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

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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?

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