Abstracts

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

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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, Te99mDMSA 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 Esherichia Coli (Iagelarri) was found, Proteus mirabilis in 6%, Enterococcus in 5% and Staphilococcus 3%. If the first UTI episode is appropriately managed, children at risk may be selected (high grade VUR) and remain ir...

893 BACTERIAL MENINGITIS IN CHILDREN

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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. 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 capsule 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 influenza). 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

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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, (Biomerieux, 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 (25–75 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 changed 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 COUNTER IN HOSPITAL BORN NEONATES

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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.