

symptoms were high temperature in 66.6%, abdominal pain in 29.6%, nausea 14.8%, burn during urination in 18.5%, frequent urination 11.1%, swelling 7.4%, back pain in the 7.4% of cases. Dominated urine casts were leukocytes, proteins were positive, while bacteria and erythrocytes were positive only to preschool age. Kidney ultrasound resulted normal in 18.5% of cases, 37% had pyelonephritic changes. While the sign of urinary stasis 40.7% of cases (up to the school age) and 11.1% (school age).

Conclusions In cases with high temperature should be planned examination of urine sediment and an ultrasound examination of abdominal organs, before we plan any other examination.

892 PEDIATRICIANS RESPONSIBLE FOR EARLY DETECTION AND SURVEILLANCE OF URINARY TRACT INFECTIONS FROM INFANTS TO PRESCHOOL CHILDREN

doi:10.1136/archdischild-2012-302724.0892

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Introduction Urinary tract infections (UTI) represent substantial pathology of children's morbidity. The frequency is just behind respiratory tract infections. The symptoms may be very diverse and non-specific. Early diagnosis very important for preventing complications (especially renal scarring).

Objectives Pediatrician is the first one that has contact with child having UTI. According to the age, symptomatology is diverse and detection has to be well-timed in order to assure proper treatment. Materials and examinations In the study we evaluated 35 children aged 6 months to 6 years (from January 2009 till January 2012). There were 28 female and 7 male children divided in two groups: A) from 6 months till 3 years (20 children) with following symptoms: high temperature, diarrhea, vomiting and lack of appetite. B) from 3–6 years old (15 children) with following symptoms: dysuria, frequency, lumbar/abdominal pain and temperature. Basic laboratory tests and imaging studies were performed: complete blood count, urinalysis, CRP, urine culture, kidney and bladder ultrasound, Tc99mDMSA scan and cystography. According to the results of these studies the children were given appropriate management particularly those with risk for renal scarring.

Conclusion In 86% of the children with UTI *E. coli* (flagellaris) was found, *Proteus mirabilis* in 6%, *Enterococcus* in 5% and *Staphylococcus* 3%. If the first UTI episode is appropriately managed, children at risk may be selected (high grade VUR) and long term treatment strategy created in order to prevent permanent kidney damage.

893 BACTERIAL MENINGITIS IN CHILDREN

doi:10.1136/archdischild-2012-302724.0893

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Background Meningitis is the most dangerous disease in children and remained irreversible mental disorders. *H. influenzae* is a fastidious bacteria and may be under detected because of inadequate techniques for isolation or overuse of antibiotics before with recovery of causative agents in bacterial meningitis. In present study two methods, culture and molecular diagnosis (PCR) apply for isolating H.I from CSF.

Methods DNA was extracted from CSF and probed for the presence of Hib DNA with PCR assay with primer derived from the sequences encoding a capsulation-associated protein; a protein most probably involved in the intracellular transportation of the capsular

polysaccharide, and would be expected to react only with capsulate *H. influenzae* strains. Primers sequencing were:

Primer 1: 5'- CGT TTG TAT GAT GTT GAT CCA GAC T

Primer 2: 5'- TGT CCA TGT CTT CAA AAT GAT G

Results Two hundred three cerebrospinal fluid (CSF) samples collected consecutively from children (less than 5 years) suffering from meningitis were investigated by PCR. There were all the cases of clinical meningitis admitted to three children hospitals in 18 months duration period.

Discussion Two hundred CSF samples were investigated by PCR. Seven samples were positive by PCR method (5 samples were culture positive and 2 samples were culture negative for *Haemophilus influenzae*). *Haemophilus influenzae* type b is a agent 17.1% of bacterial meningitis in children surveyed.

894 REDUCING THE DURATION OF ANTIBIOTIC COURSE IN A NEONATAL UNIT: RESULTS OF A TWO YEAR AUDIT

doi:10.1136/archdischild-2012-302724.0894

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Background and Aims Neonatal intensive care units (NICU) across the UK use different guidelines for the treatment of neonates at risk of sepsis. However, unless specific symptoms/risk factors for sepsis are present, antibiotics are usually stopped at 48 hours if blood culture (BC) results are negative. We aimed to determine whether it would be safe to stop antibiotics at 36 hours.

Methods We conducted a retrospective audit of all blood cultures over a two-year period (2009–2011) from neonates at risk of or with suspected sepsis admitted to Winchester NICU - a medium-sized level 2 neonatal unit (3000 deliveries/year).

BC were analysed with the automated BacT ALERT® 3D Signature system, (Biomérieux, Durham, UK), using paediatric blood culture bottles (BacT/ALERT® PF; incubated for a total of 5 days).

Results A total of 402 BC were identified and included in the analysis. Eighteen were positive (4.4%). The median time to BC positivity was 14.5 hours (25th–75th percentile: 11.5–21.5 hours). There was no significant difference between the proportion of positive BC results at 36 and 48 hours ($p=0.4857$; odds ratio 0.178 (95% CI: 0.008–3.995)). Only two BC were positive after 36 hours; both were considered to be contaminants and did not change management.

Conclusions Our data suggest that it is safe, in similar units using similar methods, to stop antibiotics after 36 hours if BC are negative. This would result in a substantial reduction in antibiotic use, invasive procedures and admission time, and thereby has significant implications for neonatal care.

895 EFFECT OF 4% CHLORHEXIDINE CORD CLEANSING ON COLONISATION AND BACTERIAL COUNT IN HOSPITAL BORN NEONATES

doi:10.1136/archdischild-2012-302724.0895

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Background Infections in new-borns are the single most important cause for neonatal mortality in developing countries. Of topical antiseptics chlorhexidine has shown potential as an effective cord care agent. Results from randomized double-blind trials examining the effect of chlorhexidine in Asia have been encouraging.