

healthcare professionals. Likewise, doctors are uncertain about dental neglect. Minimal joint standards for dental neglect thresholds and the appropriate response need to be agreed.

#### G423 SERVICE EVALUATION OF THE MANAGEMENT OF OSTEOARTICULAR INFECTION OVER 8 YEARS IN A SINGLE CENTRE

<sup>1</sup>A Rodrigues Da Costa, <sup>1</sup>B Oguti, <sup>1</sup>A Ashby, <sup>2</sup>A Smith, <sup>3</sup>E Lim, <sup>4</sup>E Alexander, <sup>5</sup>K Fidler. <sup>1</sup>Paediatrics, Royal Alexandra Hospital, Brighton and Sussex University Hospitals, Brighton, UK; <sup>2</sup>Orthopaedics, Royal Alexandra Hospital, Brighton and Sussex University Hospitals, Brighton, UK; <sup>3</sup>Paediatrics, Great North Childrens Hospital, Newcastle-Upon-Tyne, UK; <sup>4</sup>Microbiology, Royal Alexandra Hospital, Brighton and Sussex University Hospitals, Brighton, UK; <sup>5</sup>Paediatrics, Brighton and Sussex Medical School, Brighton, UK

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**Aims** There is no national consensus on the management of osteoarticular infection (OAI). Practice varies widely throughout the United Kingdom, with differences in duration of antibiotic treatment, switching from intravenous (IV) to oral antibiotics and requirement for peripherally inserted central venous catheters (PICC). Data about recurrence and complication rates is scant. We aimed to evaluate local practice: analyse demographic data, antibiotic course duration and administration route, use of invasive lines and associated complications with a view to guideline development. **Methods** OAI in children aged 0–17 years, presenting to one centre, from 01/09/2006–01/09/2014, identified through hospital coding, clinician and microbiology records.

#### Results Demographic Data

82 confirmed OAI cases: 55% male, 45% female, mean age 4.8 years. Preliminary data from the first 24 cases revealed none had significant co-morbidities, sickle cell disease or immunosuppression.

#### Pathogenesis

Tibia most commonly affected site, followed by femur. Organisms isolated in under half the cases. 2 cases of severe PVL-MSSA disease identified

#### Management

Median duration of antibiotic course (IV and Oral) was 45 (range 7–358) days. Median duration of IV antibiotic course was 20 (range 6–75) days. Oral switch occurred in 76%, after a median of 18 (range 3–17 days) of IV antibiotics. Most had PICC lines inserted, complications included line sepsis (x1). Complication of OAI included hyperesthesia, and prolonged chronic OAI

**Conclusions** The first 24/82 cases analysed confirm wide variation in management, partly due to the diversity in age, presentation and organism. This highlights the difficulties for guideline development for this heterogeneous group. Full analysis will be presented at the conference. It will provide a comprehensive picture of current local practice, and add to national data being collected as part of the DINOSAUR study, to further understanding of this serious condition.

#### G424 PREMATURITY AND THE BURDEN OF ASSESSMENT ON AUTISTIC SPECTRUM DISORDER DIAGNOSTIC SERVICES: A PRAGMATIC APPROACH

R Sharma, H Gillet. Paediatric Department, Great Western Hospital, Swindon, UK

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**Aim** Prematurity is a risk factor for autism with prevalence in middle childhood increasing 2–4 fold in preterm versus term populations<sup>1,2,3,4</sup> with a dose-response relationship between gestation and adjusted HR for autism.<sup>1</sup> 8% of the EPICure cohort screened positive for ASD at 11 years.<sup>2</sup> There are no pragmatic UK studies examining the burden of the preterm population on ASD assessment services. The aim of this abstract is to determine the burden of autistic spectrum disorder assessments in a cohort of extreme preterm versus moderately preterm versus term children.

**Methods** Retrospective cohort analysis of all preterm deliveries less than 36 weeks gestation from January to December 2009 that survived to discharge. Data gathered from local health records on gestation and gender then cross referenced with local health records to determine whether ASD assessment undertaken. Those with HIE, neurometabolic conditions, congenital cardiac malformations or chromosomal disorders were excluded.

**Results** 198 preterm infants were included. 60 cases in the extreme preterm group. 8.3% of this population underwent ASD assessment by 5 years of age. 138 cases in the moderate preterm group. 4.3% of this population underwent assessment. In the general term population 4202 children were born in 2009. Only 2% of these were assessed for autism.

**Conclusion** Extreme preterm infants are approximately four times more likely to undergo diagnostic assessment for ASD than the term population. Moderately preterm populations are approximately twice as likely to undergo assessment. Recognition of the burden of these high risk groups on ASD assessment services may aid in service provision planning.

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#### G425 ROTAVIRUS VIREMIA AND GENOTYPE CHARACTERISATION AMONG CHILDREN WITH ROTAVIRUS DIARRHOEA PRESENTING TO A TEACHING HOSPITAL

<sup>1</sup>S Kwarteng Owusu, <sup>2</sup>D Ansong, <sup>2</sup>CKA Poku, <sup>1</sup>RKK Owusu, <sup>1</sup>MO Owusu, <sup>2</sup>E Addo-Yobo, <sup>3</sup>G Armah, <sup>4</sup>K Ampofo. <sup>1</sup>Child Health, Komfo Anokye Teaching Hospital, Kumasi, Ghana; <sup>2</sup>Child Health, Kwame Nkrumah University of Science and Technology-School of Medical Scienc, Kumasi, Ghana; <sup>3</sup>Department of Virology, Nougouchi Memorial Institute for Research, Accra, Ghana; <sup>4</sup>Department of Paediatrics, University of Utah, Salt Lake City, United States of America

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**Introduction** Rotavirus (RV) is the leading cause of diarrhoea in children <5 years worldwide, especially in developing countries. RV viremia has been detected in some children with RV diarrhoea, especially during early RV infection and severe disease. There is however a paucity of data on the genotypes associated with viremia during acute RV diarrhoea. This study evaluated the burden of RV viremia among children with RV diarrhoea and circulating genotypes in blood and stools.

**Methods** Stool samples were prospectively collected from 332 children <5 years of age presenting with acute diarrhoea to Komfo Anokye Teaching Hospital, Ghana, from 9/2011 to 2/2012. Testing for RV in stools was performed using enzyme-linked immunosorbent assay. RV viremia was assessed on paired blood of children with RV by reverse transcriptase polymerase chain reaction (RT-PCR). RV capsid protein typing VP7 (G) and VP4 (P) was determined by RT-PCR.

**Results** RV was detected in 129 (39%) children. Of 106 (82%) paired blood samples tested, RV viremia, was detected in 28 samples (26%). From stool samples, 7 G types and 3 P types were detected, with G1 (40%), G2 (20%), G12 (8%) and P[8] (56%) and P[6] (30%) most commonly detected. In contrast, fewer G and P types were associated with RV viremia; G2 (39%), G1 (32%), G9 (18%) and P[6] (29%), P[9] (7%) and P[8] (7%). The predominant RV combination strains in stool were G1P[8] (26%), G2P[8] (12%), and G1P[6] (9%) compared to G2P[6] (18%) in serum.

**Conclusions** This study confirms the hypothesis that viremia occurs among some children with rotavirus diarrhoea. There exists a wide diversity of genotype strain in stools and blood of children. Different genotype strains may be present in the blood and stool of one person possibly due to mutations and multi strains with different affinity of infecting sites.

**G426** **EVALUATING MMR VACCINATION COVERAGE OF LOOKED AFTER CHILDREN (LAC), ARE WE COMPARING APPLES WITH ORANGES IF WE CONSIDER THIS POPULATION AS ONE GROUP?**

S Garry, S John-Legere. *Children's Medical Services, Croydon Health Services NHS Trust, Croydon, London, UK*

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**Aims** There are 800 LAC in the area looked at. These children have either been placed with alternate carers to their parents whilst living in this country (local LAC); or are children who

arrived to the UK alone as unaccompanied minors (UM). In national statistical analysis these groups are summarily referred to as LAC and reported as one. This study is a retrospective analysis of data comparing MMR vaccination coverage in these two groups.

**Methods** MMR vaccination coverage was analysed using electronic data records, and then compared to national guidelines.

Children were eligible for inclusion as per the following criteria: 1) matched record on the electronic system 2) aged over 5 and under 18 years 3) 'LAC' for minimum 12 months.

**Results** 422 LAC aged 5–18 years were eligible for inclusion, of which 178 (42.2%) were UM.

Of the local LAC group, 125 (51.4%) were up to date (UTD) with MMR immunisation. 79 (32.5%) had caught up, receiving two MMR vaccinations late. 20 (8.2%) had received one MMR vaccination. There was no data on 19 children (7.8%).

Of the UM, 1 (0.6%) was UTD with MMR, suggesting they were actually local LAC. 86 (48.3%) had caught up, receiving two MMR immunisations after 5 years of age. 23 (12.9%) had only received one MMR vaccination. There was no information on 68 UM (38.2%). See Figure 1.

**Conclusions** Children aged 5–18 years having received 2 MMR immunisations (combination of UTD and caught up) can be considered fully immunised against MMR. Therefore 84% local LAC and 48.9% UM were fully immunised. Combining these results, 69.2% of Looked After Children (local LAC and UM) were fully immunised.

Comparing our data to non-looked after children having received 2 MMR vaccinations in borough (74.2%) and in London (80.8%), local LAC MMR immunisation coverage is above expected. However, not only is the MMR coverage low in UM, but also there is a lack of data. This highlights the need for targeted measures, both in approach to delivering immunisations and in data reporting.

Evaluating MMR vaccination coverage of Looked After Children (LAC), are we comparing apples with oranges if we consider this population as one group?

**Evaluating MMR vaccination coverage of Looked After Children (LAC), are we comparing apples with oranges if we consider this population as one group?**

**Pie Charts showing MMR coverage of local LAC and UM aged 5-18 yrs**

