total MRI brains ordered from the department). The included studies made up ~44% of total MRI ordering for the department and 73.8% of MRI brains ordered in total.

Conclusions No studies performed in the absence of meeting RCPCH-Headsmart guidelines were found to have a space-occupying lesion indicating that these guidelines represent a sensitive decision support tool for intracranial mass albeit with low specificity. Given the limited availability of MRI brain in most departments use of this modality should be reserved for children who meet these criteria.

REFERENCES

1. Trofimova A, Vey BL, Mullins ME, Wolf DS, Kadom N. Imaging of children with nontraumatic headaches. *Am J Roentgenol* 2018;210(1):8–17.
2. Lewis DW, Qureshi F. Acute headache in children and adolescents presenting to the emergency department. *Headache* 2000;40(3):200–3.
3. Walker D, Grundy R, Kennedy C, Collier J, Wilne S, Koller K. The brain pathways guideline: a guideline to assist healthcare professionals in the assessment of children who may have a brain tumour. 2017. 2017.

British Association of Perinatal Medicine and Neonatal Society

1379

EXPLORING THE ROLE OF BREAST MILK FORTIFIER IN NEONATAL OUTCOMES IN PRETERM NEONATES, A 10 YEAR RETROSPECTIVE AUDIT

Kate Jordan, Laura De Rooy, Anay Kulkarni. *St George's University Hospital NHS Foundation Trust*

10.1136/archdischild-2021-rcpch.602

Background Breast milk fortifier (BMF) helps maintain adequate nutrition in preterm infants, which is crucial for their physical and neurodevelopmental outcomes. However, conflicting reports have linked BMF with the development of necrotising enterocolitis (NEC), a devastating condition with high morbidity and mortality among neonates.

Objectives We undertook a ten-year retrospective analysis in our tertiary Neonatal Unit (NNU) in London, United Kingdom (UK) to evaluate the association of BMF use in preterm infants with various neonatal outcomes. We primarily examined if BMF use is associated with the development of NEC, as well as with the development of the more high-mortality group of patients who develop surgical NEC. We also examined if there is an association between BMF use and all-cause mortality.

Methods The audit cohort included babies inborn at St George's Hospital, London, UK, between gestational ages 23⁺⁰ and 31⁺⁶ weeks, admitted to the NNU from January 2010 – September 2020, who had been discharged or were deceased (N=952).

Data was collected from the electronic neonatal database system (Badgernet UK). BMF use and NEC were confirmed from clinical notes and NEC was stratified by severity; those with NEC, Bell's stage II and above were included.

Statistical analysis: odds ratios and risk ratios were calculated with corresponding confidence intervals and number needed to treat (where applicable). Subgroups for analysis included all gestational ages, and those with gestational ages between 23⁺⁰ – 25⁺⁶ weeks, 26⁺⁰ – 28⁺⁶ weeks, and 29⁺⁰ – 31⁺⁶ weeks.

Results This audit established that BMF has been increasingly used in preterm infants from 2010 – 2020 (10.5% of preterm

infants on the NNU in 2010 received BMF, compared to 45.8% in 2020). Contrastingly, NEC rates on the NNU have remained stable across the 10 year audit timeframe (6.3% from 2010 – 2014; 5.8% from 2015 to 2019).

Use of BMF did *not* increase the odds or risk of developing NEC (OR 0.62, CI 0.30 to 1.29; RR 0.64, CI 0.32 to 1.28). BMF use in preterm infants was associated with a reduced risk of developing surgical/severe NEC (RR 0.24, CI 0.06 to 0.99, P 0.05, NNT (benefit) 18.04 – 344).

Furthermore, BMF *did not* lead to an increased risk of all-cause mortality in preterm infants across the ten year audit (RR 0.31, CI 0.15 to 0.63, P 0.001, NNT (Benefit) 7.95–27.42).

Extremely premature infants, born <26 weeks gestation, had less risk of developing NEC if on BMF (RR 0.36, CI 0.16 to 0.90, P 0.01, NNT (Benefit) 4.97–30.3).

Conclusions BMF use in preterm infants on our NNU from 2010–2020 was not associated with an increased risk of NEC development, nor an increase in all-cause mortality. This was true for all subgroups analysed.

Further work is being undertaken to examine the possible protective effect of BMF in some patients.

RCPCH Trainees Committee

1380

LEAP INTO LEADERSHIP! SUPPORTING TRAINEES WITH THE TRANSITION TO WORKING AS A PAEDIATRIC REGISTRAR

Shona LC Brothwell, Laura Duthie, Isobel Fullwood, Sean Monaghan, Hannah Cooper, Davina Kenyon-Blair, Emily Botcher, Laura Kelly, Sebastian Brown, Matthew Cawsey, Penny Broggio. *West Midlands School of Paediatrics*

10.1136/archdischild-2021-rcpch.603

Background Stepping up to the role of Paediatric Registrar is a juncture that many trainees find daunting; adequate support is essential to ensure a smooth transition. Working effectively as a new Registrar requires a range of non-technical skills in addition to clinical knowledge and skills. Some of these important non-technical skills are not covered during regional or departmental teaching, nor routinely addressed during Supervised Learning Events or Supervisor meetings.

Objectives Keen to improve the trainee experience of transition, and to level the playing field for trainees who do not have access to informal sources of information and support, we created the 'LEAP into Leadership! ST3–4 Transition Day', broadly covering Leadership skills, Educational tips, Acute assessment tips, and Personal/team wellbeing (LEAP).

Methods Trainees who were stepping up to work as Paediatric Registrars at any point over the following 12 months were invited; 23 trainees attended the day, which was delivered in August 2020 via Zoom. The impact of the Transition day was evaluated using pre- and post-course surveys.

Results Pre-course survey results indicated that 65% (n=15) of trainees thought Level 1 training had prepared them for the transition. However, 100% (n=23) of trainees reported feeling anxious, and 47% (n=11) did not feel confident about the transition. We enquired about previous teaching on pertinent topics; the percentage of trainees reporting that they had received teaching on each topic was as follows: effective hand-over: 53% (n=9 out of 17 responses), safety-netting: 24%