improvement 24 hours after administration. At subsequent follow-up with the multidisciplinary team, he had no residual neuromuscular deficit.

Conclusions The non-specific presentation in our patient confounded the diagnosis of IB. Of note, the patient's initial symptoms were felt to be suggestive of bronchiolitis and suspected sepsis. While various case reports have shown that infantile botulism comprises a wide-ranging clinical spectrum from non-specific symptoms to cranial neuropathies, performing an adequate neurologic exam in young infants is challenging, further compounding the problem of diagnosis.

Environmental contamination and ingestion of honey are believed to be the most common source of exposure albeit none was reported in our patient.

Mainstays of treatment for infantile botulism remain mainly supportive but the use of botulinum immunoglobulin (*Baby-BIG* - a human-derived botulism antitoxin that neutralizes botulism toxin) is an effective treatment in early disease course.

This case brings up three unique points that are worth considering. One is the rapid course of development of this disease. Second is the unknown exposure to *C. botulinum* in this patient injecting to the fact that identifiable environmental exposure or ingestion of honey may not be possible in all cases of infantile botulism. And third is the difficulty in making a diagnosis of IB.

Like a needle in a haystack, IB can get missed. Therefore, it is always good to have a broad list of differential diagnoses especially in patients with non-specific presentations.

RCPCH Trainees Committee

1742

PROVIDING SUPPORT TO TRAINEES AT TIMES OF TRANSITION: A PEER MENTORING SCHEME IN PAEDIATRICS

¹Kathleen Duffin, ²Leanne Brennan, ²Jen McGill, ²Claire Hathorn. ¹University of Edinburgh; ²Royal Hospital for Sick Children, Edinburgh

10.1136/archdischild-2021-rcpch.824

Background Mentoring – a confidential relationship, whereby an experienced individual (mentor) supports another (mentee) through personal and professional development – is associated with positive outcomes including improved staff retention. As well as being supported by the BMA and GMC, mentoring is in line with current RCPCH focus on retention and wellbeing. Times of transition, such as return from maternity leave, are associated with self-reported under-confidence in paediatric trainees.

Objectives This paper describes a mentoring programme that aims to provide practical and pastoral support to paediatric trainees at times of transition.

Methods The South-East Scotland Paediatric Mentoring Programme was established in 2017. Currently, the programme has two components: formal mentoring after time out of programme (OOP), and peer support via a buddy system for trainees who are new to the region. Mentors are required to undertake formal mentoring training. All participants must adhere to doctrines of confidentiality and good practice. Regular feedback is gathered from participants using anonymous surveys.

Results To date, 23 mentors have been recruited and 38 trainees have been offered mentors following OOP; the majority

have taken maternity leave (23/38), with others returning from research/education/bereavement/sickness. Twenty-four (63%) trainees have accepted and been paired with trained mentors. Uptake was highest amongst those returning from first maternity leave (9/10), with 7/13 requesting support after second/subsequent maternity leaves. Four trainees accepted following research, one on transition to consultant post, and three for other reasons.

Through the buddy scheme, 43 trainees have been offered buddies and 36 (84%) accepted. This encompasses newly starting ST1s and more senior trainees who have transferred to the region.

Feedback obtained through anonymous surveys found 71% of trainees described their buddy as a 'significant source of support.' Trainees specifically highlighted the induction and associated social event as positive. All mentees found the programme very or extremely valuable. Two mentees have subsequently undergone training to become mentors. Mentors reported enjoying their role, acquiring skills useful in other areas of life, and being keen to engage with further training.

Conclusions Peer mentoring can provide valuable support at times of transition. In this cohort, paediatric trainees returning from time OOP are keen for support, particularly when returning from a first maternity leave. Future aims of the programme are to widen access to mentors for additional points of transition, such as moving onto middle grade rota. We hope to be able to offer initial training and regular updates for mentors as the programme develops. We also aspire to build links across Scotland and seek endorsement from NHS Education for Scotland and RCPCH, so that trainees across the deanery can access support at times of transition.

British Association of Perinatal Medicine and Neonatal Society

1745

IMPLEMENTATION OF ROUTINE NEWBORN PULSE OXIMETRY TO IMPROVE CONGENITAL HEART DISEASE DETECTION – A QUALITY IMPROVEMENT PROJECT

Ronel Talker, Jayanta Banerjee. Imperial College Healthcare NHS Trust

10.1136/archdischild-2021-rcpch.825

Background Routine pulse oximetry screening for newborns is not currently recommended by the UK National Screening Committee (UKNSC), though the scheme is increasingly being adopted by maternity & neonatal units around the world. The antenatal detection rate of congenital heart disease (CHD) remains as low as 55% in the UK, with approximately 20–30% of CHD cases being undiagnosed at the time of post-natal discharge. Critical CHD affects 2 in 1000 births and accounts for 3–7.5% of infant mortality, with earlier diagnosis being associated with more-favourable outcomes. Furthermore, newborn pulse oximetry screening has been shown to detect cases of critical CHD, that would have otherwise been missed.

Objectives Utilising quality improvement (QI) methodology, the primary aim of our project was to effectively implement a Routine Pulse Oximetry programme at a large, tertiary London maternity trust, which delivers approximately 9000 babies per year, such that every baby born across the two maternity units would have pre-ductal and post-ductal oxygen saturations

recorded at the Newborn & Infant Physical Examination (NIPE) by paediatricians or midwives.

Methods Using electronic systems (Cerner, Smart4NIPE, BadgerNet), data was prospectively analysed for all babies born at the trust in a 2-week study period in May 2020 (pre-intervention phase). Simultaneously, anonymised questionnaires were distributed to all staff trained in performing the NIPE, assessing their understanding and current practice of pulse oximetry (surveillance phase). A four-pronged intervention was subsequently carried out over a 1-month period (intervention phase). The results of the interventions were studied for all babies born in a 1-week period in August 2020, assessing the performance of pulse oximetry and its short-term outcomes (post-intervention phase).

Results During the 2-week pre-intervention phase, 32/298 babies (10.7%) had pulse oximetry recorded at the NIPE; approximately half of these were performed only due to clinical concerns (murmur, tachypnoea or abnormal fetal echocardiogram). Of all NIPEs performed by paediatricians, 6.9% (6/86) included pulse oximetry, compared with 12.2% (26/212) by midwives. This inconsistent performance correlated with the questionnaire results; 7/55 (12%) practitioners reported performing pre/post-ductal saturations routinely, with less than half correctly stating the acceptable saturation threshold and pre/post-ductal gap, according to local guidelines. Based on the responses, four key areas of improvement were postulated, and changes implemented altogether: these included upgrading ICT facilities for documentation, re-writing trust guidelines, widening multidisciplinary education, and improving the availability of neonatal pulse oximeters. In the 1-week post-intervention phase, 151/151 babies (100%) had routine pulse oximetry throughout the trust. One baby in this cohort was admitted to NICU for 48 hours because of post-ductal hypoxaemia; he was diagnosed with mild PPHN, required oxygen therapy and an echocardiogram showed a structurally normal heart.

Conclusions This project has demonstrated an effective implementation strategy for routine pulse oximetry at a large NHS maternity trust, through multi-disciplinary collaboration and careful QI planning. Future directions are to ensure this is maintained over a prolonged period of study, as well as assessing outcomes of babies with 'positive' pulse oximetry screening and its impacts on long-term CHD detection rates.

British Paediatric Neurology Association

1747

VESTIBULAR MIGRAINE IN CHILDREN

¹Rosa Crunkhorn, ²Sudhira Ratnayake, ²Soumit Dasgupta. ¹Royal Derby Hospital; ²Alder Hey Children's Hospital

10.1136/archdischild-2021-rcpch.826

Background Vestibular Migraine (VM) and the migraine variant Benign Paroxysmal Vertigo of childhood (BPV) are the commonest causes of vertigo in childhood (Langhagen et al., 2016). Studies suggest VM and BPV are the cause in between 24–56% of childhood vertigo (Brodsky et al., 2016). Between 2–10.6% of school age children are affected by VM/BPV (O'Reilly et al, 2012).

VM is a clinical diagnosis with no specific vestibular diagnostic features or other biomarkers (Langhagen et al, 2016).

Whilst there are numerous studies on VM in adult patients, there is a paucity of evidence in paediatric patients, particularly on clinical characterisation. Currently diagnosis and management strategies are largely based on evidence from adult populations (Kacperski and Bazarsky, 2017).

Objectives This study aims to describe a large cohort of patients diagnosed with VM at a tertiary Audiovestibular Medicine unit, describing clinical presentation, examination, diagnosis, and management. We hope to raise awareness of this common and treatable condition in children and young adults.

Methods This is a retrospective electronic case note review of all patients presenting to Audiovestibular Medicine clinics in a tertiary unit between January and December 2018. All patients who were given a diagnosis of vestibular migraine/migraine variant during this time, or who were patients being followed up with a known diagnosis of vestibular migraine/migraine variant, were identified. Clinical letters were reviewed looking specifically at: presenting symptoms (including headache and vertigo, other symptoms, medical comorbidities and impact of symptoms); clinical examination findings; diagnostic test findings (including vestibular diagnostics, blood tests and neuroimaging); treatment and overall outcome.

Results 81 children were identified with a mean age at presentation of 10.3 ± 3.8 years (range 2–17). 53% were female. 65% reported episodes beginning ≥ 2 years ago. No headache was reported in 29 children, however photophobia and phonophobia were common (68 and 54 children respectively). Otological symptoms were not uncommon with tinnitus present in 22 children. Comorbidities often included neurodevelopmental difficulties. Impact on schooling and extra-curricular activities was high for a subgroup of children. 31 children had episodes weekly or more frequently.

Clinical examination showed abnormal oculomotor signs in 5/77 children tested (2 central and 3 peripheral) and abnormal neuro-vestibular findings in 14/78 children tested. Videonystagmography showed abnormalities in 30/75 patients tested (8 central and 8 peripheral oculomotor; 28 neuro-vestibular). Video Head Impulse Test showed significant saccades in 11/94 tests. 37% of children showed normal examination and diagnostic findings.

Treatment included lifestyle measures, medication (for acute treatment or for migraine prophylaxis) and vestibular rehabilitation. The most commonly used medications in this cohort were Pizotifen (44), Propranolol (29) and Topiramate (10). Symptoms fully resolved or improved in most patients (79%) with treatment.

Conclusions VM and migraine variants are a common diagnosis in children. Early recognition of clinical symptoms, appropriate diagnosis and treatment are important for effective management of these children.

Children's Cancer and Leukaemia Group

1748

ELECTRONIC PATIENT REPORTED OUTCOME MEASURES – NEXT GENERATION CANCER PATIENT MONITORING?

¹Lee Aaron Shipman, ²Corinne Fivare-Finn. ¹University of Manchester; ²The Christie NHS Foundation Trust

10.1136/archdischild-2021-rcpch.827