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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**

Y Taskiran. *Çocuk, Aydin Kadın Dogum Hastanesi, Aydin, Turkey*

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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.

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 methods. 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 coagulase-negative 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, resistance ratios against 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.

## Neurology and Developmental Paediatrics

**PO-0801 CLINICAL AND PATHOGENETIC ASPECTS OF THE DELAYED PSYCHOVERBAL DEVELOPMENT IN CHILDREN OF AN EARLY AGE**

AG Chernykh, SB Berezanskaya, AI Bespalova, TV Prosvetova, AA Afonin. *Pediatric Department, Rostov Scientific-Research Institute of Obstetrics and Pediatrics, Rostov-on-Don, Russia*

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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 cerebral-organic 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 'peak-slow 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**

<sup>1</sup>G Anand, <sup>1</sup>V Ravindran, <sup>2</sup>F Sherrin, <sup>3</sup>A Nemeth, <sup>1</sup>S Jayawant. <sup>1</sup>*Paediatric Neurology, Oxford University Hospitals NHS Trust, Oxford, UK;* <sup>2</sup>*Paediatric Neuroradiology, Oxford University Hospitals NHS Trust, Oxford, UK;* <sup>3</sup>*Paediatric Genetics, Oxford University Hospitals NHS Trust, Oxford, UK*

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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

specific mutation was not clearly established. Our familial cohort proves beyond doubt that the T653i is a pathogenic mutation.

**PO-0803 WITHDRAWN**

**PO-0804 COGNITION IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)**

T. Rusishvili, S. Bakhtadze, N. Khachapuridze, N. Sebiskveradze, N. Geladze, N. Kapanadze. *Child Neurologist, Tbilisi State Medical University, Tbilisi, Georgia*

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**Background** Attention deficit hyperactivity disorder (ADHD) is the condition which occurs approximately in 5% of school aged children. The diagnostic tool which will help clinicians to make the precise diagnosis is still absent. Thus child neurologists as well as neuropsychiatrists attempt to seek alternate methods of diagnosis and treatment. The neurophysiologic approaches especially event-related potentials (ERPs) are mostly valuable from this point of view. The later response of ERPs (P3) reflects the most important parts of executive functioning frequently affected in ADHD children-the process of mental effortfulness to select the appropriate behaviour and decision making. Besides the diagnosis the treatment of ADHD is also the point of concern. In recent years EEG biofeedback (Neurofeedback \_NF) have become the alternative treatment.

The aim of our study was assess the changes of EPRs after NF therapy.

**Methods** We have examined 14 patients with ADHDcom without any drug. Age range was 9–12 years. The children were divided into 2 subgroup: the first ADHDcom-1 (6 children) were children with NF treatment and the second subgroup of ADHDcom-2 (8 children) were non treated ones.

**Results** We have found the significant improvement of P3 in ADHD-1 compared with ADHD-2 while NF was non effective for earlier response like N1.

**Conclusions** NF can positively affect on the P3 which is very important in ADHD children as P3 reflects the speed of information processing as well as selection of appropriate action and decision making which are frequently impaired in ADHD children.

**PO-0805 CONVERGENCE INSUFFICIENCY IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER**

A. Gomes, A. Barbosa. *Pediatrics, Federal Fluminense University, Rio de Janeiro, Brazil*

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**Background and aims** Near Point of Convergence (NPC) is used to diagnose Convergence Insufficiency (CI), and the existence of common symptoms between CI and Attention Deficit Hyperactivity Disorder (ADHD) has been suggested as an important aspect to be investigated. The aims of this study was to analyse NPC measurement in children with ADHD and the presence of common symptoms between ADHD and CI through the application of standardised questionnaires and to establish the percentage of individuals that scored questions in common between the ones applied.

**Methods** A transversal study was performed between June and September 2013, with students from 7 to 17 years old, with

previous diagnosis of ADHD in which NPC measure was realised and two previously validated questionnaires were applied: one for triage of CI-CISS symptoms and other for the diagnostic criteria to ADHD – MTA-SNP-IV. The data was analysed using SPSS v.20 software.

**Results** Seventy-five students were accepted on the study, 62 (82.7%) male and 13 (17.3%) female, with age of  $11.24 \pm 2.33$  years old. Mean to NPC was 17.19 cm. NPC was altered in 85.3%. When NPC measure was  $>5$  cm, both questionnaires were positive in 92% of students and 56% of scored questions in common between the two ones.

**Conclusions** This study indicates a high prevalence of CI in the population with ADHD, and shows an overlap of symptoms that were highlighted by comparing the questionnaires applied, suggesting the need to introduce the ocular muscles examination in children with diagnosed or suspected ADHD.

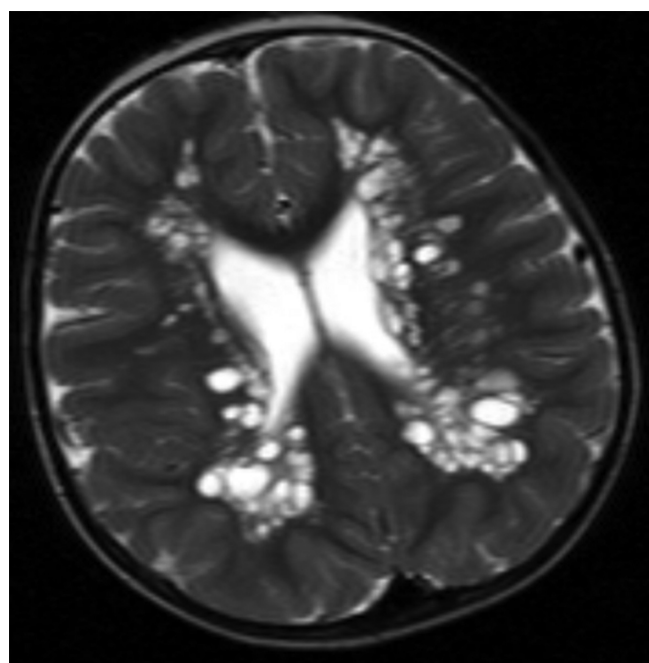
**PO-0806 MULTI-CYSTIC WHITE MATTER ENLARGED VIRCHOW ROBIN SPACES IN A 5-YEAR-OLD BOY**

<sup>1</sup>E. Bayram, <sup>1</sup>Y. Topcu, <sup>2</sup>H. Cakmakci, <sup>1</sup>O. Giray, <sup>1</sup>D. Ercal, <sup>1</sup>S. Hiz. <sup>1</sup>*Pediatrics, Dokuz Eylul University Hospital, Izmir, Turkey;* <sup>2</sup>*Radiology, Dokuz Eylul University Hospital, Izmir, Turkey*

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Virchow–Robin spaces (VRS) are perivascular, pial-lined areas in the brain that surrounds small arteries and can be seen on brain magnetic resonance imaging. VRS are typically less than 5 mm in diameter and accepted as normal anatomical structures. VRS are usually asymptomatic, but if there is an expansion to the brain parenchyma, various clinical symptoms can be seen associated with the mass effect.

A 5-year-old boy presented with a complaint of developmental delay. He had relative macrocephaly, hair with a double crown, and clinodactyly of the middle phalanx of both the fifth fingers. He had dysmorphic facial features, including triangular



Abstract PO-0806 Figure 1