

Methods: An online questionnaire was applied with 38 multiple choice questions about the future academic perspectives and expectations of their children, the job market and about school adaptations and the school year during the COVID-19 pandemic.

Results: So far, 16 parents of a Speech-Language Pathology laboratory in which they assist children with Autism Spectrum Disorder (ASD) have answered the questionnaire. When asked if there were teachers who work with TEA individuals, nine guardians 56.3% answered that they did not, 50% of the guardians said they had received adapted material during the COVID-19 pandemic, 100% of the guardians believe that their child will finish high school, 93.8% of those in charge do not believe that the job market is prepared for individuals with ASD.

Conclusions: Parents are dissatisfied with the education their children receive and most of them did not get adequate support during the COVID-19 pandemic. There are also low expectations for the future in the job market.

Keywords: Autism; autism in School; Job Market for autistic individual; Covid-19 pandemic and autism

EPP0079

Non-suicidal self-injury and impulsivity: Study of inhibitory control in adolescent population

S. Pacifici^{1*}, V. Baglioni¹, L. Cammisia¹, D. Guerrini¹, C. Mancini², G. Mirabella² and A. Terrinoni¹

¹Department Of Human Neuroscience, Sapienza University of Rome, Section of Child and Adolescent Neuropsychiatry, RM, Italy and

²Department Of Clinical And Experimental Sciences, University of Brescia, Brescia, Italy

*Corresponding author.

doi: 10.1192/j.eurpsy.2021.545

Introduction: Non-suicidal self-injury (NSSI) is a clinical condition defined as intentional, self-inflicted act causing pain or superficial damage without suicidal intents (12-35% of the adolescent community). Several findings show a high correlation between NSSI and impairments in the impulsivity control.

Objectives: The goal of our study is to evaluate the role of impulsivity in NSSI adolescents, relatively to the inhibitory control, in order to investigate if it can represent a neurocognitive risk factor underlying maladaptive behaviours and which psychopathological dimensions can be associated with this neurobiological process.

Methods: 30 NSSI inpatients (age range: 12 to 18 years), drug-free, were compared with an age-matched control group, using two behavioural paradigms for the study of inhibitory control: the Stop Signal task and the emotive go/Nogo. Psychopathological traits were evaluated by self-report questionnaires for impulsivity dimensions, suicidality and self-injurious acts. Statistical analyses were performed with SPSS program ($p = 0.05$).

Results: NSSI patients did not present impairments in the global inhibitory control but they had longer movement times in both paradigms and faster reaction times in the Go/no-go behavioural paradigm. Therefore, NSSI patients tended to be impulsive at an early stage of movement (rapid TR) and have to slow down in a second phase (TM slow) in order to have time to rework the cognitive processes underlying movement.

Conclusions: The impulsivity dimension is a complex construct that involves multiple interconnected factors. The study of neurocognitive and psychopathological aspects and how they are

interconnected is necessary to draw new perspectives on the etio-pathogenesis of NSSI.

Keywords: NSSI; adolescent; impulsivity; inhibitory control

EPP0080

Microbiome - a (FUTURE) marker for the differential diagnosis for autism spectrum disorder and attention-deficit/hyperactivity disorder?

I. Ramos¹ and M. Figueiredo-Braga^{2,3*}

¹Psychology, Faculty of Medicine - University of Porto, Porto, Portugal;

²Clinical Neurosciences And Mental Health, Faculty of Medicine, University of Porto, Porto, Portugal and ³Metabolism, Nutrition & Endocrinology, i3S - Instituto de Investigação e Inovação em Saúde, Porto, Portugal

*Corresponding author.

doi: 10.1192/j.eurpsy.2021.546

Introduction: The differential diagnosis between Autism Spectrum Disorder (ASD) and Attention Deficit/Hyperactivity Disorder (ADHD) is often challenging and detrimental to early and timely treatment. Co-current and overlapping symptoms contribute to erode differential diagnostic accuracy, based mainly on clinical assessment supported by standardized instruments and reports from parents and teachers. The microbiota was recently considered a valuable resource in the search for biological markers in neurodevelopmental disorders.

Objectives: Our objective was to examine the published literature in order to clarify the role of the microbiome as a possible differential biomarker between ASD and ADHD.

Methods: Five hundred and sixteen articles were reviewed in order to contextualize the role of Gut- Brain Axis in neurodevelopment and neurodevelopmental disorders, the microbiome as a biomarker and ultimately to unravel microbiome abnormalities reported in patients diagnosed with ASD and/or ADHD.

Results: Although gut microbiome appears to be involved in the pathogenesis of ASD with several reports identifying changes in gut populations and functions, a “microbial signature” is still not reached. In ADHD patients, research confirms that the composition and predicted functions of gut microbiome are also altered, but identically controversial results were found.

Conclusions: Future studies are needed to confirm the relationship between the composition and function of the microbiome and the occurrence or presentation of each of the disorders. A specific signature of the microbiota could then constitute itself as a differential biomarker in ASD and ADHD.

Keywords: Attention Deficit/Hyperactivity Disorder; Microbiome; autism; Biomaker

EPP0083

Electrodermal activity – a promising biomarker for cardiovascular risk assessment in adolescent anorexia nervosa.

I. Tonhajzerova^{1*}, N. Ferencova¹, I. Ondrejka², L. Bona Olexova¹, D. Funakova², I. Hrtanek³ and Z. Visnovcova³

¹Department Of Physiology, Jessenius Faculty of Medicine Comenius University, Martin, Slovak Republic; ²Psychiatric Clinic, Jessenius Faculty of Medicine in Martin; ³Jessenius University in Bratislava,

University Hospital Martin, Martin, Slovak Republic and ³Biomedical Center Martin, Jessenius Faculty of Medicine in Martin/Comenius University in Bratislava, Martin, Slovak Republic

*Corresponding author.

doi: 10.1192/j.eurpsy.2021.547

Introduction: Anorexia nervosa (AN) represents a severe mental disorder associated with cardiovascular complications leading to morbidity and mortality. Abnormal functioning of autonomic nervous system, particularly sympathetic nervous system, plays a crucial role in AN-linked psychopathology and cardiovascular diseases; however, the pathomechanisms are still unclear.

Objectives: Thus, we studied sympathetic arousal in response to mental stress using conventional parameters, and for the first time by spectral analysis of electrodermal activity with aim to detect non-invasive biomarkers for cardiovascular risk assessment already in adolescent AN patients.

Methods: Twenty-five AN girls were examined (14.8 ± 0.4 yr.) and age/gender matched controls (15.1 ± 0.3 years). Electrodermal activity (EDA) was continuously recorded at rest (5 min.) and in response to Go/NoGo test (5 min.). Evaluated parameters: skin conductance level (SCL) and spectral parameter of EDA in the sympathetic frequency band (EDASymp). EDA reactivity was calculated as percentual change (%) of SCL and EDASymp in response to stressor.

Results: The AN group had significantly reduced SCL and EDA-Symp compared to controls during baseline ($p=0.041$, $p=0.0001$, respectively) and in response to Go/NoGo test ($p=0.043$, $p=0.017$, respectively). The EDASymp index reactivity was significantly lower in AN group compared to control ($p=0.034$).

Conclusions: Our study revealed resting sympathetic underactivity associated with lower reactivity to mental stressor indexed by EDA parameters in adolescent AN patients. This altered pattern of sympathetic arousal could play important role as a pathomechanism leading to cardiovascular complications in AN. It seems that EDA indices represent potential non-invasive biomarkers to detect AN-linked cardiovascular risk already at adolescent age.

Conflict of interest: This study was funded by the Slovak Scientific Grant Agency under grants VEGA 1/0044/18 and VEGA 1/0190/20 and Ministry of Health of the Slovak Republic under the project registration number 2018/20-UKMT-16.

Keywords: anorexia nervosa; electrodermal activity; sympathetic nervous system

EPP0085

The effect of vitamin C on sociability in a juvenile zebrafish pesticide-induced model of autism spectrum disorder

M.A. Robea^{1*}, A. Ciobica^{2,3}, S.-A. Strungaru⁴, G. Plavan¹, M. Nicoara¹ and C. Solcan⁵

¹Department Of Biology, "Alexandru Ioan Cuza" University of Iasi, Faculty of Biology, Iasi, Romania; ²Department Of Research, "Alexandru Ioan Cuza" University of Iasi, Faculty of Biology, Iasi, Romania; ³Center Of Biomedical Research, Romanian Academy, Iasi, Romania; ⁴Department Of Interdisciplinary Research In Science, "Alexandru Ioan Cuza" University of Iasi, Iasi, Romania and ⁵Department Of Molecular Biology, Histology And Embriology,

University of Agricultural Science and Veterinary Medicine "Ion Ionescu de la Brad", Faculty of Veterinary Medicine, Iasi, Romania

*Corresponding author.

doi: 10.1192/j.eurpsy.2021.548

Introduction: Autism spectrum disorder (ASD) is a multi-factorial disease characterized by impairments in social interaction, communication and repetitive behaviors. The necessity of developing an adequate treatment for ASD is essential. There is an increase in clinical studies assessing the positive effects of vitamins in ASD children. Vitamin C (vit. C) is implicated in biosynthesis of neurotransmitters and in protein metabolism.

Objectives: This study evaluated the possible effect of vit. C on zebrafish sociability after a single insecticide mixture administration as inductor for ASD.

Methods: A single dose of insecticide mixture ($600 \mu\text{g L}^{-1}$ fipronil and $600 \mu\text{g L}^{-1}$ pyriproxyfen) was administrated to zebrafish juvenile. Vit. C ($25 \mu\text{g L}^{-1}$) was daily administrated during 14 days. A control group simulated the administration of insecticide mixture and vitamin. Each animal was tested in the experimental tank designed for the social interaction test. The trials were recorded and analysed using EthoVision XT 11 (NOLDUS, Netherlands). The locomotor activity parameters and the time spent next to the group were measured. Each trial had 4 minutes duration.

Results: We have found no significant differences in the average levels between pre-treatment and treatment days ($P < 0.05$ ANOVA) regarding the locomotor activity parameters. Significant changes in sociability were observed for the group exposed to insecticide mixture and for vit. C group ($P > 0.05$ ANOVA). It was also found that 14 days vitamin administration can lead to sociability improvements after a single administration of mixture insecticide.

Conclusions: The results of the current study bring some positive insights for the future of ASD therapy.

Conflict of interest: This work was co-funded by the European Social Fund, through Operational Programme Human Capital 2014-2020, project number POCU/380/6/13/123623, project title

Keywords: vitamin C; pesticide; autism spectrum disorder; sociability

EPP0086

Prenatal attachment & socio-demographic and clinical factors

L.S. Meddouri^{1*}, S. Bourguou¹, R. Fakhfakh², D. Bousnina³, A. Triki⁴ and A. Belhadj¹

¹Child And Adolescent, Mongi Slim Hospital, La Marsa, Tunisia; ²Preventive Medecine, Aberahman Mami, ariana, Tunisia; ³Preventive And Social Medecine, mother infant protection center, ezzouhour, Tunisia and ⁴Gynecology And Obstetrics, Mongi Slim Hospital, La Marsa, Tunisia

*Corresponding author.

doi: 10.1192/j.eurpsy.2021.549

Introduction: A pregnant woman's bond with her fetus and the quality of the prenatal attachment can be determined by numerous variables.

Objectives: Determine the socio-demographic and clinical factors' effect on prenatal attachment.

Methods: We conducted a transversal descriptive study in a first line clinical practice center and in an university gynecology-