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PO-0796 WITHDRAWN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  $2.84 \pm 3.14$  years old (female/male ratio: 1.8/1). The mean age of VUR diagnosis was  $3.31 \pm 2$  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

trimethoprim/sulfa-methoxazole (77.6%) were the lowest. All Enterococcus spp. isolates were susceptible to linezolid and vancomycin, resistan-ce ratios aganist nitrofurantoin, penicillin, and erythromycin were 5.6%, 19.0%, and 27.3% respectively.

Although antibiotic susceptibility rates among our hospital's patient population were higher than other studies, it should be remembered that culture and antimicrobial susceptibility testing may be beneficial to help choosing narrow-spectrum antibiotics and to prevent development of resistance.

PO-0800

#### BACTERIA ISOLATED FROM THE URINE SAMPLES OF CHILDREN AND THEIR ANTIBIOTIC SUSCEPTIBILITIES

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10.1136/archdischild-2014-307384.1435

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

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#### **Neurology and Developmental Paediatrics**

PO-0801

# CLINICAL AND PATHOGENETIC ASPECTS OF THE DELAYED PSYCHOVERBAL DEVELOPMENT IN CHILDREN OF AN EARLY AGE

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26 children at the age of 1.5 to 4 with delayed psychoverbal development (DPVD) without movement disorders were examined. All children were born full-term, had cerebral ischaemia of the 1st and 2nd degrees, were observed by a neurologist during the 1st year of life and were further observed according to their place of residence.

The complex of examination included: video-EEG monitoring of the daytime sleep, brain MRI, transcranial dopplerography (TCDG) and consultation of a psychologist, logopedist, endocrinologist and geneticist.

The data of psychological testing revealed mental retardation of a different level and character: immaturity of emotional regulation, skills of communicative behaviour and cooperative activity as well as partial delay of cognitive development against the background of general speech underdevelopment, delay of sensorimotor development (12), intellectual deficiency of cerebralorganic genesis with neurodynamic disorders (10) and traits of autistic behaviour (4).

As a result of logopedist's examination it was revealed that more than 1/3 of children had alalia, 2 children had dysarthria and 15 children had dyslalia.

According to the data of video-EEG 13 children had decrease of functional lability of cortical processes, 6 children had paroxysmal activity, 2 children had epiactivity in the form of 'peakslow wave' complexes, 5 children had delay in the basic rhythm formation that conformed to the presence of organicity as per the data of brain MRI in the form of periventricular gliosis and allowed to consider DPVD of cerebral-organic type.

As a result of complex examination the following clinical entities were revealed: subclinical hypothyroidism (2), syndrome of cognitive epileptiform disintegration (2), autism (3), organic lesion of central nervous system (5), encephalasthenia (7) and syndrome of minimal brain dysfunction (9).

The analysis of results revealed different variants of DPVD: dysontogenetic variant due to immaturity, encephalopathic variant against the background of minor organic lesion of CNS, secondary DPVD against the background of hypothyroidism that determined the initial approach and amount of therapy as well as further prognosis for the disease.

PO-0802

#### A RARE CASE OF H1N1 TRIGGERED RECURRENT ACUTE NECROTIZING ENCEPHALOPATHY (ANE1) IN A FAMILIAL COHORT WITH A T653I MUTATION IN THE RANBP2 GENE

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Acute necrotizing encephalopathy (ANE) is a host-mediated phenomenon with viral triggers typically including influenza and parainfluenza viruses [1]. It presents with a spectrum of symptoms from vomiting to seizures and coma with a potential to cause long-standing neurocognitive impairment [2]. Sporadic (ANE) and recurrent/familial (ANE1) forms are now recognised in the literature with the latter being described after the discovery of mutations in the RANBP2 gene [1]. The diagnosis requires exclusion of other causes of encephalopathy, a high index of suspicion from the history (i.e. of recurrent attacks) and diagnostic clues from prompt MRI imaging.

Although the association of the H1N1 strain of influenza as a trigger for isolated ANE has been previously described, this is the first case of the H1N1 strain being isolated in the recurrent/familial form, ANE1, with a confirmed missense mutation in RANBP2. This is only the second report of the T653i mutation in RANBP2 giving rise to a clinical phenotype of ANE1. In the previous reported case, the pathogenic significance of this