These results prompt us to ask the question, whether these areas of impaired functions are associated with each other or are two separate phenomena. We hypothesize that there is some association between Implicit motor learning and motor functioning as assessed by Serial Reaction Time Task (SRTT), Neurological Evaluation Scale (NES, for NSS) and International Cooperative Ataxia Rating Scale (ICARS, for CSS).

Aim: We aim to evaluate the association between neurological and cerebellar soft signs and implicit motor learning in group o patients with BD and SZ, and healthy controls.

Methods: Thirty-three patients with DSM-5 diagnosis of SZ, 33 patients with DSM-5 diagnosis of BD (type I and II), and 31 healthy controls were examined. Diagnosis clinical assessment of the patients were performed by an experienced psychiatrist. Groups were matched for gender and age. HC were invited to participate in the study via social networks. In the interview performed by an experienced psychiatrist, they all reported negative history of mental and neurological disorders, had a negative history of mental diseases in family and did not meet any exclusion criteria for patients. Implicit motor learning was assessed with the use of ambidextrous Serial Reaction Time Task (SRTT). The procedure of the task and the strategy of data analysis were adopted from Gómez-Beldarrain et al. (1998). All participants were right handed and performed the task with right and subsequently left hand. Motor functioning assessment included two scales – the Neurological Evaluation Scale (NES, for NSS) used to assess neurological soft signs and the International Cooperative Ataxia Rating Scale (ICARS, for CSS) used to assess cerebellar soft signs. Total score as well as subscores were included in statistical analysis. In order to evaluate association between all the parameters, Pearson's correlation was used.

Results: Statistical analysis revealed no statistically significant correlations between SRTT, NES and ICARS parameters in all three groups. Due to lack of significant correlations, comparisons between the groups were not performed

Conclusion: Contrary to our hypothesis disrupted implicit motor learning are not related to motor performance as examined in neurological and cerebellar soft signs examination.

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P.572 A case report of rapid anti-suicidal and robust antidepressant effects of ketamine in post-psychotic depression

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Introduction: The employment of intravenous ketamine in psychiatry has increasingly gained attention throughout the last decade due to its rapid anti-suicidal and robust antidepressant effects. These could be repeatedly observed in patients suffering from unipolar as well as bipolar depression [1–3]. Because of potential psychotomimetic effects of ketamine, its administration in patients with psychotic symptoms has been managed restrictively so far. However, clinically meaningful antidepressant efficacy of ketamine could be confirmed in depressed patients with psychotic symptoms in their history [4]. This is of relevance since up to 36 % of schizophrenia patients develop post-psychotic depression [5], which may often implicate severe depressive symptoms and suicidal behaviour requiring effective treatment strategies. Hence, patients suffering from post-psychotic depression who do not sufficiently respond to conventional antidepressant psychopharmacotherapy may benefit from further treatment modalities, such as ketamine, in order to tackle this challenging clinical phenomenon.

Case Report: Here, we present a case of a 30 years-old female schizophrenia inpatient (weight: 114 kg) with a severe and chronic disease course (DSM-5: 295.90). She was admitted because of exacerbation of positive symptoms, which completely remitted under antipsychotic treatment with clozapine 400 mg and risperidone 8 mg per day. However, after full remission of positive symptoms she developed severe post-psychotic depression with concrete suicidal ideation. Hence, she received an additional antidepressant treatment with venlafaxine up to 300 mg per day, which was subsequently augmented with valproate 1000 mg and pregabaline 600 mg per day. Unfortunately, she did not respond to this conventional psychopharmacotherapy and the suicidal behaviour increased alarmingly. Consequently, we initiated an augmentation treatment attempt with intravenous S-ketamine 25 mg per application (=0,22 mg/kg). Immediately after the first S-ketamine infusion we observed a rapid anti-suicidal and robust antidepressant response, which lasted several days. The patient reported discrete dissociative symptoms during the infusion, which, however, disappeared minutes after S-ketamine had been administered. Since intravenous S-ketamine led to clinically meaningful antidepressant efficacy and was well tolerated by the patient, the application dose was increased to 37,5 mg (=0,33 mg/kg) and administered thrice weekly. After the following 2 weeks, a sustained remission of depressive symptoms and suicidal behaviour was achieved. Importantly, we did not observe any induction of psychotic symptoms during the whole period of intravenous augmentation treatment with S-ketamine.

Conclusions: Our young schizophrenia female inpatient was able to achieve rapid anti-suicidal and robust antidepressant response following an intravenous augmentation treatment with S-ketamine. Importantly, this treatment regimen led to a sustained remission of depressive symptoms and the positive effects were not accompanied by meaningful psychotic or dissociative phenomena during- as well as after the whole treatment period. Based on our safe and effective experience with ketamine in schizophrenia, we encourage scientists and clinicians to widen its administration range beyond the diagnosis of depression in the course of mood disorders. Further research in this field is necessary in order to enrich the current knowledge of ketamine effects in psychotic disorders.

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P.573 Child maltreatment predicting more severe psychiatric and biological phenotype among adolescent patients with depressive symptoms

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Introduction: Child maltreatment has relatively recently been hypothesized to associate with specific phenotype in several psychiatric disorders such as depression or PTSD, in terms of early onset, more severe clinical features, more resistance to therapy, representing a separate ecophenotypic variant [1]. Child maltreatment has, as well, been associated with immunological and metabolic disturbances, some of which have been found in depression [2,3], as well as with EEG variations in depression and PTSD [4]. Nevertheless, data on various psycho-biological ecophenotypic differences among adolescent patients with depressive symptoms is scarce.

Aim of our study was to explore the predictive effects of severe child maltreatment on various psychiatric symptoms, attachment, contemporary immunological markers (neutrophil-to-lymphocyte (NLR), thrombocyte-to-lymphocyte (TLR), and monocyte-to-lymphocyte ratios (MLR)), metabolic parameters (glycaemia and lipid status), and EEG abnormality, among adolescent patients with depressive symptoms.

Method: Seventy seven adolescent inpatients participated in our study (19 males, 58 females; age 12-18), treated for diagnoses of depressive disorders and mixed disorders of emotion and conduct. History of child maltreatment was assessed through multi-informant methods – data from family members or child protection services, as well as self-report (Childhood Trauma Questionnaire – CTQ). Demographic data, medical history, suicidal phenomena and treatment data were explored through general questionnaire and medical record. Psychiatric symptoms were investigated by Trauma Symptom Checklist for Children (TSCC), Withdrawal and Somatic Complaints scales of Youth Self Report (YSR), and Adolescent Psychotic-Like Symptom Screener (APSS). Attachment security was investigated with Inventory of Parent and Peer Attachment Revised (IPPA-R). Blood sampling was performed to assess NLR, TRL, MLR (blood count), glycaemia and lipid status (serum). Standard EEG was recorded and evaluated by neurologist. Data was analysed through a series of linear and logistic regressions.

Results: Having a history of severe child maltreatment was predictive of several phenotypic characteristics, independently of gender, age and family psychiatric history. Those who were severely abused were more likely to have more symptoms of withdrawal (Beta = 0.385, p = 0.004), somatic complaints (Beta = 0.258, p = 0.046), depression (Beta = 0.399, p = 0.002), PTSD (Beta = 0.471, p<0.001), dissociation (Beta = 0.268, p = 0.039), and sexual worries (Beta = 0.278, p = 0.034). Prediction of anxiety symptoms showed marginal significance (Beta = 0.238, p = 0.065). Psychotic symptoms were not predicted by the severe maltreatment in general, but with emotional (Beta = 0.414, p = 0.020) and sexual abuse independently (Beta = 0.375, p = 0.003). Experience of maltreatment was also predictive of suicidal phenomena (Exp(B) = 5.370, p = 0.011), and more insecure attachment to mother (Beta = −.395, p = 0.003). When it comes to biological characteristics, severe child maltreatment was predictive of higher NLR (Beta 0.328, p = 0.033), but not TRL and MRL. EEG abnormality was somewhat more present in those who were severely maltreated, but the difference was only marginal (Hi2 = 3.267, p = 0.07), and was not confirmed by logistic regression. There were no predictive effects of maltreatment on glycaemia, lipid status and medication classes used in treatment.

Conclusions: Our findings contribute to the hypothesis of more severe psycho-biological ecophenotypic nature of child maltreatment, among adolescent inpatients with depressive symptoms. The findings may have practical implications in terms of tailoring specific preventive strategies and treatment interventions.

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