
3 injuries<12 months of age	2	0.5%
0 further injuries over 12 months*	362	82.2%
1 further injury over 12 months of age*	72	16.4%
2 further injuries over 12 months of age*	4	0.9%
3-4 further injuries over 12 months of age*	2	0.5%

*Patients followed up for 12 months following initial presentation

Discussion From our previous 2014 data there has been an improvement in use of the injury under 1 proforma; 88.6% compliance versus 70% in 2014. The re-presentation rate increases with age which is expected given increased mobility over 1. The patient who had multiple (4) re-presentations was referred to social work resulting in extra parental support. One patient who had 2 injuries under 1 subsequently presented with a burn age 16 months. There were serious safety concerns with the result being the child was placed in kinship care.

G132(P) BETTER COMMUNICATION TO ENHANCE PAEDIATRIC TRAINEES WORKING LIVES

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10.1136/archdischild-2018-rcpch.128

Aims During the junior doctors' contract dispute, paediatric trainees were keen to build networks and strengthen the sense of belonging to a community, which is central in Maslow's hierarchy of needs. In particular, trainees wanted to find out more information about training opportunities. In view of this, we set out to improve communication within the school of paediatrics.

Methods Four key areas of communication were identified and reviewed:

A trainee working group was set up to update and manage the website

Creation of a new logo for the regional school

Development of an official facebook page by a group of trainees

Regular dissemination of emails by a new school administrator

One year later, the effectiveness of communication within the school of paediatrics was evaluated by means of an online survey conducted over a 2 week period in September and statistical analysis from the school website and the facebook page.

Results 334 people including trainees and consultants joined the facebook page. This page is regularly updated by trainees. Some particularly relevant posts reached up to 2000 views.

School website visits increased by 14.3% from Sept 2016 to August 2017. Visits reached the highest point during the recruitment and application period (October and November). Within the deanery, the school of paediatrics has been identified as having one of the best and most informative website.

57 trainees responded to the survey. Of these 72% (41/57) accessed the facebook page, 79% (45/57) accessed the school website with 67% (38/57) mainly for information about study days. 77% (44/57) were informed about study days via email. Overall 77% (40/52) of trainees felt communication has improved within the school of paediatrics.

Conclusion The new improved communication strategies increased trainee engagement, in particular with the school website. We strongly believe that effective dissemination of training opportunities and broadcasting of school events helps promote a community spirit for paediatricians within the region. We hope that this will in future reflect onto recruitment and retention of paediatrics doctors in the Deanery.

G133(P) IMPROVING PARENTAL COMMUNICATION IN A BUSY DISTRICT GENERAL NEONATAL UNIT

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10.1136/archdischild-2018-rcpch.129

Introduction Communication is a vital part of Neonatal medicine. Effective communication enables parents to be fully-informed and up-to-date with their baby's care. A significant proportion of newborns are screened and treated with antibiotics for suspected sepsis if there are positive maternal risk factors and/or baby is born in a poor condition or has abnormal observations such as tachypnoea, tachycardia and temperature instability. Maternal risk factors include Group-B Streptococcal infection, premature rupture of membranes, and maternal pyrexia. The decision to screen and treat frequently occurs on labour ward or theatre, where the mother herself may be unwell, therefore unable to acknowledge and process the verbal communication that takes place.

Aim To improve parental communication by providing written information and evaluate if this would improve understanding, confidence going home, and overall care satisfaction.

Method We surveyed 22 parents of newborns who were screened and treated with antibiotics. We produced a questionnaire to assess the need for written information, current understanding and confidence going home. We identified key information parents wished to know and from this produced a leaflet. The leaflet was trialled then implemented. Effectiveness was assessed through a further questionnaire.

Results We found that with the pre-leaflet questionnaire 74% of parents thought written information would be useful. 72% of parents understood why their baby was on antibiotics and only 29% had knowledge of antibiotic duration. Worryingly only 75% of parents felt confident going home leaving 25% not confident.