

**Objectives:** To present a case of rosacea that developed in a schizophrenic patient after starting aripiprazole. Review of literature and search for the total number of cases reported in the European database of suspected adverse drug reactions (EudraVigilance).

**Methods:** We carried out a literature review in Pubmed electing those articles focused on skin and subcutaneous skin disorders in those patients that have been taking aripiprazole. Review number of cases of skin reactions reported by the European database of suspected adverse drug reactions.

**Results:** A 43-year-old man previously diagnosed with schizophrenia with low adherence to different treatments. He came to our service seeking for help in order to decrease delusions with a treatment with minimum adverse reactions. We started aripiprazole 10 mg every day and, after 7 days appeared signs of rosacea in his face. After discontinuation of aripiprazole, after 5 days, rosacea remitted.

**Conclusions:** Rosacea in our case possibly points to aripiprazole as the agent that produced the skin reaction. After stopping the treatment the signs disappeared. Awareness of skin manifestations produced by aripiprazole is essential to prevent worse skin reactions.

**Keywords:** aripiprazole; skin reaction; adverse effect; antipsychotic

## EPP1062

### Therapeutic monitoring of mood stabilizers in bipolar disorder

D. Falfel\*, H. Ben Ammar, G. Hamdi, E. Khelifa and L. Mnif

Psychiatry Department, Razi Hospital, Manouba, Tunisia

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1296

**Introduction:** Efficacy of lithium is well documented in the literature, making it the gold standard treatment. However, its use declines with the advent of anticonvulsants. This raises the question about monitoring of mood stabilizers in practice.

**Objectives:** The aims of this study were to determine the prophylactic lithium response in patients followed for bipolar disorder and compared to those of anticonvulsants and assess the mood stabilizers monitoring procedures in clinical practice.

**Methods:** A retrospective study was conducted, over a period of six months, with patients followed for bipolar disorder stabilized under the same mood stabilizer (lithium or anticonvulsant) for at least one year. The participants were divided into two groups according to the mood stabilizing treatment. The two groups were compared according to socio-demographic, clinical and evolutionary profiles as well as the prophylactic response to treatment.

**Results:** Patients included were 64 in the study, 28 received lithium and 36 received anticonvulsants. The socio-demographic profile and clinical characteristics were similar in two groups, except for the average total number of mood episodes. Retrospective evaluation of the prophylactic response by ALDA scale showed a significantly higher mean total score in patients receiving lithium ( $5.9 \pm 2.8$  versus  $2.58 \pm 2.4$ ,  $p = 0.025$ ). Ten of them were in compliance with the recommendations; while 19.44% received anticonvulsants had all the monitoring parameters within the recommended time frame.

**Conclusions:** Thymoregulators significantly modify the disease's prognosis. Practitioners will attach particular special attention to distinguish the therapeutic efficacy of the side effects which are numerous and sometimes serious.

**Keywords:** bipolar disorder; lithium; Mood stabilizer; therapeutic monitoring

## EPP1063

### Use of benzodiazepines in psychosis and bipolar disorder by Tunisian psychiatrists

M. Lagha\*, U. Ouali and F. Nacef

Department Of Psychiatry A, Razi hospital, Manouba, Tunisia

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1297

**Introduction:** Benzodiazepines (BZD) are psychotropic drugs prescribed in psychiatry for their anxiolytic, hypnotic and sedative properties. Since anxiety, agitation and insomnia are common in psychoses and mood disorders, BZDs are frequently prescribed in the treatment of these pathologies. Guidelines remain rare with regard to the use of BZDs in the treatment of psychosis and bipolar disorder.

**Objectives:** Our study aimed to evaluate BZDs prescribing practices in psychoses and bipolar disorder and to assess the specific risks related to the use of these molecules in the population suffering from severe mental disorder.

**Methods:** This is a descriptive cross-sectional study conducted through a Google-forms self-administered questionnaire, intended for psychiatrists and psychiatric residents, over a period of two months, from April 1 to May 31, 2019.

**Results:** One hundred physicians practicing in psychiatry answered our questionnaire. The response rate was 28%. BZDs were prescribed during thymic or psychotic relapses by 88.6% of the participants. During relapses, the main indication for BZDs was anxiety (81.3%), insomnia (80.2%), and catatonia (59.4%). Among the participants, 24.8% indicated that they maintained a long-term treatment with BZDs in patients with psychosis, and 11.4% in patients with bipolar disorder. The participants estimated that the long-term use of BZDs in patients with severe mental disorder represented an increased risk of: dependence (94.3%), behavioral disinhibition (30.5%), suicide (22.9%), anger, hostility and violence (31.4%).

**Conclusions:** Few guidelines concern the use of BZDs in psychosis and bipolar disorder. However, this prescription remains very frequent in current practice, with clinical and therapeutic features specific to this population.

**Keywords:** Benzodiazepines; psychosis; bipolar disorder

## Psychophysiology

## EPP1064

### Neural underpinnings of contingency awareness in human fear conditioning

Y. Pavlov<sup>1,2\*</sup> and B. Kotchoubey<sup>2</sup>

<sup>1</sup>Department Of Psychology, Ural Federal University, Ekaterinburg, Russian Federation and <sup>2</sup>Institute Of Medical Psychology, University of Tuebingen, Tuebingen, Germany

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1298

**Introduction:** The recognition of the conditioned-unconditioned stimulus (CS-US) association in classical conditioning is referred to as contingency awareness. The neural underpinnings of contingency awareness in human fear conditioning are poorly understood.

**Objectives:** We aimed to explore the EEG correlates of contingency awareness.

**Methods:** Here, we recorded electroencephalography (EEG) from a sample of 20 participants in a semantic conditioning experiment. In the acquisition phase the participants were presented with sequences of words from two semantic categories paired with tactile stimulation followed by presentation of a neutral sound (US-) (e.g., animals -> left hand vibration -> US-, clothes -> right hand vibration -> US-). In the test phase the association violated in 50% of trials which followed by a presentation of a loud noise (US+). The participants were only instructed to listen carefully. On the basis of self-reported contingency awareness, twenty participants were divided in aware (N=12) and unaware (N=8) group.

**Results:** The aware group expressed a non-lateralized effect of alpha-beta (12-23 Hz) suppression along with a more negative CNV at central channels preceding presentation of the vibration (main effect of Group). Also, CNV was more negative in expectation of US+ comparing with expectation of US- in the aware group but not in the unaware group.

**Conclusions:** The results indicate that contingency awareness is accompanied by neural patterns reflecting expectation as can be seen in the suppression of somatosensory alpha-beta activity before expected presentation of the vibration as well as in CNV in expectation of an aversive event.

**Keywords:** EEG; ERP; Fear conditioning; contingency awareness

## EPP1067

### Complex sympathetic arousal during negative emotional stress

Z. Visnovcova<sup>1\*</sup>, N. Ferencova<sup>2</sup>, L. Bona Olexova<sup>2</sup> and I. Tonhajzerova<sup>2</sup>

<sup>1</sup>Biomedical Center Martin, Jessenius Faculty of Medicine in Martin/Comenius University in Bratislava, Martin, Slovak Republic and <sup>2</sup>Department Of Physiology, Jessenius Faculty of Medicine Comenius University, Martin, Slovak Republic

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1299

**Introduction:** The autonomic nervous system (ANS) plays a key role in maintenance of the homeostasis and adaptability of the body to different stimuli. The disturbances of ANS, especially sympathetic dysregulation in stress response, are associated with various disorders.

**Objectives:** Thus, we aimed to study the sympathetic arousal in response to negative emotional stress and during recovery using heart rate variability (HRV) nonlinear analysis (symbolic dynamics parameter 0V%) and skin conductance level (SCL) as sympathetically-mediated indices in healthy students.

**Methods:** Seventy students (age: 23.1±0.2yr., 39 females) were examined during complex stress response: baseline – negative emotional stress – recovery. RR intervals (for HRV analysis) and electrodermal activity were continuously recorded during each period lasting six minutes. Evaluated parameters: HRV nonlinear analysis - symbolic dynamics index 0V% as cardiac sympathetic index, skin conductance level (SCL) as sympathetic cholinergic index.

**Results:** Regarding electrodermal activity, the parameter SCL significantly increased in response to negative emotional stress (p<0.001) and remained higher after stress (recovery phase, p<0.001). Symbolic dynamics index 0V% was without significant changes.

**Conclusions:** Our findings revealed increased sympathetically-mediated index SCL in response to negative emotional stress and in recovery phase indicating higher sympathetic arousal during complex stress response in young people. Surprisingly, cardiac sympathetic index 0V% was not sensitive to detect discrete changes in sympathetic arousal to negative emotion. We suggest that detailed knowledge about complex sympathetic regulatory mechanisms to emotional stress in healthy probands represents the first step for understanding of pathomechanisms leading to abnormal stress response in mental disorders.

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

**Keywords:** sympathetic nervous system; electrodermal activity; heart rate variability; negative emotional stress

## EPP1069

### Age-related differences in processing speed in children can be explained by heterochronicity of human brain development

S. Kiselev

Clinical Psychology, Ural Federal University, Ekaterinburg, Russian Federation

doi: 10.1192/j.eurpsy.2021.1300

**Introduction:** Age-related differences in the processing speed have been observed in a great variety of tasks. In spite of the great amount of researches in this area, we know relatively little about the nature of this developmental tendency.

**Objectives:** The aim of this study was to assess whether age-related differences in reaction time (RT) can be explained satisfactorily in terms of a global age-related differences in processing speed alone.

**Methods:** The sample consisted of 48 4-year-olds, 50 5-year-olds, 46 6-year-olds children, and 35 adults. To investigate processing speed in children and adults we used the test battery consisted of three types of RT tasks: simple, discrimination, and choice.

**Results:** We have revealed clear age-related differences in processing speed not only between children and adults but also between three age groups of children. However, using transformation method proposed by Madden et al. (2001) and Ridderinkhoff & van der Molen (1997) we have revealed that there are not only global age-related differences but also process-specific age-related differences in processing speed. Among children, age-related differences larger than predicted by the global difference hypothesis were evident when tasks required spatial orientation discrimination and stimulus-response rule complexity, but not for response suppression or reversal of stimulus-response contingencies.

**Conclusions:** It can be assumed that the observed process-specific, age-related differences in processing speed generally can be explained by the principle of heterochronicity of human brain development (Casey et al., 2005).

**Keywords:** processing speed; Brain Development; heterochronicity