25-OH Vitamin D: 26.76 µg/L (20–120). The Ca/Cr ratio in spot urine was 0.07. DEXA: Z score was –1.3. Gene analysis was performed for hypophosphatasia accompanied by low ALP and dental findings.

Conclusions Patients who present with the complaint of spontaneous early loss of primary teeth should be evaluated in terms of hypophosphatasia. The most important issue for diagnosis in such patients is clinical suspicion.

British Association of Child and Adolescent Public Health

1400

TRENDS IN HOSPITAL ADMISSIONS FOR CLINICALLY VULNERABLE INFANTS IN ENGLAND DURING THE COVID-19 LOCKDOWN

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Background One in four infants have a hospital admission in their first year of life, of which 75% are unplanned. Clinically vulnerable infants have more planned and unplanned hospital contacts than other infants. They are therefore likely to have been disproportionately affected by restricted access to hospitals during the COVID-19 pandemic.

Objectives To compare trends in planned and unplanned hospital contacts among clinically vulnerable and other infants before and during the COVID-19 pandemic.

Methods We included infants born between September 2016 and March 2020 in Hospital Episode Statistics (HES).

We defined clinically vulnerable infants by (i) long-term health conditions (chronic conditions or congenital anomalies), or (ii) adverse birth outcomes (low birth weight <2500g or preterm birth <37 weeks of gestation). We included characteristics and diagnoses recorded at birth, during subsequent hospital admissions, or as a cause of death.

We described rates of planned and unplanned hospital admissions (excluding the birth admission) between January 2017 and March 2020 for infants with and without vulnerability.

Results Of 2,184,114 infants in the study, 9.1% had a long-term health condition (6.8% had a chronic condition; 3.8% had a congenital anomaly), 9.3% had an adverse birth outcome (6.1% were low birth weight and 6.7% were preterm), and 16.4% had one or more.

Between January 2017 and March 2020, an average of 0.12% of the infants had a planned and 0.69% had an unplanned admission each week. Infants with a long-term health condition were at a higher risk for hospital admissions with 16 times (RR: 15.38 (11.16–21.74)) as many weekly planned and over four times (RR: 4.56 (4.00–5.20)) as many weekly unplanned admissions as infants without these conditions. This was similar for infants with an adverse birth outcome who had twice as many weekly planned (RR: 2.36 (1.86–3.02)) and unplanned (RR: 1.75 (1.59–1.93)) admissions as infants without.

Both weekly planned and unplanned hospital admissions started to fall two weeks before the first lockdown on March 23, 2020 for infants compared with the same period (averaged over 2017 and 2019); unplanned admissions fell more steeply. The reduction was greater for clinically vulnerable infants: there was a ten-fold decrease in planned admissions

and a four-fold decrease in unplanned admissions for infants with long-term health conditions compared to those without. There was a three-fold reduction in planned admissions and a two-fold reduction in unplanned admissions for infants with an adverse birth outcome compared to those without.

Conclusions The impact of the COVID-19 pandemic was greatest for unplanned admissions in infants with long-term health conditions. This may be due to restricted access to hospitals, fear of COVID-19 infection, lower rates of other infections, closer monitoring by carers at home, or deferred presentations. Reductions in planned admissions could reflect postponement of elective procedures. Further research is needed to establish the unmet needs that will result from the pandemic. Prioritisation of interventions to address unmet clinical need during lockdown should focus on clinically vulnerable infants.

Paediatricians with Expertise in Cardiology Special Interest Group

1401

MILD AORTIC ARCH TURBULENCE – WHAT IS THE LONG TERM OUTLOOK

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Background Aortic arch anomalies might exist in isolation but also may be associated with other congenital heart defects. Mild hypoplasia of the arch could result in note of mild turbulence on echocardiography and may be incidentally diagnosed in infancy but there are no published data on the long term outlook in these patients. These patients are usually monitored annually with Blood pressure monitoring and serial echocardiographies. It is not known how many of these patients go on to develop coarctation of aorta or need surgery in future. We would like to present a case series of 5 infants who were diagnosed in infancy with mild aortic arch narrowing and review their follow up over 5 years.

Objectives To review the clinical details in 5 children diagnosed with mild aortic arch hypoplasia in infancy and follow up with their outcome over 5 years.

Methods Review clinical notes of these five patients and analyse the findings

Results There were 5 children in this study, which included 4 girls and 1 boy who were all non-syndromic. All children had normal blood pressures and palpable femoral pulses. All of them were diagnosed with mild aortic arch hypoplasia with turbulence noted at the distal transverse arch with velocities of around 2.2–3.0 m/s before their first birthday. All 5 children had left sided arch and it was an isolated finding in 3 of the 5 cases. One child also had a small secundum ASD (Atrial septal defect) and one patient had mild mitral regurgitation. At the time of this study these children were in 5–7 year age group. Most of the cases were followed up annually. Only 1 child had evidence of mild concentric left ventricular hypertrophy. All 5 patients had trileaflet aortic valve. None of the 5 patients needed cardiac interventions. One patient had resolution of flow acceleration and was discharged at 4 years of age. The rest of the patients have continued to be followed up with minimal or no increase in flow velocities.

Conclusions Isolated mild aortic arch hypoplasia in a non-syndromic child has an reassuring five year outcome with none of the patients in this series needing surgical interventions. These patients can usually be followed up annually and the risk of developing obstructive coarctation is very rare at least in the first five years of life. This information would be useful in communicating to parents of infants diagnosed to have mild turbulence across the transverse/descending aortic arch and organising follow ups. Longer term follow up in a larger group, till adolescence would provide better outcome data in this cohort of children.

Association of Paediatric Palliative Medicine

1402 DEDICATED ADMINISTRATIVE SUPPORT IMPROVES CHILDREN AND YOUNG PEOPLE'S ADVANCE CARE PLANNING DOCUMENTATION

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Background Advance Care Planning (ACP) is a key component of end-of-life care for children with life-limiting conditions. National Institute for Health and Care Excellence (NICE) standards exist providing guidance to clinicians around best practices in ACP.

Objectives To audit Children and Young People's Advance Care Planning (CYPACP) documentation in Gloucestershire against the national guidelines at the time. To evaluate whether introduction of an administrative lead would improve ACP record-keeping and distribution.

Methods We initially reviewed the quality of CYPACP documentation of children who had expected deaths between April 2015 and March 2017 in county against NICE standards. We compared this to the CYPACP used in children who died from expected causes between May and December 2019, following introduction of dedicated administrative support in April 2019. We also audited active CYPACPs between December 2019 and January 2020 against national standards.

Results There were 19 expected deaths between April 2015 – March 2017, of which 3 (16%) had accessible documented CYPACPs. There were 7 expected deaths over 6 months in

the 2019–20 timeframe, of which 3 (43%) had accessible CYPACPs. Of note, 1 had a documented parent wishes letter, 2 had no ACP and 1 died in another trust and therefore their CYPACP was inaccessible. Documented distribution of CYPACPs to key stakeholders improved from 66% to 100% following administrator introduction. Completion of the CYPACPs based on NICE guideline criteria is outlined in table 1. Case note review found 25 active CYPACPs in December 2019 – January 2020. 20 of these were readily available on our Trust's electronic patient record and 2 of the remaining 5 had an alert on the system to state that an ACP was in place. 2 (8%) of these were overdue review.

Conclusions Recruitment of a dedicated administrative lead improved accessibility and distribution of CYPACPs in the region. Limitations of the audit include small sample size within the expected deaths groups and difference in analysed timeframes. We would expect the proportion of CYPACPs to be greater following administrator introduction, had the same time period been analysed. Further information needs to be gathered using the updated NICE guidelines and following introduction of ReSPECT documentation in the region.

Quality Improvement and Patient Safety

1403 MANAGEMENT OF CONSTIPATION IN PATIENTS UP TO 18 YEARS FOLLOWING MAJOR SURGERY

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Background Postoperative constipation is common, due to a combination of opiate analgesia and relative immobility. This causes significant morbidity with loss of appetite, nausea and abdominal pain being prominent symptoms. This can hinder healing and recovery, prolonging hospital stay.

Despite its prevalence, our trust had no postoperative constipation guideline. We also noted frequent usage of suppositories and enemas in our department, which are invasive and potentially avoidable procedures.

Objectives To evaluate laxative and rectal medication use in this patient group.

Methods All paediatric patients admitted for elective surgery from 1st September to 30th November 2019 with a projected stay greater than 5 days were included in the analysis. Data was collected retrospectively from drug charts and clinical notes. Two-stage operations within a single admission were counted as two separate procedures. The only exclusion was a child with ileostomy.

For each laxative, the day of prescription and day of first administration were recorded, in relation to operation day, as well as when rectal medication was administered, and when bowels first opened. We also divided the laxative doses into low, medium and high using BNFC recommended age-related dose ranges. We postulated that higher doses would be more beneficial for this patient group.

Results In total, 91 procedures were recorded in 78 patients, 84% of patients were older than 12 years.

Docusate sodium was the most frequently prescribed laxative, being written on 91% of drug charts by day 1 post surgery. On the day of operation only 16 patients (18%) received a dose, 80% had done so by day 1. 75% of patients

Abstract 1402 Table 1

Completion Rate	2015–2017 (%)	2019–2020 (%)
Sample population	3	3
Demographics	100	100
Contact information	100	100
Consent statement	66	100
Condition summary	100	100
Child's wishes	66	67
Record of discussions	100	67
Treatment plans	100	100
Education plans	0	0
Preferred location of death	100	67
Organ donation	100	67
Resus plans	100	100
Distribution list	66	100