European Psychiatry S453

**Introduction:** Post-traumatic stress disorder (PTSD) is often a chronic condition, despite the existence of evidence-based treatment options. Psychotherapy is the designated first line treatment for PTSD, although high rates of psychiatric and medical comorbidity are observed among patients who have undergone treatment. The psychoactive properties of psychedelics may be of particular interest within a substance-assisted psychotherapy approach, offering new treatment opportunities for this debilitating disorder.

**Objectives:** Review current evidence, therapeutic context, and possible mechanisms of action of different types of psychedelics in the treatment of PTSD.

Methods: Literature review using Medline database.

Results: 3,4-methylenedioxymethamphetamine (MDMA)-assisted psychotherapy appears to be a potentially safe, effective, and durable treatment for individuals with treatment-refractory PTSD. Based on a small number of studies, ketamine administration appears to result in temporary symptom relief and may, in combination with psychotherapy, lead to lasting reductions in PTSD symptoms. Although these have not yet been investigated in controlled studies, it is known that psilocybin and LSD induce psychoactive effects that could as well contribute to the psychotherapeutic treatment of PTSD.

**Conclusions:** The use of psychedelic compounds within a substance-assisted psychotherapy framework offers a novel method for pharmacotherapy-psychotherapy integration, although there is still much to learn from both a clinical and neurobiological perspective. It is necessary to generate more data regarding the safety and efficacy of psychedelics, in addition to research on cost-effectiveness, its use in mental health care infrastructure and also regarding the training of specialized therapists.

**Keywords:** psychedelics; MDMA; Ketamine; Posttraumatic Stress Disorder

# **EPP0950**

# Rorschach test with exner cs in assessing damage and trauma in suspected cases of abuse. Traumatic intrusions in thinking: Ptsd and adaptation disorder

D. Galletta\*, V. Suarato, M. Confuorto, F. Subosco and A. M. Mastrola

Department Of Head-neck Care Unit Of Psychiatry And Psychology "federico Ii" University Hospital Naples, "Federico II" University Hospital Naples, Italy, Naples, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1210

**Introduction:** This study wants to identify elements that could be informative in diagnosis and prognosis process of all those subjects who, following traumatic experiences, may develop PTSD, or even show signs of a more general and pervasive adaptation disorder, allowing a more precise damage assessment.

**Objectives:** In this perspective, the analysis of the Rorschach test according to the comprehensive system of Exner, reading Structural Summary and the analysis of the constellations, allows to make interesting inferences, in all the descriptive areas associated with the key variables as regards not only the cognitive area (Processing >> Mediation >> Ideation) but also the affective and relational area (Interpersonal Perception >> Self-Perception >> Controll >> Affect), so as to have a picture of the functioning of these subjects and, to be able to plan a more functional therapeutic plan.

**Methods:** It is based on a sample of 29 subjects, 20 women and 9 men with an average age of about 35 years (54-14 years), who came to the attention of the clinic, at the request of the reference psychiatrist for diagnostic personality assessment. All subjects complained of various kinds of discomfort, affective-relational difficulties and anxious-depressive symptoms.

**Results:** The results that emerged, in line with the initial hypotheses, converge in describing a personality style, not very resilient that could suffer in overcoming difficulties and in the search for new equilibrium.

**Conclusions:** It's emphasized how the weight of a traumatic event like abuse can evolve into an adaptation disorder, strongly affecting the functionality of the subjects and their social integration.

**Keywords:** abuse; damage assessment; Rorschach; adaptation disorder

## **EPP0953**

# A new player in the field: Methylphenidate in post-traumatic stress disorder treatment

R. López-Escribano $^*$ , M.-J. Alvarez, J. Muñoz-Padrós and A. Marzán Gutierrez

Mental Health Department, Consorci Hospitalari de Vic, Vic, Spain \*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1211

**Introduction:** Currently available psychotherapies and psychotropic drugs for post-traumatic stress disorder (PTSD) are poorly effective in a substantial proportion of patients. Dopaminergic dysfunction plays a prominent role in the pathophysiology of PTSD: intrusions, avoidance symptoms, anhedonia and emotional numbing. Dopamine reuptake inhibitors can be studied as novel drugs in PTSD treatment.

**Objectives:** Explore methylphenidate as a promising drug in PTSD treatment.

**Methods:** Case report presentation based on the review of clinical notes and non-systematic review of the PTSD therapeutics state-of-the-art.

Results: A 72-year-old Portuguese male, a veteran of the Angolan War, sought medical attention four years ago after the death of his brother, which had happened three years before the consultation. The clinical picture consisted of re-experiencing the war and the loss of his brother, flash-backs, nightmares, irritability, a fear of losing control, inner dialogues with occasional intra-psychic voices, emotional numbing with the impossibility of developing loving relationships with his relatives, feelings of unreality, an episode of dissociative fugue and complaints of episodic forgetfulness and time warp. He was diagnosed with PTSD with dissociative symptoms, based on DSM 5 clinical criteria. He was initially treated with SNRIs and risperidone, with little improvement. A year ago, he suffered a flare-up, with suicidal ideation. He was prescribed methylphenidate 36 mg, with progressive improvement, persisting mild PTSD residual symptoms.

**Conclusions:** There is enough evidence of the dopamine involvement in PTSD, although research on dopaminergic drugs is scarce. Methylphenidate may be promising in the treatment of at least some individuals that haven't responded to current psychological and medical interventions.

**Keywords:** post-traumatic stress disorder; methylphenidate; Dopamine

S454 E-Poster Presentation

#### **EPP0954**

# Post-traumatic stress disorder after first-episode psychosis

M. Pinho\*, D. Martins and S. Carvalho

Department Of Psychiatry, Hospital de Magalhães Lemos, Porto, Portugal

\*Corresponding author. doi: 10.1192/j.eurpsy.2021.1212

**Introduction:** A psychotic episode may be sufficiently traumatic to induce symptoms of post-traumatic stress disorder (PTSD), which could impact outcomes in first-episode psychosis (FEP). Yet, post-traumatic stress disorder is often left untreated and undiagnosed in the presence of psychosis.

**Objectives:** To conduct a short review of literature on the prevalence and impact of PTSD after FEP.

**Methods:** We performed a literature search on PUBMED, using the query: "Stress Disorders, Post-Traumatic" [Mesh] AND "first episode" AND "psychosis". We focused on data from systematic reviews, clinical trials and meta-analysis published on last 10 years, either in English or Portuguese.

Results: Approximately one in two people experience PTSD symptoms and one in three experience full PTSD, following a FEP. Prevalence may be higher in affective psychosis, inpatient samples and patients previously suffering from depression and anxiety. PTSD Symptom Scale – Self-Report (PSS-SR) can be a useful screening instrument, but there is no established evidence-based intervention for PTSD in people with FEP. Coercive intervention such as involuntary hospitalization, seclusion, restraint or being forced to take medication, as well as being around sick or anxious patients, can be upsetting and traumatizing.

**Conclusions:** Our data showed high rates of psychosis-related PTSD. To prevent PTSD, conditions of hospitalization should be optimized and the use of coercive treatments should be limited. Subjects with recent-onset psychosis should be screened for PTSD symptoms. Evidence-based interventions to treat PTSD symptoms in the context of FEP are needed to address this burden and improve outcomes.

**Keywords:** psychosis; first episode; post-traumatic stress disorder; trauma

## **Precision psychiatry**

#### **EPP0955**

Vasopressin surrogate marker copeptin as a potential novel endocrine biomarker for antidepressant treatment response in major depression: A pilot study

A. Agorastos<sup>1\*</sup>, A. Sommer<sup>2</sup>, K. Wiedemann<sup>2</sup> and C. Demiralay<sup>2</sup>
<sup>1</sup>Ii. Dept. Of Psychiatry, Aristotle University of Thessaloniki,
Thessaloniki, Greece and <sup>2</sup>Psychiatry & Psychotherapy, University
Medical Centre Hamburg-Eppendorf, Hamburg, Germany
\*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1213

**Introduction:** Major depressive disorder (MDD) constitutes the leading cause of disability worldwide. Although efficacious antidepressant pharmacotherapies exist for MDD, only about 40-60% of

the patients respond to initial treatment. However, there is still a lack of robustly established and applicable biomarkers for antidepressant response in everyday clinical practice.

**Objectives:** This study targets the assessment of the vasopressin (AVP) surrogate marker Copeptin (CoP), as a potential peripheral hypothalamic-level biomarker of antidepressant treatment response in MDD.

Methods: We measured baseline and dynamic levels of plasma CoP along with plasma ACTH and cortisol (CORT) in drug-naive outpatients with MDD before and after overnight manipulation of the hypothalamic-pituitary-adrenal (HPA) axis [i.e., stimulation (metyrapone) and suppression (dexamethasone)] on three consecutive days and their association with treatment response to 4 weeks of escitalopram treatment.

**Results:** Our findings suggest significantly higher baseline and post-metyrapone plasma CoP levels in future non-responders, a statistically significant invert association between baseline CoP levels and probability of treatment response and a potential baseline plasma CoP cut-off level of above 2.9 pmol/L for future non-response screening. Baseline and dynamic plasma ACTH and CORT levels showed no association with treatment response.

Conclusions: This pilot study provide first evidence in humans that CoP may represent a novel, clinically easily applicable, endocrine biomarker of antidepressant response, based on a single-measurement, cut-off level. These findings, underline the role of the vasopressinergic system in the pathophysiology of MDD and may represent a significant new tool in the clinical and biological phenotyping of MDD enhancing individual-tailored therapies.

**Keywords:** biomarker; hypothalamus-pituitary-adrenal (HPA) axis; antidepressant response; Depression

### **EPP0956**

The influence of concentration of micro-rna hsa-mir-370-3p and CYP2D6\*4 on equilibrium concentration of mirtazapine in patients with major depressive disorder

M. Zastrozhin<sup>1</sup>\*, V. Skryabin<sup>2</sup>, D. Sychev<sup>1</sup> and E. Bryun<sup>2</sup>

<sup>1</sup>Addictology, Russian Medical Academy Of Continuous Professional Education, Moscow, Russian Federation and <sup>2</sup>Addictology, Moscow Research and Practical Centre on Addictions, Moscow, Russian Federation

\*Corresponding author. doi: 10.1192/j.eurpsy.2021.1214

**Introduction:** Mirtazapine is commonly prescribed to patients diagnosed with major depressive disorder. Some proportion of these patients do not show adequate response to treatment regimen containing mirtazapine, whereas many of them experience dose-dependent adverse drug reactions.

**Objectives:** The objective of our study was to investigate the influence of 1846G>A polymorphism of the CYP2D6 gene on the concentration/dose indicator of mirtazapine, using findings on enzymatic activity of CYP2D6 and on CYP2D6 expression level obtained by measuring the hsa-miR-370-3p plasma levels in patients suffering from recurrent depressive disorder.

Methods: Our study included 192 patients with major depressive disorder. Treatment efficacy was evaluated using the international psychometric scales. For genotyping and estimation of the microRNA plasma levels we performed the real-time polymerase chain reaction. The activity of CYP2D6 was assessed with HPLC-MS/MS method by the content of the endogenous