Background Atypical anti-psychotics have been found to be associated with hyperuricemia. The aims of this study were to determine the prevalence of hyperuricemia and metabolic adverse events in children and adolescents with ASD treated with risperidone.
Methods In this cross-sectional study, we recruited 127 Thai ASD children and adolescents aged 3–20 years receiving risperidone for more than 4 weeks. The clinical data and laboratory data were obtained and analyzed. Hyperuricemia was defined as serum uric acid > 5.5 mg/dL.
Results Hyperuricemia was present in 57.48% of total ASD patients treated with risperidone. Uric acid levels were significantly higher in adolescents as compared to children. Uric acid levels correlated with risperidone dose ($P = 0.01$), duration of treatment ($P < 0.0001$), BMI ($P < 0.0001$), waist circumference ($P = 0.003$), triglyceride (TG; $P < 0.0001$), triglycerides/high-density lipoprotein cholesterol ratio (TG/HDL-C; $P < 0.0001$), insulin ($P = 0.04$), homeostatic model assessment index (HOMA-IR; $P = 0.03$), high-sensitivity CRP (hs-CRP; $P < 0.0001$), and leptin levels ($P < 0.0001$). HDL-C and adiponectin levels were negatively correlated with uric acid levels ($P < 0.0001$). In multiple regressions analysis, age, BMI, TG/HDL-C, and adiponectin level remained significantly associated with uric acid levels ($P < 0.0001$).
Conclusion Hyperuricemia may play a role in metabolic adverse effects in children and adolescents with ASD receiving high dose and/or long-term treatment with risperidone.
Disclosure of interest The author has not supplied his/her declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.02.198

EW0585

Effects of executive function stimulation in the language improvement of children with ASD

I. Sun*, F. Fernandes
University of São Paulo, FMUSP, São Paulo, Brazil
* *Corresponding author.*

The Autism Spectrum Disorder (ASD) is a neurobiological disorder that involves deficits currently classified into two areas:.
– social communication and interaction across multiple contexts;
– restricted, repetitive patterns of behavior, interests or activities.
Although, these disorders do not have any causal relationship, both are always present. It has increasingly been sought methods aiming at the effectiveness of intervention for this population seeking to include all aspects. A promising research field is the one that considers the interdependence of the language and cognition areas, specifically regarding executive functions. This study was designed to verify the effectiveness of an executive functions stimulation program (EFS) during the regular speech-language therapy sessions and its impact in language development, specifically in the pragmatic aspects, through the evaluation of the functional profile of communication (FPC) in 14 children with ASD. During a 12-week period of regular speech-language therapy, the following areas were focused: working memory, cognitive flexibility, central coherence, inhibitory control and specific language aspects. Data were registered and analyzed statistically. The average performance of children in the stimulation was 85%, ensuring the effectiveness of EFS. The association analysis between pre- and post-EFS performance with FCP a significant improvement was observed in the occupation of the communicative space and the percentage of interactivity. These results are consistent with the hypothesis of the study, which believes in strong association between communication aspects and executive functions skills.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.02.199

EW0586

Cytogenetic characteristic the patients of both sexes with phobic-anxiety disorders

P.T.[1,*], N. Bagatska[2], E. Mykhailova[1,2], L. Glotka[3], N. Reshetovska[1], T. Matkovska[1], A. Goloborodko[1]
[1] *SI "Institute for Children and Adolescents Health Care of the NAMS of Ukraine", psychiatry, Kharkiv, Ukraine*
[2] *SI "Institute for Children and Adolescents Health Care of the NAMS of Ukraine", genetic, Ukraine Kharkov V. Karazin National University, Kharkiv, Ukraine*
[3] *SI "Institute for Children and Adolescents Health Care of the NAMS of Ukraine", genetic, Kharkiv, Ukraine*
* *Corresponding author.*

Background and aims Anxiety-phobic disorders are caused both by environmental and hereditary factors. The study was designed to determine the level of chromosomal aberrations in the peripheral blood lymphocytes (PBL) of children and adolescents of both sexes with phobic-anxiety disorders (PAD).
Patients and methods Cytogenetic analysis was performed in 27 children and adolescents of both sexes with PAD, aged 9–15 years; the control group consisted of 50 healthy peers of both genders. Statistical analysis-Excel and SPSS statistics 17.0.
Results Cytogenetic analysis of patients with PAD and in healthy age-matched individuals has established normal female (46,XX) and male (46,XY) karyotypes. The frequency of the chromosomal aberrations (CA) spontaneous level in the PBL is 4.6 times higher than the CA frequency in healthy persons. In children and adolescents with the disease, the spontaneous frequency of aberrations of chromatid and chromosome types is also significantly higher than the same in healthy children and adolescents. Single acentric fragments and exchanges prevail among the chromatid–type aberrations; pair acentric fragments prevail among the chromosome–type aberrations. An increase in the frequency of the chromosome-type aberrations has been revealed in boys with PAD (1.72 vs.0.55 per100 cells in healthy boys, $P < 0.001$ by pair acentric fragments), in comparison with healthy boys; and the chromatid–type aberrations have been observed in girls with PAD (3.22 vs.0.94 per 100 cells in healthy girls, $P < 0.001$ by single acentric fragments), in comparison with healthy girls. A pronounced individual variability of CA frequency, which ranges in our patients from 2.0 to18.0 per 100 metaphase plates, has been found along with an increase in the CA level in patients with PAD.
Conclusion Children and adolescents with PAD require a careful cytogenetic analysis and the consequent therapeutic measures for genome stabilization.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.02.200

EW0587

Effect of adenotonsillectomy on attention-deficit/hyperactivity disorder symptoms, sleep disturbance symptoms, and quality of life of children with adenotonsillar hypertrophy and sleep-disordered breathing

S. Türkoglu[1,*], B.T. Somuk[2], E. Sapmaz[2], G. Goktas[2], A. Bilgic[3]
[1] *Selcuk university medical faculty, department of child and adolescent psychiatry, Konya, Turkey*
[2] *Gaziosmanpasa university hospital, department of otolaryngology-head and neck surgery, Tokat, Turkey*
[3] *Necmettin Erbakan university, department of child and adolescent psychiatry, Konya, Turkey*
* *Corresponding author.*

https://doi.org/10.1016/j.eurpsy.2017.02.201 Published online by Cambridge University Press

Objectives To date, limited data has been available regarding the impact of adenotonsillectomy (AT) on the psychosocial well-being of chronic adenotonsillar hypertrophy (CAH) subjects.
Aims In the present study, we examined the impacts of AT on attention-deficit/hyperactivity disorder symptoms (ADHD) and sleep disturbance symptoms and quality of life of children with chronic adenotonsillar hypertrophy.
Methods Parents of children with CAH filled in Conners Parent Rating Scale-Revised Short (CPRS-RS), children's sleep habits questionnaire (CSHQ), and the pediatric quality of life inventory, parent versions (PedsQL-P) before and six months after AT.
Results A total of 64 children were included the study (mean age: 6.8 ± 2.4 years; 50% boys). Mean ADHD Index (11.98 ± 6.94 versus 10.35 ± 6.44) (before AT versus after AT) and oppositional scores (6.73 ± 3.72 versus 5.87 ± 3.52) improved statistically significantly after AT ($P < 0.05$). All of the CSHQ subdomain scores, except sleep duration, significantly reduced after AT ($P < 0.05$). Regarding to quality of life, both PedsQL-P physical health (64.20 ± 19.81 versus 69.84 ± 18.63) and psychosocial health subdomain scores (67.83 ± 12.89 versus 75.57 ± 13.16), and PedsQL-P total score (66.57 ± 12.94 versus 73.58 ± 12.46) of the patients were significantly higher six months after AT ($P < 0.001$).
Conclusions It is necessary for child and adolescent psychiatrists to query the symptoms of CAH to identify children with chronic adenotonsillar hypertrophy who suffer from ADHD symptoms, oppositionality, and sleep disturbance. To carry out AT seems to be beneficial for coexisting ADHD and sleep disorder symptoms and quality of life in these children.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.02.201

EW0588

Intelligence functioning and associated factors in children with cerebral palsy

S. Türkoglu[1,*], G. Türkoğlu[2], C. Celik[3], H. Ucan[4]
[1] *Selcuk university, faculty of medicine, department of child and adolescent psychiatry, Konya, Turkey*
[2] *Konya training and research hospital, physical medicine and rehabilitation, Konya, Turkey*
[3] *Giresun university, faculty of medicine, department of physical medicine and rehabilitation, Giresun, Turkey*
[4] *Ankara physical medicine and rehabilitation training and research hospital, department of physical medicine and rehabilitation, Ankara, Turkey*
[*] *Corresponding author.*

Objectives Cerebral palsy (CP) is described as a primary disorder of posture and movement; however, intellectual impairment is prevalent in children with CP.
Aim The aim of the present study was to examine the association with intellectual level and gross motor function, hand function, type of CP, and the presence of co-morbid disorders in these children.
Methods A total of 107 children with CP were included in the study. Intellectual functions of the children were determined by clinical assessment, adaptive function of daily life, and individualized standardized intelligence testing. Gross motor function and hand function of the patients were classified using the gross motor function classification system and the bimanual fine motor function measurements.
Results The mean age of the patients were 8.10 ± 3.43 years (age: 2–16 years). During clinical typing, we observed that 80.4% of the patients were spastic, 11.2% were mixed, 4.7% were dyskinetic, and 3.7% were ataxic. No significant relationship was determined between the type of CP and intellectual functioning ($P > 0.05$). Intellectual functioning was found to be significantly correlated negatively with both gross motor function and hand functions level ($P < 0.001$). The factors related to intellectual functioning were neonatal convulsion ($x^2 = 12.97$, $P = 0.002$), epilepsy ($x^2 = 29.221$, $P < 0.001$), and speech disorders ($x^2 = 23.29$, $P < 0.001$).
Conclusions There is an association between intellectual functioning in children with CP and the degree of motor impairment, neonatal convulsion, epilepsy, and speech disorders. Intelligence assessment should be an essential part of CP evaluation.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.02.202

EW0589

Methylation related to perceived parenting in adolescents and its association to depressive symptoms two years later

E. Van Assche[1,*], E. Vangeel[1], K. Freson[2], K. Van Leeuwen[3], K. Verschueren[4], H. Colpin[4], W. Van den Noortgate[5], L. Goossens[4], S. Claes[1]
[1] *KU Leuven, neuroscience, Leuven, Belgium*
[2] *KU Leuven, center for molecular and vascular biology, Leuven, Belgium*
[3] *KU Leuven, parenting and special education, Leuven, Belgium*
[4] *KU Leuven, school psychology and child and adolescent development, Leuven, Belgium*
[5] *KU Leuven, methodology of educational sciences, Leuven, Belgium*
[*] *Corresponding author.*

Introduction Adolescents' well being is affected by their parenting situation and can influence their well being over time. We present an exploratory study with an Illumina 450 k array, comparing methylation in adolescents, based on perceived parenting at T_0, and how methylation can interact with parenting in explaining depressive symptoms two years later (T_2).
Objectives Identify differentially methylated regions (DMRs) associated with perceived parenting at T_0 and investigate their association with depressive symptoms two years later.
Aims An exploratory analysis evaluating the association between methylation and depressive symptoms longitudinally.
Methods From two extreme parenting clusters: perceived supportive, and punishing neglecting, we randomly selected 44 adolescents ($M_{Age} = 14$ at T_0; 48%boys). The CES-D scale (Center for Epidemiologic Studies Depression Scale) assessed depressive symptoms. DMRs were identified based on the parenting clusters (DMRcate and comb-p) using Illumina Infinium HumanMethylation 450 BeadChip data. Associations between the most significant CpG for each DMR and the depression score at T_2, were calculated using linear regression analysis.
Results We identified 17 DMRs, but only cg13306335 in PEX10 was associated with depressive symptoms at T_2 ($P = 0.0014$, Bonferroni (17 tests): $P < 0.0029$). Additionally, an interaction between parenting at T_0 and PEX10 methylation (T_0) in explaining depressive symptoms (T_2) can be suggested ($P = 0.014$).
Conclusions We show that methylation at PEX10's most significant CpG is correlated with depressive symptoms at T_2, these exploratory results also suggest a possible interaction between parenting and PEX10 methylation at T_0 in association with depressive symptoms at T_2. Validation in a larger sample is needed to support the role of methylation and its interactions in depression over time.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.02.203