necessary, based on clinical history and physical examination, and whenever possible serological tests (ANCA and anti-GBM), to start immunosuppressive therapy to interrupt fatal course of lung and kidney complications.



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Background and aims Fetal hydronephrosis is the most common anomaly detected on prenatal ultrasound examination. Several algorithms exist for its management but it remains controversy until now. Here we present our experience in management and outcome of the patients with prenatal hydronephrosis.

Methods In this study 160 known cases of prenatal hydronephrosis were evaluated for detecting underlying aetiology. We carried out renal and bladder sonography and voiding cystourethrography (VCUG) for all patients and DTPA scan in cases with suspicion of obstruction.

Results Of 160 cases of prenatal hydronephrosis 75% were boys and 25% were girls. The mean duration of postnatal follow up was 21.5 months (3 months to 36 months). The most common detected abnormalities were ureteropelvic junction obstruction (UPJO) 90 patients, vesicoureteral reflux (VUR) 46 patients, posterior urethral valve (PUV) 15 patients respectively. Nine patients had neurogenic bladder. Prenatal hydronephrosis were unilateral in 83.2% (133 cases). In these cases 57% were on the left side . The grade of reflux was severe in 20 renal units (36.4%), moderate in 24 renal units (43.6%), and mild in 11 renal units (20%). During the follow up period 50 cases (31.25%) resolved spontaneously. 34 cases (21.25%) underwent surgery and 76 (47.5%) are still under medical treatment.

Conclusions It is highly suggested to do standard VCUG in all boys with prenatal hydronephsis to detect PUV and neurogenic bladder. Additionally, renal sonography in all cases of congenital hydronephrosis and DTPA in cases with indication is recommended.

PO-0793 STUDY ON THE DETERMINING FACTORS FAVOURING URINARY TRACT INFECTIONS IN CHILDREN

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Background and aims The study of the factors that are in favour and determine the urinary tract infections (UTI) in children hospitalised in Clinic II Paediatrics, SCJU Craiova, between 1.01.2012–31.12.2013.

Material and method 213 children: 48 (22, 5%) infants, 25 (11.7%) 1–3 years, 31 (14.6%) 3–6 years, and 109 (51.2%) > 6 years

Results UTI accounted for 4.4% of all hospital admissions.

Distribution by sex (M/F): Infant 33/15, 1–3 years 17/8, 3–6 years 14/17, > 6 years 27/82; medium of origin Urban/Rural: Infant 26/22, 1–3 years 11/14, 3–6 years 14/17, > 6 years 42/67.

Favouring factors – Urinary tract abnormalities: phimosis 13 cases, hydronephrosis 12, 11 with kidney stones, vesicoureteral reflux 5 children, and pielocaliceal duplication in 5 children, 4 with hypospadias, congenital kidney in 2; vulvovaginitis in 9; oxiuriaza in 8; constipation in 7; poor hygiene at 15.

Bacterial determinant factors: E Coli in 118, Proteus in 28, 25 with Klebsiella, Enterobacter in 13 Pseudomonas aeruginosa in 10; viral causes in 19 cases (acute viral haemorrhagic cystitis). Conclusion 1. UTI were more common in males in infants and children :1–3 years and as for the females in children between 3–6 years and > 6 years;

2. E coli was the determining factor in over 50% of the cases.

3. Urinary tract anomalies favoured about 1/4 of the cases.

PO-0794 NEW TUBULAR INJURY MARKERS IN CHILDREN WITH SOLITARY FUNCTIONING KIDNEY

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The present study aimed to assess whether urinary profiles of the following lysosomal exoglycosidases: N-acethyl- β -hexosaminidase (HEX), its isoenzymes A (HEX A) and B (HEX B), α – fucosidase (FUC), β -galactosidase (GAL), α – mannosidase (MAN), and β – glucuronidase (GLU) are useful biomarkers of tubular dysfunction in children with solitary functioning kidney (SFK).

Methods We measured HEX, its isoenzymes HEX A, HEX B and FUC, GAL, MAN, GLU urinary activity in 52 patients with SFK. Patients were subdivided in two groups: congenital SFK (cSFK) - unilateral renal agenesis and acquired SFK (aSFK) - unilateral nephrectomy. The reference group (RG) contained 60 healthy children sex and age matched.

Results Urinary activity of all exoglycosidases in SFK was significantly higher than in RG (p < 0.05). There was no difference in exoglycosidases activity between cSFK and aSFK (p > 0.05). HEX, its isoenzymes HEX A, HEX B negatively correlated with eGFR, and all estimated parameters correlated positively with albumin/ creatinine ratio (p < 0.001).

Conclusion Urinary activity of HEX, its isoenzymes HEX A, HEX B, FUC, GAL, MAN, and GLU is elevated in children with SFK. Long-term follow-up studies in larger groups of children with SFK may help us better understand their clinical significance.

PO-0795 URINARY TRACT INFECTIONS IN CHILDREN AND ROLE OF PAEDIATRICIAN IN THEIR EARLY DETECTION AND TREATMENT

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Introduction Urinary infections are common problem in paediatric practice. Every vague febrile condition should be considered as a possible urinary infection.

Objectives Role of paediatrician in early detection and treatment in urinary infection

Aims With timely diagnosis and treatment of urinary infections impairment of the renal (kidney) function is prevented.

Materials and methods Data from 610 children aged 0 to 18 years suspected of urinary infection or febrile for a period of 3 years (2011–2013) had been processed. Analytical and descriptive method had been used for processing.

Results Out of 320 children with taken urine – culture, 102 showed positive results (31,87%). Escherichia coli had been isolated with 84 children (82,35%), Proteus sp. with 7 children (6,86%), Klebsiella with children 5 (4,91%), Pseudomonas aeruginosa had been isolated with 4 children (3,92%) and other bacteria with 2 children (1,96%). From the lab findings the most common had been leucocytosis. One child had been diagnosed agenesis of the right kidney, 6 children had been diagnosed VUR, and 1 child ectopic kidney. During the treatment the following drugs had been used: Nitrofurantoin, Amoxicillin + clavulonic acid, Trimetoprim + sulfonamide, Cefuroxim or Cefixime depending on the antibiogram. It resulted in the negative urineculture in more than 95% of children, while children with congenital malformations are under regular scrutiny by the paediatrician – nephrologists.

Conclusion Routine investigation of urine during every obscure febrile condition. Urine- culture method is necessary to determine the specific therapy.

Timely diagnosis and treatment leads to successful prevention of renal (kidney) damage.

PO-0796 WITHDRAWN

PO-0797 EVALUATION OF PATIENTS WITH DIAGNOSIS OF UROLITHIASIS IN UMRANIYE REGION OF ISTANBUL

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Urinary tract stones (nefrolithiasis, urolithiasis) is an endemic disease, which is seen in developing countries including our country. In this study, our aim was to evoluate the patients with the diagnosis of urolithiasis retrospectively, between the years of 2013 to 2014. On this purpose, 80 patients diagnosed with urolithiasis were evaluated retrospectively.

There was not any statistically significant difference between the patients evaluated by means on sex (50% were female). 62,5% of the patients were under the age of five years. Positive family history for urolithiasis was determined in 37.5% of the patients. Renal stones were detected on the left kidney in 47,5% of the patients. Full urinalysis showed hematuria in 32,5% of the patients, pyuria in 27,5%, proteinuria in 13.75% respectively. The mostly seen metabolic disorder was hiperoxaluria with 25% (also hiperuricasiduria was seen in 21%, and hipercalciuria in 10%). The patient were taken under control with medical treatment and metaphylactic diet according to the metabolic test results. Accompanying anatomic abnormalities were seen low rates.

As a result, we can say that urolithiasis can be treated with the help of metaphylactic preventions and metabolic analysis in childhood.

PO-0798 THE EVALUATION OF IMAGING TESTS IN RECURRENT URINARY TRACT INFECTIONS DURING CHILDHOOD

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Background and aims Delay in diagnosis or insufficient treatment of recurrent urinary tract infections (UTI) may lead to hypertension, growth retardation, reflux nephropathy or chronic kidney failure. The aim of our study is to establish the incidence of urinary system anomaly at recurrent UTI and to compare the findings of urinary tract ultrasonography (USG), voiding cystourethrogram (VCUG) and Technetium-99 dimercaptosucsinic acid scintigraphy (DMSA).

Methods Our study included 92 children at age of 0 to 14 years old. Inclusion criteria's were: been diagnosed as UTI at least two times, had at least two positive urine culture and completed USG, VCUG ve Tc-99 m DMSA scintigraphy.

Results The mean age of subjects was 2.84 ± 3.14 years old (female/male ratio: 1.8/1). The mean age of VUR diagnosis was 3.31 ± 2 years with a female/male ratio of 2.6/1. The renal scar has found at 27.2% in subjects with a diagnosis of VUR (23.9%). Renal scar was significantly higher at subjects who had grade 3, 4 and 5 VUR, 9.7% of subjects who specified normal by USG had a diagnosis of VUR by VCUG (sensitivity: 59%, specifity: 87%), 2.7% of subjects with normal VCUG were diagnosed as abnormal by DMSA (sensitivity: 72.7%, specifity: 97.1%, pozitive predictive value was 88.8% and negative predictive value was 91.89%.

Conclusions VCUG and DMSA scintigraphy are very sensitive diagnostic tests at diagnosis of recurrent urinary tract infections. Using of these tests in children with recurrent urinary tract infections will prevent development of renal damage.

PO-0799 BACTERIA ISOLATED FROM THE URINE SAMPLES OF CHILDREN AND THEIR ANTIBIOTIC SUSCEPTIBILITIES

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The aim of this study was to identify the bacteria isolated from urine samples and to investigate their antibiotic suscep-tibilities in children aged 0-14 years.

Urine samples of 1820 patients who referred to our hospital and had urinary tract infection symptoms were studied in order to evaluate culture and antibiotic susceptibility testing results. All urine samples were inoculated on eosin methylene blue (EMB) and 5% blood agars. Bacterial isolates were identified by conventional met-hods. Antibiotic susceptibility testing was performed by disk diffusion method.

The bacteria were isolated in 198 (9.2%) of 1820 urine samples. The most frequently isolated bacteria (69.4%) were Escherichia coli. Enterococcus spp. (12.7%), Proteus spp. (6.1%), Klebsiella spp. (4.3%), Enterobacter spp. (5.9%) and coagulasenegative staphylococci (CNS) (1.5%) followed respectively. While all E.coli, Proteus spp., Klebsiella spp., and Enterobacter spp. isolates were susceptible to amikacin, gentamicin, and imipenem, sensitivity of the ampicillin (68.5%), and the