4. Ashtiani S, Makela N, Carrion P, Austin J. Parents' experiences of receiving their child's genetic diagnosis: a qualitative study to inform clinical genetics practice. *Am J Med Genet A* 2014 Jun; **164A**(6):1496–502. doi:10.1002/ajmg.a.36525. Epub 2014 Apr 4. PMID: 24706543; PMCID: PMC4039554.
5. Collins JL, La Pean A, O'Tool F, Eskra KL, Roedl SJ, Tluczek A, Farrell MH. Factors that influence parents' experiences with results disclosure after newborn screening identifies genetic carrier status for cystic fibrosis or sickle cell hemoglobinopathy. *Patient Educ Couns* 2013 Mar; **90**(3):378–85. doi:10.1016/j.pec.2011.12.007. Epub 2012 Jan 11. PMID: 22240007; PMCID: PMC3328613.
6. Waxler JL, Cherniske EM, Dieter K, Herd P, Pober BR. Hearing from parents: the impact of receiving the diagnosis of Williams syndrome in their child. *Am J Med Genet A* 2013 Mar; **161A**(3):534–41. doi:10.1002/ajmg.a.35789. Epub 2013 Feb 7. PMID: 23401422.
7. Krabbenborg L, Schieving J, Kleefstra T, Vissers LE, Willemsen MA, Veltman JA, van der Burg S. Evaluating a counselling strategy for diagnostic WES in paediatric neurology: an exploration of parents' information and communication needs. *Clin Genet* 2016 Feb; **89**(2):244–50. doi:10.1111/cge.12601. Epub 2015 May 21. PMID: 25916247.

British Association of Perinatal Medicine and Neonatal Society

789

A STUDY OF TERM AND NEAR TERM INFANT ADMISSIONS TO A TERTIARY NEONATAL UNIT

Abhishek Agarwal, Serah Koshi, Anneli Allman. *Aneurin Bevan University Health Board*

10.1136/archdischild-2021-rcpch.201

Background Analysis of care days provided by our tertiary neonatal unit has shown a higher than expected number of special care days. We focussed on this by studying term and near term admissions to the unit over a defined time.

Objectives Our aims were to identify the primary reasons for term and near term admissions and the level of care required. We sought to benchmark our admission rate with national data and measure separation days, as defined by low dependency care days where breathing support is not needed. We aimed to calculate the proportion of potentially avoidable admissions and to establish what changes in practice would be required to achieve this.

Methods This was a retrospective observational study performed from January 2020 to August 2020. Inclusion criteria were any infant born ≥ 35 completed gestational weeks (CGW) admitted to the neonatal unit. 'Term' was defined as ≥ 37 CGW, and 'near term' was ≥ 35 to < 37 CGW. Data were collected from BadgerNet and analysed using Microsoft excel.

Results A total of 214 infants were identified, 170 term (9.5% of term births) and 44 near term (42.6% of near term births). 139 (65%) infants were admitted for respiratory concern, which was the most common admission reason. Of these, 40 (29%) required less than 6 hours of respiratory support and 30 (21%) required less than 2 hours of respiratory support. The second most common admission reason was hypoglycaemia/feeding concerns, with 49 (23% of the 214 cohort) admitted for this. Of these, 32 (65%) required nasogastric feeding or feeding plan only, while 17(35%) required IV fluids. 18 infants (8.5%) were admitted for jaundice, neonatal abstinence syndrome, or observations. Our cohort of 214 required a total of 1261 care days, 903 (72%) being special care days. There were 898 care days in term infants, of which 621 (69%) were special care, and 363 care days in near term infants, of which 282 (78%) were special care. The average duration of stay was 5.3 and 8.3 days for a term and near term infant, respectively. Average separation days were 4.0 for a term infant and 6.9 for near term infant.

Conclusions Our study demonstrates a high admission rate of term and near term infants, above the national ATAIN programme recommendation of $< 6\%$ in this population. Our average separation days are above the NNAP unit comparison data of 2.9 for term and 5.8 for near term infants as published in the 2020 report. Our conclusions are to adopt the standards for transitional care as published in the BAPM 2017 framework and revise our guideline to manage infants at high risk of hypoglycaemia by introducing a new network guideline based on BAPM 2017 recommended thresholds for intervention. Our unit should subscribe to the ATAIN programme with a multidisciplinary weekly review of term and near term admissions. We calculate that 78 (36%) of our cohort could have avoided admission with these systems in place.

British Society of Paediatric Endocrinology and Diabetes

792

CLINICAL IMPACT OF THE 2020 BSPED INTERIM GUIDELINE ON THE MANAGEMENT OF DIABETIC KETOACIDOSIS: A SNAPSHOT OF DATA FROM TWO LONDON CENTRES

¹Zijian Zhang, ²Melanie Ranaweera, ³Christina Wei, ²Edward Holloway. ¹St George's University Hospitals NHS Foundation Trust; ²Croydon Health Services NHS Trust; ³Evelina London Children's Hospital, Guy's and St Thomas NHS Foundation Trust

10.1136/archdischild-2021-rcpch.202

Background There is little consensus on optimal fluid replacement in DKA; and the 2020 British Society for Paediatric Endocrinology and Diabetes (BSPED) interim guideline on the management of children < 18 years with diabetic ketoacidosis (DKA) represents a significant shift away from the more restrictive approach to fluid replacement advocated in the 2015 guideline.

BSPED 2020 guideline recommends that all patients should receive an initial 10 mL/kg bolus and those in shock receive a 20 mL/kg bolus. Furthermore, the maintenance fluid requirement was liberalised to use the Holliday-Segar formula and given in the first 24 hours of admission, instead of the previously slower infusion rates over a 48 hour period.

Objectives This survey aimed to report any change in clinical outcomes with the switch to using the 2020 BSPED interim DKA guideline compared to the previous BSPED/NICE 2015 guideline.

Methods We collected data from all paediatric patients who presented with DKA to Croydon University Hospital and St George's Hospital, London. Data was collected from admissions during the 6 months pre and post-implementation in the respective trusts of the 2020 guideline (Sept 2019-Sept 2020). Patients were identified from local paediatric diabetes team databases and data was retrospectively extracted from electronic patient records.

Results A total of 30 patients were studied. 3 patient sub-cohorts were identified according to which guidelines were followed:

1. 2015 guideline (n=13)
2. 2020 guideline (n=13)
3. 2020 guideline on initial admission but subsequent change to the South Thames Retrieval Service (STRS) guideline (n=4)

All cohorts had similar demographics. Mean admission pH for each cohort was 7.17 (range 6.8–7.3) in the 2015 group;

7.14 in the 2020 group (6.8–7.3); and 6.89 (6.8–7.0) in the 2020/STRS group.

Treatment was given for cerebral oedema for one patient each of the 2015 and 2020 cohorts, two in the 2020/STRS group.

AKI rates were one each in the 2015 and 2020 cohorts, two in the 2020/STRS group.

Hospital length of stay was also similar across the 3 groups (means of 3.9, 5.7 and 14.5 days respectively).

Conclusions Patient numbers were too small to give robust conclusions but on this evidence, both DKA guidelines appear to be safe and did not affect hospital length of stay, acute renal or cerebral oedema complication rates.

The authors note that after this study's conclusion, NICE published another new guideline (December 2020) offering something of a 'middle ground' recommendation on fluid replacement in DKA; and the debate on safest fluid management continues.

Association of Paediatric Emergency Medicine

793

PREDICTING SERIOUS BACTERIAL INFECTIONS IN INFANTS AGED 90 DAYS OR LESS

¹Claire McGinn, ²Charlotte Munday, ¹Thomas Waterfield, ¹on behalf of PERUKI Peruki. ¹Belfast HandSC Trust; ²University Hospitals Bristol NHS Foundation Trust

10.1136/archdischild-2021-rcpch.203

Background NICE sepsis guidelines advise febrile children aged ≤ 90 days are at higher risk of serious illness. Therefore, children undergo investigations and receive antibiotic therapy in these cases, despite limited data on actual number of serious bacterial infections (SBI). The Febrile Infants Diagnostic Assessment and Outcomes (FIDO) study, performed on behalf of PERUKI, aimed to evaluate this further.

Objectives To determine rates of SBI in children aged ≤ 90 days with fever $\geq 38^{\circ}\text{C}$.

To assess clinical features and investigations most significantly associated with SBI.

Methods Retrospective analysis of Emergency Department (ED) presentations of febrile infants was conducted across six sites (Belfast, Bristol, Dublin, Glasgow, Leicester and London) between 01.09.2018 and 31.08.2019.

The clinical features underwent univariate analysis, and those deemed to be statistically significant ($p < 0.2$) were included in multivariate analysis.

Results 535 ED records, out of 543 identified, had complete data and were included. 70 (13.1%) participants were diagnosed with SBI – 6 with bacterial meningitis (1.1%), 7 with bacteraemia (1.3%) and 57 (10.7%) with urinary tract infections.

Table 1 shows univariate analysis of individual features. Multivariate analysis of clinical features demonstrated that appearing well was significantly associated with the infant not having a SBI ($p = 0.008$), as was receiving a vaccination in the preceding 24 hours ($p < 0.0001$). No well-appearing infant who received a vaccine within the preceding 24 hours had an SBI.

433 (80.9%) participants underwent blood testing, including all 70 of those diagnosed with SBI. The median CRP ($p < 0.0001$) and neutrophil counts ($p = 0.011$) were significantly higher for participants with SBI. There was no

Abstract 793 Table 1

Variable	Complete Data N(%)	Without SBI N(%)	With SBI N(%)	P Value
Male gender	535 (100)	269 (57.8)	45 (64.2)	0.362
Age (median and interquartile range)	535 (100)	56 (35 to 70)	44 (22 to 69)	0.034
Temperature (median and interquartile range)	535 (100)	38.3 (38.1 to 38.7)	38.5 (38.2 to 38.8)	0.075
Received vaccine in preceding 24 hours	535 (100)	74 (15.9)	1 (1.4)	<0.0001
Normal colour	535 (100)	129 (27.7)	21 (30.0)	0.671
Alert/responding to social cues	535 (100)	141 (30.3)	21 (30.0)	1.000
Normal Cry	535 (100)	63 (13.5)	10 (14.3)	0.852
Normal skin/eyes	535 (100)	84 (18.1)	17 (24.2)	0.250
Moist mucous membranes	535 (100)	104 (22.3)	22 (31.4)	0.099
Appears well	535 (100)	92 (19.8)	5 (7.14)	0.008
Decreased activity	535 (100)	103 (22.2)	22 (24.4)	0.096
Tachycardia	535 (100)	362 (77.8)	55 (78.6)	1.000
Prolonged capillary refill time	535 (100)	70 (15.1)	16 (22.9)	0.115
Reduced feeding	535 (100)	209 (44.9)	39 (55.7)	0.096
Reduced wet nappies	535 (100)	35 (7.5)	7 (10.0)	0.474
Mottled/ashen/pale/blue colour	535 (100)	170 (36.6)	31 (44.3)	0.234
Not responding to social cues	535 (100)	30 (6.5)	4 (5.7)	1.000
Appears unwell	535 (100)	65 (14.0)	11 (15.7)	0.714
Lethargic on examination	535 (100)	12 (2.6)	3 (4.3)	0.430
Tachypnoea	535 (100)	109 (23.4)	19 (27.1)	0.548
Reduced skin turgor	535 (100)	24 (5.2)	4 (5.7)	0.775
Non-blanching rashes	535 (100)	20 (4.3)	2 (2.86)	0.755
Meningism	535 (100)	25 (5.4)	7 (10.0)	0.169

significant difference in median white cell count, lymphocyte count or haemoglobin.

Conclusions This study adds that appearing well and having a vaccination in preceding 24 hrs is significantly associated with not having SBI. It found CRP and neutrophil count was significantly associated with SBI but other blood analysis were not. Further research into clinical assessment and investigations of these children may help identify those with SBI more accurately and reduce over-treatment in low risk children.

British Association of Perinatal Medicine and Neonatal Society

796

BRIDGING THE DAM GAP!!

Suman Fathima, Bindu Radha. Surrey and Sussex Healthcare Trust

10.1136/archdischild-2021-rcpch.204

Background In many Neonatal clinical emergencies, endotracheal intubation procedure is life saving and forms a vital part of neonatal resuscitation. It is possible that current trainees are getting less exposure to emergency intubations in the current scenario of less invasive methods of neonatal stabilisation and surfactant administration.

Objectives To explore knowledge and awareness regarding Difficult Airway Management (DAM) in Neonates amongst neonatal practitioners in local deanery and Surrey Heartlands region.