and/or surgical treatment depends on the Stage of the CE-infection, not on the general condition of the patient.

888 ANTIBIOTICS STUDY ON *STAPHYLOCOCCUS* SPP. STRAINS ISOLATED FROM VENOUS AND URINARY CATHETERS IN NICU OF HAMADAN HOSPITALS, WEST RAN

doi:10.1136/archdischild-2012-302724.0888

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Background and Aim *Staphylococcus* coagulase negative strains are colonized on epiderm and distribute in environment and outer bodies apparatus such as protez and intera-venous catheters. The aim of this study was the frequency of *Staphylococcus* coagulase negative isolated from venous and catheters children hospitalized in NICU of Hamadan hospitals and determination of antibiotics resistance patterns in Hamadan, the west of Iran.

Methods We collected 108 samples randomly from patients who were hospitalized in NICU hospitals of Hamadan and they needed to venous or urinary catheters. One specimen of each patient was taken and inoculated into carrier transported media and transferred to bacteriology laboratory to identification of strains. Antibigram was performed by Kirby-Bauer method. Data was analyzed using SPSS 15 software.

Results Out of 108 tested samples, 32.7% of patients had urinary catheter and 67.3% had venous catheter. 28% of tested samples had positive culture. The positive cases were significantly found in those children who had been used catheter more than 48 hours ($P = 0.00$). From the positive cases, *Staphylococcus epidermidis* (40.4%), *Acinetobacter baumannii* (10.6%) and *E. coli* (8.5%) were the most common isolates. The most rate of resistance of *Staphylococcus epidermidis* was against erythromycin and ampicillin. The most rate of sensitivity of *E. coli* was against gentamicin and *Pseudomonas aeruginosa* to ciprofloxacin.

Conclusion Our results showed the high contamination in used catheters particularly in those patients who needed to catheter for long time. We also indicated the high drug resistance in strains isolated from catheters.

889 ETIOLOGIES OF THE STATUS EPILEPTICUS IN CHILDREN HOSPITALISED IN THE PICU OF THE UNIVERSITY HOSPITAL CENTER OF ORAN (ALGERIA)

doi:10.1136/archdischild-2012-302724.0889

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Background and Aims Status Epilepticus is one of the most frequent neurological emergencies in Pediatrics, that can involve the vital and functional prognosis in the short and long term.

The Aim of this study is to determine epidemiological, causative, diagnostic aspects and to evaluate the therapeutic means.

Methods In this prospective study we analyse 214 children with status epilepticus between January 2008 and December 2010.

Results The mean age is 04 years (min: 28 days - max: 15 years) with a sex ratio equal to 1.3. 60% of cases was febrile. 81% of the seizures are generalized. The different etiologies are: Epilepsy: 59 (27.5%); Occasional seizures: 69 (32.24%); Infections of central nervous system (CNS): 53 (24.7%) (26 méningitidis and 27 méningo-encéphalitis); Febrile seizures: 24 (11%); Indeterminate cause: 09 (04%).

It was noted a long delay between the onset of clinical manifestations and world-renowned workplace support. The drugs used are represented by injectable diazepam and phenobarbital. In terms of

support, 46% need artificial ventilation. In this series the mortality is 22%.

Conclusion The vital and functional prognosis could be improved by better prevention and effective treatment of infectious diseases, a reduction of the period of support and better ways of resuscitation.

890 URINARY TRACT INFECTION AND PREDISPOSING FACTORS IN CHILDREN

doi:10.1136/archdischild-2012-302724.0890

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Objective This study was designed to determine the predisposing factors in children with symptomatic urinary tract infection (UTI) according to age and gender.

Material and Methods We reviewed prospectively 183 pediatric patients with symptomatic UTI admitted to emergency department or referred to nephrology clinic from November 2002 through July 2005. All patients underwent renal ultrasonography and voiding-cystourethrogram or radionuclide cystography. Diuretic renal scan or intravenous pyelography (IVP) was performed in those with urinary system dilatation. Urodynamic studies were done in patients with normal radiologic findings and recurrent infections or urinary-intestinal symptoms.

Findings Of 183 patients, 130 cases (71%) were female and 53 patients (29%) male. Most of the patients (61.9%) were between 2–24 months old ($P=0/001$). Vesicoureteral reflux (VUR) was the most common predisposing factor in both genders (46.9% in girls and 48.9% in boys). Voiding dysfunction in girls and urinary obstruction in boys were found with a significant difference ($P=0/03$ for both). In all age groups, except patients ≤ 1 month, the most common predisposing factor was reflux. Reflux, urinary obstruction and nephrolithiasis were found with a significant difference in 2–24 months age group ($P=0/001$ for all).

Conclusion In our study vesicoureteral reflux (VUR) was as common in boys as in girls, and suggested urolithiasis as a significant UTI predisposing factor. This study showed that voiding dysfunction in girls and urinary obstruction in boys are as significant predisposing factors. We suggest urodynamic studies in patients with normal radiologic findings and recurrent infections or urinary-intestinal symptoms.

891 ACUTE PYELONEPHRITIS AND DIAGNOSTIC PARAMETERS

doi:10.1136/archdischild-2012-302724.0891

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Introduction Diagnosis and the right time management of Pyelonephritis are extremely important especially if we consider the risk of permanent kidney damage.

Objectives and research To analyze the clinical and laboratory signs and radiological presentation of the disease in children diagnosed with acute pyelonephritis during year 2010 in Pediatric clinic, Nephrology Unit.

Methods Among cases admitted to Nephrology Unit diagnosed as pyelonephritis acuta, during 2010, we analyzed presentation symptoms by age, inflammatory laboratory results, protein degradation products, urine and kidney ultrasound findings.

Results Among of 83 cases with urinary tract infections, 32.5% were diagnosed as pyelonephritis acuta. More frequent among male infants and preschool age and on female school age. 29.6% of the cases were male and 70.3% of the cases were female. Inflammatory parameters were high in 88.8% of cases and the value of above SE:100 mm/h was in 20.8% of cases. Dominated presentation

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 *Escherichia 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 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 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.