AN EXPERIENCE IN MANAGING A CHILDHOOD STROKE: a DGH PERSPECTIVE

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Background Introduction: Childhood stroke, although rare, occurs and can cause significant long-term morbidity. Compared to adult’s stroke, paediatric stroke is a heterogenous entity, both of aetiology and presentation. This makes accurate and timely diagnosis challenging. In 2017, new paediatric stroke guideline, endorsed by RCPCH/Stroke Association, was published to address these challenges.

Objectives We presented 2 similar cases of childhood stroke that happened before and after the publication of the guideline. The second case demonstrated how we adapted current guidelines into the management of the patient.

Methods Case 1 (2011): 3-year-old girl presented with inability to stand and left hand weakness while playing in the garden. Examination revealed weakness to both arm and leg, with facial droop. No history of trauma. CT head was reported to be normal. She was given aspirin and arranged for transfer to tertiary centre the day after for MR/MRA imaging which confirmed stroke.

Case 2 (2020): 3-year-old girl presented with left sided facial droop, weakness of left side of her body and slurred speech during family visit to the safari park. The new 2017 guideline was used to aid assessment and management. She scored 6 of PedNIHSS and both CT and CTA was normal. Her assessment and imaging was done within thrombolyis window (4.5 hours). She was transferred to tertiary centre afterwards. MRA confirmed right MCA territory acute infarct.

Conclusions Conclusion Despite the new stroke guideline, we encountered several challenges in managing the child in the DGH settings. The assessment and imaging were significantly delayed due difficulty in assessing children, unfamiliarity with the new guidelines, difficulty in reporting paediatric neuroradiology imaging and absence of clear guidance with regards to thrombolysis administration in children. This experience has highlighted the need for regional paediatric stroke assessment centre and decision-making for thrombolysis.

British Association of Child and Adolescent Public Health

1236 EMOTIONAL AND PHYSICAL HEALTH NEEDS OF LOOKED CHILDREN IN A NORTH WEST LOCAL AUTHORITY: NEED FOR MORE INTEGRATED CARE APPROACH

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Background Children and young people (CYP) under public care are more vulnerable to mental and physical health morbidity than their peers living within birth families, due to previous experience of neglect and abuse, deprivation and poverty, genetic predisposition and subsequent instability experienced while looked-after. Previous research has shown that two-thirds of looked-after Children (LAC) are reported to have one physical complaint compared to 19% of boys and 17% of girls have a longstanding illness or disability.

Objectives We aimed to identify the profile of physical and emotional health needs among a cohort of LAC within a Local Borough of North West England.

Methods We carried out a retrospective audit of the healthcare records for all the LAC referred for initial health assessment (IHA) between the period of April 2019 and March 2020.

Results 82 LAC aged between 6 months and 19 years (averaged 8 yrs 2 months) were assessed during the one-year period. There was a male preponderance of 64% (51 males and 31 females). Each of them had an average of 4 multidisciplinary professionals (3.8 ± 2) and three physical/mental health diagnoses (3.5 ± 2.5. The preschool children (1 to 4 years old) were the largest group of children among the cohort. ). The number of diagnosed problems ranged between 0 and 13. 62 (76%) of the LAC had at least one physical diagnosis, 41 (50%) were diagnosed with emotional/behavioural difficulties (EBD), 39 (48%) had disabilities/neurodevelopmental problems while 19 (23%) had perinatal disorders (Prematurity at birth, previous neonatal abstinence (withdrawal) syndrome and intrauterine growth retardation.

The commonest emotional/behavioural problems were behaviour difficulties (33%), emotional problems including anxiety (33%), Smoking (13%), other substance misuse (11%), self-harm (7%) and Attachment difficulties (2%).

The commonest physical illnesses were Dental caries (27%), overweight/obesity (21%), congenital heart defects (8%), Eczema (8%), asthma/hay fever and chronic constipation (7% each).

Perinatal problems were identified in 19 (23%) of the LAC. These included prematurity at birth (21%), neonatal abstinence syndrome (2.4%) and intra-uterine growth retardation (1%).

The commonest disabilities/neurodevelopmental disorders were visual impairment (18%), speech and language delay (15% total and 8% below 5 years) and learning difficulties (10%). Sleep difficulties was identified in 12 LAC (15%) with
an average age of 15 years. ADHD and Autism were diagnosed in 5% and 2.4% respectively.

Conclusions The audit confirms the high prevalence of physical, emotional and neurodevelopmental disorders among the LAC. It highlights need for providing a comprehensive assessment and holistic management with regular follow-up for this group of vulnerable CYP. This should involve close collaboration between a wide range of multidisciplinary professions from the Educational, social care, health, mental health and voluntary sectors.

We recommend that national guidance should consider replacing the mental health screening by Strength and Difficulties Questionnaire with wider-spectrum screening tools designed to explore a wider range of emotional, behavioural and neurodevelopmental disorders among LACYP, such 12-item ESSENCE-Q and 181-item Five to Fifteen-R (FTF-R) questionnaire.

British Association of Perinatal Medicine and Neonatal Society

1237 AN AUDIT INTO THE MANAGEMENT OF EXCESSIVE WEIGHT LOSS IN THE NEONATAL PERIOD AND THE IMPACT OF THE COVID-19 PANDEMIC

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Background It is accepted that healthy neonates can lose weight in the first days of life due a negative fluid balance caused by diuresis of extra fluid and breast feeding only supplying small amounts of colostrum. In breastfed neonates there is an average weight loss of 6.6% from their birth weight in the first days of life. Weight loss of greater than 10% can be associated with underlying pathology such as Neonatal Hypernatremic Dehydration (NHD). Weighing of neonates on day five and ten of life as recommended by NICE, has been shown to lead to earlier identifications of feeding difficulties, NHD and abnormal weight loss.

Objectives To review local management of neonates presenting with significant weight loss in the first 3 weeks of life.

To compare the management of neonates presenting with significant weight loss in the first 3 weeks of life prior to and during the Covid-19 pandemic.

Methods Cases were identified from admissions coded as ‘Feeding Problems’ during two separate six month periods, prior to and during the Covid-19 pandemic. From these, cases meeting the inclusion criteria were identified manually. The circumstances of the admission and the management of the neonate was assessed and described using descriptive statistics. A comparison between the cases and their management prior to and during the Covid-19 pandemic was performed using paired T-Testing.

Results n=16 cases met the inclusion criteria. n=12 of these cases were admitted in the six months prior to the Covid-19 pandemic. n=4 cases were admitted during the Covid-19 pandemic.

The neonates admitted with weight loss had a mean gestation of 39 +0 weeks and a mean birthweight of 3480g. 56% were born by Caesarean Section. The mean maternal age was 34 years. n=10 of the neonates were born to primiparous mothers. The mean weight loss was 13.9%. These factors were not statistically different in the pre-pandemic and pandemic groups.

n=15 neonates were breast fed on admission. Of these n=2 were discharged fully formula fed, n=10 were breastfed (with or without expressed breast milk top ups) and n=3 were mixed feeding. There was no difference in the discharge feeding plans between the pandemic and pre-pandemic group.

The length of hospital stay was significantly less in the neonates admitted during the pandemic (mean= 0.75 days) compared to prior to the pandemic (2.5 days) p≤0.041.

Conclusions Infants that were admitted with weight loss in this audit were more likely to be born to primiparous mothers, breastfed and born via caesarean section.

Fewer neonates presented during the Covid-19 pandemic compared to before the pandemic. The length of stay in hospital was shorter during the Covid-19 pandemic.

Despite local and national guidelines to encourage ongoing breast feeding and supplementation with expressed milk, neonates presenting with weight loss are often discharged either exclusively formula fed or mixed feeding.

British Association of General Paediatrics

1238 NOT BEING IN DKA ON ADMISSION AND NORMALISING BLOOD GLUCOSE VALUES FROM ONSET KEY TO EXCELLENT HBA1C VALUES ONE YEAR AFTER DIAGNOSIS OF TYPE 1 DIABETES

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Background NICE guidance recommends paediatric patients with Type 1 Diabetes Mellitus (T1DM) should achieve a HbA1c target level of 48mmol/mol (6.5%) or lower.

Objectives We therefore wanted to investigate potential factors that led to an optimal HbA1c one year after diagnosis in paediatric patients.

Methods We did a case review of paediatric patients newly diagnosed with T1DM from 01/01/17 to 31/12/20 who were managed by the paediatric diabetes team at Doncaster Royal Infirmary. Factors we looked at included initial presentation (DKA or no DKA), gender, index of multiple deprivation, family structure and average glucose control at week 1, week 2 and one month. We compared these factors with HbA1c at 1 year to establish any patterns associated with better control, as dictated by HbA1c <48 mmol/mol (6.5%).

Results 9 newly diagnosed T1DM patient were identified. 37.5% (18 patients) presented with diabetic ketoacidosis (DKA) at diagnosis. 88.9% of children who presented with DKA at diagnosis had a HbA1C >48 mmol/mol one year after diagnosis. There was a positive correlation between lower average blood glucose values one week, two weeks and one month after diagnosis with lower Hba1c values at one year. On Sub-analysis of patients with Hba1c <48 mmol/mol and Hba1c >70 mmol/mol, the mean blood glucose at one week, two week and one month were much lower in the <48 mmol/mol group compared to the >70 mmol/mol group.

No associations with age at diagnosis, index of multiple deprivation decile, and two parent households were found.

Conclusions Evidence from this case review shows that identifying diabetes early (thereby preventing development of DKA)