25–33% of all referrals. Over the last year 44% were for suspected skin cancer.

Conclusions COVID-19 seems to have resulted in a fall in the total number of referrals, however the proportion of suspected skin cancers increased. The shift from referrals for lymph node or other masses towards more dermatological problems is possibly due to the move from face-to-face to video consultations caused by the pandemic. The increased presentation of skin pathologies to paediatrics necessitates a greater degree of expertise in this subspecialty.

### Paediatric Critical Care Society

**WHAT’S THE POINT? (OF CARE?)**

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10.1136/archdischild-2021-rpch.721

**Background** Point of Care testing for virology is readily available in PICU and results are available within 45 minutes. Laboratory virology PCR results can take up to 48 hours. This can have an impact on bed status, cohorting of patients and staff allocation in busy periods when side rooms are at a premium. Recently, Sars-Cov-2 has been added to the list of viruses detected by our machine.

**Objectives** Recently, Sars-Cov-2 has been added to the list of viruses detected by our machine however the machine is not validated for this. We aim to validate it, making it easier to cohort patients and allow de-escalation of PPE and ‘red zones’ at the earliest opportunity.

**Methods** All medical staff performing bronchioalveolar lavage on patients in PICU were requested to split the sample obtained; one to run one through the POC machine and the rest to be sent off to the lab. A folder was placed by the machine to insert an ID label in when a POC sample was run. Each sample was analysed over a four month period between October 2020 and January 2021. The results obtained by the point of care machine was compared to the lab results for both Sars-Cov-2 and for other virology PCR.

**Results** In total 89.4% of the samples showed correlation in the results obtained by the POC machine for both covid 19 and other virology. With regards to Sars-Cov-2 testing 15 of the 19 samples were both negative on point of care testing and on lab testing. The remaining four samples had not been tested by the lab for covid 19 PCR – it is assumed that no request form was completed by medical staff to request covid 19 PCR to be run on the sample. 5.2% of the samples analysed for virology PCR showed that the lab was more sensitive in detecting viral loads at lower levels. 5.2% of the results obtained for virology couldn’t be correlated as the POC machine didn’t test for the organism detected. We are unable to assess whether the point of care machine correlates with the lab Covid 19 PCR in those patients who are covid positive, as we didn’t have any covid positive patients in our cohort.

**Conclusions** There is good correlation between the results obtained on the POC machine in patients who are Covid 19 negative. We are unable to assess whether the point of care machine correlates with the lab Covid 19 PCR in those patients who are covid positive. Ideally, we would have liked a larger cohort of patient results to analyse with some of those patients being positive for Sats-Cov-2.

### British Association for Paediatric Nephrology

**MANAGEMENT OF UNILATERAL MULTICYSTIC DYSPLASTIC KIDNEY (MCDK) IN THE UK: A NATIONAL SURVEY**

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10.1136/archdischild-2021-rpch.722

**Background** Follow-up for unilateral MCDK is recommended due to its risk of contralateral kidney abnormalities and long-term sequelae. However, there is currently no national or international consensus on management strategies for this group of children and young people. Varying practice between and within departments may have negative consequences including performance of unnecessary investigations, parental anxiety or late recognition of chronic kidney disease progression in those at risk.

**Objectives** To review the current evidence and explore variation in management strategies amongst paediatricians looking after children and young people with unilateral MCDK.

**Methods** A nationwide online survey was performed using a 10-item survey with multiple choice and free text between August 2020 to December 2020. The survey was open to tertiary paediatric nephrology and general paediatric consultants who care for these patients.

**Results** A total of 60 responses were obtained, two-thirds of whom were paediatric nephrologists. 62% routinely perform a DMSA scan to confirm the diagnosis (Paediatric Nephrologists (58%); SPIN paediatricians(67%); Non-SPIN paediatricians (89%)). 8% routinely perform an MCUG to investigate for contralateral vesico-ureteric reflux (VUR) (Paediatric Nephrologists(13%); SPIN paediatricians(0%); Non-SPIN paediatricians (0%)). Thematic analysis of free-text answers supported these findings.

A total of 62% of respondents stated the need for routine renal function assessment even in the absence of indication. The frequency of blood sampling ranged from once only (62%) to ‘every two years’ until transfer to adult services. Referral to assess for nephrectomy for lack of involution was stated by 7%. Thresholds quoted were: ‘still present at 3/4 years’; ‘still present at 5 years’; ‘3cm at 5 years’; and ‘6cm at 6 years’. 25% of respondents recalled nephrectomy of an MCDK in the previous five years. Quoted indications for nephrectomy of the MCDK were: hypertension(5), large size (4, 1 with symptoms), lack of involution(3), urinary tract infections (1), surgical decision (1), previous sibling died from malignancy (1).

The survey also revealed divergent opinions over creation and implementation of a national guidance for management of MCDK, mainly due to concerns around overcautious management. However an evidence-based national guidance that could (1) balance between consensus and safe variation and (2) offer families both choice and reassurance, was cited as potentially beneficial.
Estimated costs from birth to adulthood (18 years) in those with uncomplicated MCDK were calculated from the respondents’ free-text answers. 53 (88%) respondents’ answers were detailed enough and suitable for this analysis. Mean estimated costs were £1,962 (range: £258 - £3,854). Although the average costs were greater for general paediatricians compared to paediatric nephrologists, this was not statistically significant (£1,950 SD± £871 versus £1,485 SD± £829).

**Conclusions**

Management of children and young people with unilateral MCDK varies nationally. Review of current evidence suggests this variation extends globally. There is increasing consensus for avoiding invasive testing and taking a more pragmatic approach, but the risks of hypertension and progression to chronic kidney disease remain a concern in some, highlighting the need for a clear pathway to ensure those at high-risk of renal sequelae are recognised early and followed-up appropriately.

**Association of Paediatric Emergency Medicine**

1568 THE USE OF CENTOR AND/OR FEVERPAIN SCORING CRITERIA TO DETERMINE ANTIBIOTIC PRESCRIBING IN ACUTE SORE THROAT ACCORDING TO NICE NG84 GUIDELINE

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Background NICE guideline NG84 sets out an antimicrobial prescribing strategy for acute sore throat. The aim is to limit inappropriate prescribing, which can lead to antibiotic resistance as well as suppurative and non-suppurative complications such as Rheumatic fever. The highest incidence of acute sore throat is in children (Nice CKS, 2021) yet there are no studies or national audit data which look at use of NG84 in paediatric patients presenting to secondary care. Therefore, we studied the use of scoring systems within the Paediatric Acute admissions unit, and if antimicrobial use and choice was appropriate.

Objectives

1. In paediatric patients who presented with sore throat to secondary care, to identify if Fever Pain or Centor Criteria was formally used
2. Identify whether antibiotic prescribing was initiated as per defined scoring criteria and
3. Identify if antibiotic choice was appropriate in accordance with the NG84 recommendation

Methods Two researchers retrospectively reviewed ED notes and discharge summaries from Medway of paediatric patients presenting with ‘sore throat’ between 15/03/20-30/05/20. FeverPain and Centor scores were calculated from notes and outcomes compared to NG4 guidance.

Results 54 cases were identified, ranging 0–13 years of age. 4 cases were excluded due to alternate diagnoses. In all cases specific references to FeverPain or Centor criteria were not recorded. We could not calculate FeverPain in 10 cases (20%), and Centor scores in 16 cases (32%) due to lack of clinical detail. Most missed criteria included examination of throat and assessment for cervical lymphadenopathy. Using FeverPain criteria, antibiotic prescription was indicated in 31 cases. 29 cases received antibiotics. Using Centor criteria, antibiotic prescription was indicated in 32 cases, with 29 cases receiving antibiotics. Appropriate antibiotic selection occurred in 89.7% of cases.

**Conclusions**

We do not reference clinical scoring systems in notes, yet appropriate antibiotic choices are made in 89.7% of cases. Throat and neck examination was most frequently missed, however this study was carried out after RCPCH advised against examination of sore throats unless necessary. To improve practice, we have created a sticker with FeverPain scoring criteria, as well as a clinical education tool. We will re-audit results in 2021. Further research is needed to validate a which scoring system is best in children presenting acutely to secondary care with an acute sore throat.

**British Association of Perinatal Medicine and Neonatal Society**

1569 INCREASED OXIDATIVE STRESS POST-BLOOD TRANSFUSION IN PRETERM SMALL FOR GESTATION INFANTS COMPARED TO APPROPRIATE FOR GESTATION INFANTS

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Background Compared to appropriate for gestation (AGA) infants, small for gestation (SGA), defined as < 10 percentile birthweight for gestation and sex) infants are at higher risk of bronchopulmonary dysplasia and retinopathy of prematurity, diseases associated with oxidative stress. Although blood transfusions are associated with oxidative stress, it is unknown how SGA and AGA infants react to blood transfusion.

Objectives To determine oxidative stress in SGA and AGA infants after blood transfusion.

Methods A prospective observational study of infants <30 weeks gestation at birth who received blood transfusion. Exclusion criteria included any blood product administered within 3 weeks, sepsis, renal and liver disorders. Urine was collected pre-transfusion, and at 24–48 and 49–72-hours post-transfusion. ELISAs were used to measure thiobarbituric acid reactive substances (TBARS), 8-isoprostane and 8-hydroxy-2-deoxyguanosine (8-OHdG) as markers of lipid peroxidation and DNA oxidative injury. Levels were normalized to the urinary creatinine levels. Statistical analysis was performed using a two-way non-paired Student t test or Mann-Whitney test for continuous variables as appropriate and χ² or Fisher’s exact test for categorical variables. Linear regression was performed to adjust for confounders.

Results 58 AGA & 14 SGA infants were enrolled in the study for analysis. The demographic characteristics of the study participants in each group were quite comparable except for difference in birth weight as expected, small but statistical difference in gestational age and rate of caesarean section. Higher rates of caesarean section among the SGA group could be explained probably by the factors that complicate the delivery, though all infants in the SGA group received antenatal