London, East Midlands, West Midlands and Scotland had estimated incidences above the national incidence. Boys (91/130; 70%) were significantly more affected than girls (39/130; 30%) and the majority were of Black (44.6%) and South Asian(36.2%) ethnicity with a median age of 18 months. The commonest clinical presentations were bowed legs, swollen wrists and radiological rickets. Comorbidities included fractures (15/130; 11.5%) hypocalcaemic seizures (11/130; 8.5%;), and dilated cardiomyopathy (4/130; 3%) Two children died of dilated cardiomyopathy from vitamin D deficiency. The commonest associated conditions were cows milk protein allergy (19/51; 19%;) iron deficiency (8/51; 7%) and eczema (8/51; 7%) At the time of diagnosis 77% of children were not receiving vitamin D supplements. 19 children had rickets despite being reported to be receiving appropriate supplementation. All confirmed radiological cases had either high parathyroid hormone and/or low phosphate. Following diagnosis, most clinicians initially prescribed treatment themselves, with huge variation in duration of prescriptions. In a further 10 cases, rickets was confirmed but excluded in the incidence analysis, for not meeting the case definition (specifically Vitamin D<25 OHnmol/L), suggesting both dietary calcium deficiency and vitamin D insufficiency as role-players in the presentation of NR in the UK.

Conclusions NR continues to affect children in the UK with serious sequelae. Uptake of vitamin D supplementation remains low and constitutes a failure of current public health policy. A UK national policy focusing on vitamin D and calcium supplementation and adherence is required to eliminate this entirely preventable condition.

British Paediatric Allergy, Immunity and Infection Group

G52 NICE IN THEORY, BUT WHAT ABOUT IN PRACTICE? OUR EXPERIENCE OF THE NEW SEPSIS GUIDELINES

[1]MJ Carter, [1]PA Stilwell, [2]R Nijman, [1]S Eisen. [1]*Children and Young People's Services, University College London NHS Foundation Trust, London, UK*; [2]*Section of Paediatrics, Imperial College London, London, UK*

10.1136/archdischild-2018-rcpch.50

Aims NICE (2016) guidance on the recognition, diagnosis and early management of sepsis aims to expedite interventions in children with 'high-risk criteria' for sepsis. Early administration of parenteral broad-spectrum antibiotics is recommended in these children, unless a senior decision-making doctor (ST4+) makes an alternative diagnosis with a separate treatment pathway. We assessed the presenting characteristics and management of children at UCLH NHS Foundation Trust (UCLH) Paediatric Emergency Department (PED) following the introduction of these guidelines. A senior decision-making doctor was available for urgent review of children at all times.

Methods We audited the notes of all children presenting to UCLH PED from 6th February to 31 st May 2017 (excluding simple trauma or primarily psychosocial presentation). All notes of children with fever or suspicion of infection and one or more high-risk criterion for sepsis were identified on a daily basis, and data entered onto a specific database. High-risk criteria were as defined by NICE, and included: tachypnoea (≥99 th centile), tachycardia (≥99 th centile), additional oxygen requirement, reduced consciousness, reduced urine output and blood lactate ≥2 mmol/L.

Results 4322 children presented to the PED during the time period. Of these, 216 (5.0%) met one or more high-risk criteria for sepsis. The most common clinical syndrome was viral upper respiratory infection (67 children, 31%). Severe tachycardia was the most prevalent high-risk criterion (159 children, 73%). 25 children (12%) underwent blood testing/IV access, 17 (7.8%) were administered parenteral antibiotics, six (2.8%) were administered intravenous fluid boluses, 16 (7.4%) were admitted to the ward, and one child was transferred to intensive care (in status epilepticus). One child (admitted) had a bacterial pathogen isolated from blood.

Conclusion In this single centre, only 12% of children with one or more high-risk criteria for sepsis underwent blood testing, and 7.8% of children were admitted for parenteral antibiotics. Appropriate de-escalation from the sepsis pathway prevented the admission of an additional two children per day for parenteral antibiotics for presumed sepsis. Given the small proportion of children with high-risk criteria who were deemed to require treatment for sepsis, the availability of appropriately senior decision-making doctors is essential to enable appropriate implementation of these guidelines.

G53 EPIDEMIOLOGICAL AND MICROBIOLOGICAL TRENDS IN CANDIDAEMIA IN A TERTIARY PAEDIATRIC UK HOSPITAL

[1]JL Wright, [2]S Paulus. [1]*General Paediatrics, Glan Clwyd Hospital, Rhyl, UK*; [2]*Paediatric Infectious Diseases, Alder Hey Children's Hospital, Liverpool, UK*

10.1136/archdischild-2018-rcpch.51

Aims To describe the demographics of patients diagnosed with candidaemia, and to explore speciation and susceptibility trends in Candida organisms grown in blood cultures over 15 years in a single tertiary care paediatric hospital in the UK.

Method Local laboratory records were accessed to obtain data about all positive blood cultures for Candida species between January 2001 and December 2015. A retrospective analysis of available electronic medical records was completed. Data was input and analysed using Microsoft Excel.

Results There were 192 episodes of candidaemia, with 23 patients having multiple episodes of candidaemia (i.e. separated by >30 days). Patient's ages ranged from 5 days to 18 years, with a mean of 5 years and 6 months. There were 85 females (44%) and 107 males (56%).

The patient's locations at the time of the candidaemia varied from the general paediatric wards (61, 32%), haematology/oncology wards (52, 27%), ICU (49, 26%), and paediatric surgical wards (30, 16%). The outcome of the patients after 30 days showed that 85 remained in hospital (44%), 81 had been discharged home (42%) and 26 had died (14%).

The two most common candida species identified were *Candida albicans* (96, 50%) and *Candida parapsilosis* (56, 29%). There was a lower incidence of recognised resistant species such as *Candida lusitaniae* (9, 5%), *Candida glabrata* (7, 4%), and *Candida krusei* (3, 2%) with no increase in incidence of these species seen over time.

The majority of samples (181, 94%) underwent sensitivity testing for a selection of seven common antifungal medications (amphotericin, caspofungin, fluconazole, flucytosine, itraconazole, micafungin and voriconazole). Eight samples of *Candida*