PO-0778 WITHDRAWN

PO-0779 WHICH PARAMETERS ARE MANDATORY IN URINARY TRACT INFECTION IN CHILDREN?

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Background The protocol of investigations in urinary tract infection (UTI) in children mandatory includes urinalysis, uroculture, reactive C protein (RCP), blood urea (BUN), renal ultrasonography and scintigraphy. Each one of these has limits to perform in children.

Aims To establish the correlations between UTI investigations for argumentation the therapeutic decision.

Methods Retrospective study of hospitalised paediatric patients for UTI. The study parameters were: age, symptoms, RCP, BUN, uroculture, renal ultrasonography, urinalysis (leukocytes, nitrites, pH, density, proteins, erythrocytes, ascorbic acid-AA).

Results Were studied 243 hospitalised and treated with antibiotics UTI. Uroculture was positive in 178 patients (143 E.coli, 16 Enterococcus, 17 Proteus, 2 Staphylococcus). Negative uroculture was considered as decapitated UTI by antibiotics initiated before admission. 52 patients were <1 year old. Fever has been presented in 204 patients. 96 (56,1% from patients >1 year old) presented renal specific symptoms. 22 (42,3% from patients <1 year old) presented unspecific symptoms (vomiting, diarrhoea). 84 presented high values of RCP and 25 of BUN, 104 significant leukocyturia, 12 nitrites, 211 AA, 24 abnormal ultrasonography. Fever was the most important clinical parameter in younger patients (p 0,03), while unspecific symptoms were not significantly more frequent (p 0,25); the majority of patients with high BUN also presented abnormal ultrasonography (p 0,002); the reduced frequency of nitrites was due to AA (p 0,0001). Negative uroculture has no diagnostic significance (p 0,78), only in presence of significant leukocyturia and high RCP.

Conclusions In guideline of UTI diagnosis with negative uroculture, fever, RCP, BUN, leukocyturia, ultrasonography become mandatory.

PO-0780 POSTNATAL FOLLOW-UP OF NEWBORNS WITH PRENATAL DIAGNOSIS OF HYDRONEPHROSIS

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Background Prenatal Hydronephrosis is diagnosed in 1–5% of pregnancies worldwide. The diagnosis of antenatal hydronephrosis (ANH) causes stress to the parents and dilemmas to the paediatrician.

Objectives To examine the correlation between the degree of the renal pelvic dilatation (RPD) detected by the first 2–5 days of life and the postnatal outcome. To investigate the correlation between bilateral hydronephrosis and the nephrologic outcome. To discuss the possibility of decreasing the postnatal examinations of these healthy babies.

Methods During a period of two years, we enrolled 143 term newborns with ANH. These babies had an ultrasound at the age of 2–5 days and a second ultrasound at the age of 4–6 weeks. After the examinations they were referred to our nephrologist.

Results Out of 8370 live-births, 143 infants had ANH. Six babies never completed the exam. At the first exam 69 babies were normal, 62 babies had mild, 3 babies had moderate and 3 babies had severe RPD. On their second ultrasound 76 had normal findings, 36 had mild, 8 had moderate and 12 had severe RPD. 132 babies completed both of the examinations. Bilateral hydronephrosis was detected in 33 cases during their first ultrasound while on the second only 27. There were 11 infants with UPJ obstruction 9 of them with severe RPD. We found 10 babies with VUR. Six babies needed surgical intervention.

Conclusions There seems to be a correlation between the degree of RPD and the presence of postnatal pathology. Bilateral hydronephrosis probably carries increased risk for postnatal pathology.

PO-0781 HIVAN IN A YOUNG CAUCASIAN FEMALE

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Background Renal impairment in patients with HIV/AIDS is described since the beginning of pandemic. The incidence is increasing in the last 10 years by associated comorbidities: hypertension, diabetes, lipids disorders. In Romania there is a cohort (those born 1988–1990) around 9000 HIV -infected patients over 20 years old, which started antiretroviral therapy (ART) since 1996/1997.

Methods We studied an HIV case – white female, 22 years, from the nephrological perspective, with all complex comorbidities.

Results Our patient was diagnosed with AIDS at 11 years when she was admitted with toxoplasmic encephalitis, comatose. Since 2000 with ART. After that started ART side effects: hypercholesterolemia, hypertension, cardiomyopathy and an early renal failure. Renal impairment was detected at the age of 15 year with the GFR estimation (MDRD)-61 ml/min, with elevated blood pressure values. Treatment of complications was correction of dyslipidemia (Pravastatin + Ezetrol), intermittently diuretics, and from 2009 - Captopril. From 2012 she is in the C2 stage of HIV infection, RNA undetectable, CKD stage III (GFR-MDRD 36 ml/min). The renal biopsy performed revealed chronic glomerulopathy and diffuse global glomerulosclerosis. She present now osteopenia and a neurologic sequel (hemiparesis).

Conclusions Renal pathology is found in all stages of HIV infection. Biopsy is one that correctly diagnose the case even if the lesions are not pathognomonic for HIVAN. The case is with a complex pathology related with the HIV infection. Renal impairment, a fact in these patients, often need renal replacement therapy (dialysis or renal transplantation), less than in US population confronted with a higher prevalence of HIVAN.

PO-0782 WITHDRAWN

PO-0783 CONTRIBUTION OF CYSTOGRAPHY IN INFANTS WITH FIRST URINARY TRACT INFECTION

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Objectives To assess the yield of radiological retrograde ureterocystography (UCR) done systematically after a first episode of urinary tract infection (UTI) in infant less than 1 year.

Methodology A retrospective cohort study conducted in the Department of Paediatrics at Monastir included all patients between 1 month and 12 months who underwent UCR after a first episode of UTI between January 2000 and July 2013. Results: 203 infant were included, mean age was 5.69 months (peak was between 3–6 months). Fever was present in 190 infant (93.5%) of which 32 (15.7%) had prolonged fever. Germs found in culture were dominated by *Escherichia coli* present in 83% of children. CRP was positive in 88.6% of patients. Renal ultrasonography was performed in all cases and showed abnormalities in 57 cases (28%). The pyelocalical dilatation was predominant (28 cases). The UCR showed abnormalities in 24 children which ultrasonography findings were also abnormal. The most common abnormalities were primary vesico-ureteral reflux; 14 infants (6.9%) had high grade (bilateral in 7 cases). 6 patients (3%) had unilateral had low grade reflux in 3 cases and bilateral in 3 cases.

Conclusion As recommended, the indications of UCR in infants should be limited to abnormal ultrasound or recurrent UTI.

PO-0784 NEUROLOGICAL COMPLICATIONS IN TWIN PREGNANCIES WITH FETAL DEATH

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Introduction A monofoetal death is described in 0.5 to 7% of twin pregnancies. The neurological complications risk in the surviving twin is estimated at 18% in monochorionic pregnancies and it is based on vascular anastomoses between the fetal circulations.

Purpose To insist in twin pregnancy monitoring in case of one foetal death to avoid cerebral damage in the surviving twin.

Materials and Methods We report observations of 5 hospitalised newborns in Sfax Neonatology Department from August 2003 to October 2007 who presented neurological complications following foetal death of their twins.

Results The pregnancy was dichorionic in one case, monochorionic in the others. A twin transfusion syndrome was diagnosed in one case. The average term was 36 weeks and twin fetal death occurred at an average term of 33 weeks. The delivery was vaginal in two cases and caesarean in three. One child was clinically asymptomatic and the others showed neurological distress : convulsions or hypotonia. Transfontanellar ultrasound was done in one case, tomography in two cases, MRI in one case and Angio MRI in one case. Brain lesions were ischaemic in four cases and haemorrhagic in one. Death occurred in one case at the age of 10 days. There was a psychomotor retardation in the others with epilepsy in two cases.

Conclusion Cerebral damage in the surviving twin is based on different pathophysiological mechanisms. Strict monitoring should guide our choice of the appropriate moment of delivery.

PO-0785 RELATIONSHIP BETWEEN HEART RATE AND BLOOD PRESSURE IN PAEDIATRIC PATIENTS REFERRED FOR AMBULATORY BLOOD PRESSURE MONITORING (ABPM)

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Objective To establish the relationship between heart rate (HR), systolic blood pressure (SBP), diastolic blood pressure DBP, pulse pressure (PP), and mean arterial pressure (MAP) in paediatric patients from ambulatory blood pressure monitoring (ABPM) records.

Design and methods 100 ABPM studies from 75 children; mean age 12.1 years who underwent 24 h BP monitoring in our paediatric nephrology clinic were analysed. We acquired demographic data and readings of HR, SBP and DBP, PP and MAP from the ABPM records. The relationship between these variables was examined using regression statistical analysis. None of the children were on drugs known to affect heart rate or blood pressure.

Results Highly significant correlation coefficients were found between increasing HR and SBP, DBP and MAP: 0.40 (95% confidence intervals 0.38–0.43), 0.39 (0.36–0.41) and 0.37(0.35–0.39), all $p < 0.001$ respectively. Boys had a lower mean clinic HR than girls 84 vs 91 bpm $p < 0.02$. However, there was no difference in the response to increasing HR and BP parameters between the genders. HR and BP parameters correlated more strongly during awake periods than during sleep.

Conclusions In this pilot study, we found that as HR increases above basal, Blood Pressure increases in a predictable fashion. There are differences in the response of BP to increasing HR during asleep and awake periods. This pilot study confirms that we may be able to 'adjust' BP readings for tachycardia to improve our interpretation of ABPM.

PO-0786 PRENATAL DIAGNOSIS OF GLOMERULOCYSTIC KIDNEY DISEASE DUE TO MUTATION HNF 1B. IMPORTANCE OF GENETIC TEST

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Background HNF 1B is a key factor for the normal development of the kidney and pancreas transcription. Mutations affecting the gene encoding this factor are related to different phenotypes of renal disease among glomerulocystic kidney disease (GCKD) is included.

GCKD is entity characterised by glomerular cysts with dilatation of the Bowman space and adjacent tubules.

Methods Case report: Male patient, 7 years old, with renal cystic disease prenatal diagnosis of bilateral cortical cysts distribution. Unrelated parents, mother with IgA nephropathy, no alterations of hepatic metabolism or glucose. At birth, had very enlarged kidneys with increased echogenicity and loss of cortico medullary differentiation without other extrarenal findings. The disease has slowly evolved, with increased number of cysts, always cortical distribution. No impairment of renal function, normal BP. Genetic study was performed.

Results Heterozygous mutation HNF 1B was identified (c. 1- ϵ _1674+del), consisting of the deletion in one of its complete gene alleles. Neither parent is a carrier of the mutation.

Conclusions The demonstration of *de novo* gene mutation in this patient confirms the aetiology of cystic disease.

The test is very useful because it allows early diagnosis, non-invasive, allows estimating a prognosis and genetic counselling to the family.