AKI 3 did not receive specialist nephrology care. A training need was identified in paediatric junior doctors. We suspect these issues are not limited to our region. This highlights the need for a more robust follow-up pathway for AKI in paediatrics. The lack of trainee knowledge emphasises the need to deliver an AKI educational programme, possibly at the level of the Royal College or included in the trainee curriculum. We hope that we will be able to roll out, in addition to existing digital alerts, a STOP AKI Care Bundle that will trigger a response to the AKI alert and improve follow-up.

Children’s Ethics and Law Special Interest Group

A DESCRIPTIVE ANALYSIS OF CORONIAL PREVENTION OF FUTURE DEATH REPORTS RELATING TO NEONATAL PATIENTS IN ENGLAND & WALES (2015–2020)

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Background Prevention of future death (PFD) reports are issued where a Coronial investigation gives rise to concern that future deaths may occur unless actions are taken to reduce the risk of this occurring. They are issued following an inquest and are directed to the person that the Coroner believes has the power to take such action. Their intent is to ensure learning from deaths and to improve public health, welfare and safety.

Objectives A descriptive analysis of neonatal PFDs to understand Coronial reasons for issuing PFDs and learning themes.

Methods Publicly available data regarding all neonatal PFDs (0–28 days) issued in England and Wales were reviewed for the period between January 2015 and December 2020 (https://www.judiciary.uk/subject/child-death-accessed 08/03/2021). The following details were collected: Age, sex, Coroner’s area, circumstances around death, coroner’s concern and recommendation, cause of death and the organisations to whom it was directed. Thematic content analysis was used to analyse qualitative data.

Results A total of 52 PFDs relating to neonatal deaths were issued during the 6 year evaluation period from 21/88 (24%) of UK Coroner areas. 67% of PFDs related to male neonatal deaths and 9% related to babies who were thought stillborn (even though at the time of writing, stillbirths do not fall under the jurisdiction of HM Coroner). Perinatal asphyxia (56%), sepsis (15%) and prematurity (11%) accounted for over 80% of the causes of death. The majority of PFDs (69%) were directed toward an NHS Hospital Trust. Thematic content analysis revealed the following themes: (i) Communication (intra-agency and inter-agency) (ii) Standard of medical record keeping (iii) Staff and resource gaps, (iv) Education and training gaps (v) Non-compliance with guidelines (vi) Errors in perinatal decision making (vii) Incomplete or inaccurate review of neonatal death.

Conclusions Our data indicate that the majority of neonatal PFDs relate to male infants with perinatal asphyxia and that learning relates to a number of predominantly obstetric themes. However, and of relevance to neonatal and paediatric clinicians is the observation that the conclusions from local neonatal death reviews were thought inaccurate in 15% of cases. Strategies for wider dissemination of the learning recommendations from PFDs directed to NHS organisations and methods to increase the transparency and rigour of local NHS Trust neonatal death review processes recommended to optimise the utility of Coronial PFDs.

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THE DIAGNOSTIC UTILITY OF IMAGING IN SUSPECTED PAEDIATRIC COVID-19 INFECTION: A DIAGNOSTIC CROSS-SECTIONAL STUDY

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Background Evidence on chest X-ray findings, indications and diagnostic utility in paediatric corona virus disease (COVID-19) remains sparse.

Objectives Evaluate chest X ray findings in laboratory confirmed COVID-19 in children admitted to a children’s hospital.

Methods A retrospective cross-sectional diagnostic test accuracy study, in patients with suspected COVID-19 presenting to a tertiary paediatric hospital. Study participants Data was retrospectively collected from 402 consecutive patients at our centre who underwent testing for clinically suspected COVID-19 for infection between the dates of 15-03-2020 and 24-04-2020. Up to 2 chest radiographs were collected for all included patients from 7 days before the COVID-19 sample up to 30 days post-sample. All imaging studies were reported by a consultant paediatric radiologist. Blinding of the reporting radiologist to COVID-19 status was not possible due to the clinical nature of the reports. A researcher reviewed each chest radiograph report, recording the presence of presence of consolidation, collapse, bronchial thickening, hyperexpansion and effusion. The diagnostic odds ratio (OD) and its 95% confidence interval was calculated. Odds ratios were also calculated for the other points on the grading scheme, and in order to assess the overall utility in diagnosing COVID-19, a receiver operator characteristic (ROC) analysis was performed with comparison between curves using DeLong’s test.

Results Data was collected from 402 patients. In total 408 COVID-19 tests were performed (6 patients were tested twice). Overall 11.27% of all tests performed were positive. 52.4% of included patients were male. Included patients ranged between 0 days old and 17.1 years at the time of the COVID test. 220 patients had at least one chest radiograph available (53.92% of all patients), with 82 (20.1%) having two available, and the distribution of chest radiograph availability did not differ significantly between COVID-19 test result groups (Chi-Squared test, p = 0.6). The absolute mean time in days from the COVID-19 test to the chest radiograph was 1.2 days for the initial chest radiograph (range -7 to 21 days) and 6.1 days for the second radiograph (range 0 to 29 days).