

DRSP along with the aforementioned mood questionnaires during both their PM and follicular phases.

Results: In the first research phase, the sample was divided into women with probable PMDD diagnosis (PMDD group, $n=68$) and women without probable PMDD diagnosis (nonPMDD group, $n=45$) based on the DSM-5-Based Screening Tool. The PMDD group reported significantly more severe depressive ($F(1; 56.2) = 19.394, p \leq 0.001$) and anxiety ($F(1; 35.6) = 17.714, p \leq 0.001$) symptoms and lower well-being ($F(1; 44.3) = 4.288, p = 0.04$) compared to the non-PMDD group, irrespective of the menstrual phase they experienced.

In the second and third research phases based on the DRSP, the sample was divided into women with probable PMDD diagnosis (PMDD group, $n=3$) and those without probable PMDD diagnosis (nonPMDD group, $n=6$). A statistically significant association was observed between the classifications according to the DSM-5 Based Screening Tool and the DRSP ($p=0.048$; Cramer's $V=0.79$). The PMDD group showed a tendency of lower well-being and more severe anxio-depressive symptoms than the nonPMDD group (Well-being: between phases $p=0.93$, between groups $p=0.06$; BDI-II: between phases $p=0.79$, between groups $p=0.07$; STAI-S: between phases $p=0.87$, between groups $p=0.17$).

Conclusions: The prevalence of PMDD was high in our sample. Women with probable PMDD retrospectively reported substantial affective difficulties and a decline in subjective well-being, regardless of their menstrual cycle. Prospective preliminary findings suggest a trend toward differentiation associated with probable PMDD. These results highlight the need for prospective clinical studies addressing the psychological symptoms of women with PM issues and the importance of appropriate treatment of the clinical appearance of PMDD.

Disclosure of Interest: None Declared

EPP0055

The Mediating Role of Maladaptive Metacognitive Beliefs between Adverse Childhood Experiences and Trait Anxiety

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Introduction: Adverse childhood experiences (ACE) have a significant negative impact on health. ACEs lead to more pronounced trait anxiety, among others, which serves as a basis for various mental and somatic symptoms. Recent findings suggest that the fact that individuals with more ACEs also have more maladaptive metacognitive beliefs may contribute to the development of these symptoms.

Objectives: We aim to study the possible mediating role of maladaptive metacognitive beliefs, resulting from adverse childhood experiences, on trait anxiety.

Methods: Data was collected online, anonymously, in a non-clinical population of adults over 18 years of age. The sample consisted of 304 subjects (84.21 % women, 15.79 % men). The applied questionnaires included a demographic questionnaire, the

Adverse Childhood Experiences Questionnaire 10 item version, the Meta-Cognitions Questionnaire, and the Spielberger Trait Anxiety Questionnaire. The system of correlations between the examined variables was explored using structural equation modeling (SEM). The study was carried out with ethical approval and in accordance with the Declaration of Helsinki.

Results: Our results confirm that ACEs have a significant impact on all the measured dimensions of maladaptive metacognitive beliefs. The direct effect of ACEs on adult trait anxiety is also significant. The results of the study on indirect effects support the joint mediating role of the five metacognitive dimensions. The strongest significant mediating effect was found for the uncontrollability and dangerousness of negative beliefs about worry. Both the direct and indirect effects of cognitive self-consciousness on adult trait anxiety are negative, which means that the more the cognitive self-consciousness is characteristic of someone, the lower the degree of trait anxiety in adulthood is.

Conclusions: Our results confirm the mediating effect of metacognitive beliefs on trait anxiety in the context of adverse childhood experiences, which points to the importance of further research on metacognition among the population that suffered early adversities. One of the limitations of the study roots in online data collection: the examined sample is not representative. Moreover, to extend the results, it is recommended to repeat the study on a clinical population. This would enable us to compare our results with those of the clinical population, which could provide further important results in the field of metacognition and adverse childhood experiences.

Disclosure of Interest: None Declared

Psychosurgery and Stimulation Methods (ECT, TMS, VNS, DBS)

EPP0056

Effect of intermittent theta-burst stimulation on the thyroid and adrenal systems in resistant depressed patients

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Introduction: Disturbances in the hypothalamic-pituitary-thyroid (HPT) and hypothalamic-pituitary-adrenal (HPA) axes have been frequently reported in treatment resistant depressed patients (TRDs). So far, the effects of intermittent theta-burst stimulation (iTBS) treatment—a form of repetitive transcranial magnetic stimulation (rTMS) technique—on the activity of the HPT and HPA axes are poorly understood.

Objectives: The present study aimed to evaluate the effects of iTBS sessions, applied to the left dorsolateral prefrontal cortex, in TRDs with abnormal chronobiological HPT functioning at baseline (BL) possibly associated with hypercortisolemia.

Methods: The $\Delta\Delta$ TSH test (i.e., the difference between the thyrotropin response to protirelin tests [Δ TSH] performed at 8 AM and 11 PM on the same day) and the dexamethasone suppression test (DST) were performed in 12 TRDs and 14 healthy hospitalized

control subjects (HCs). To be enrolled in this study, patients had to show at BL reduced $\Delta\Delta$ TSH values (i.e., < 2.5 mU/L) and a score of 18 or greater on the 17-item Hamilton Rating Scale for Depression (HAMD-17). Post-DST cortisol maximum (COR_{max}) serum level in excess of 120 nmol/L defined DST non-suppression (i.e., hypercortisolemia)—6 TRDs were DST non-suppressors at BL. After 10 and 20 iTBS sessions the $\Delta\Delta$ TSH test and the DST were repeated in all inpatients. A positive clinical response was defined by a final HAMD-17 score ≤ 8 .

Results: Compared to HCs, $\Delta\Delta$ TSH values were lower in TRDs at BL ($p < 0.00001$), and remained reduced after 10 and 20 iTBS sessions ($p < 0.001$ and $p < 0.02$ respectively). Post-DST COR_{max} levels were higher in TRDs than in HCs at BL ($p < 0.01$), but were comparable to those of HCs after 10 and 20 iTBS sessions. Responders ($n = 5$) were characterized by 1) a normalization of their $\Delta\Delta$ TSH values after 20 iTBS sessions (whereas after 10 iTBS sessions $\Delta\Delta$ TSH values were still reduced compared to HCs [$p < 0.05$]), and 2) a normality of post-DST COR_{max} levels at BL—while after 10 and 20 iTBS sessions post-DST COR_{max} levels were decreased compared to HCs ($p < 0.006$ and $p < 0.03$ respectively). Non-responders ($n = 7$) showed 1) no significant change in their $\Delta\Delta$ TSH values which remained lower than those of HCs at each assessment (all $p < 0.001$), 2) while increased post-DST COR_{max} levels found at BL ($p < 0.0008$ vs. HCs) normalized from the 10th iTBS session.

Conclusions: The present pilot study suggests that successful iTBS treatment can restore the chronobiological activity of the HPT axis. Although iTBS may increase glucocorticoid receptor signaling, baseline hypercortisolemia could negatively impact subsequent response to iTBS treatment.

Disclosure of Interest: None Declared

EPP0058

Brain atrophy but not white matter lesions associate with ECT-related confusion

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Introduction: Patients undergoing electroconvulsive treatment (ECT) may display an acute confusional state, often characterized by transient disorientation, inattention, memory and cognitive deficits.

Objectives: In this retrospective medical chart naturalistic study, we sought to determine whether white matter lesions and brain atrophy associate with the emergence of confusion during ECT treatment and preliminary results are presented herein

Methods: Medical charts of 24 consecutive inpatients with depression admitted to a psychogeriatric ward and subjected to bilateral frontotemporal ECT were examined retrospectively for patient and clinical characteristics. Mini-Mental State Examination (MMSE) and Geriatric Depression Scale (GDS) scores at admission and hospital discharge were retrospectively collected. Available brain

Magnetic Resonance Imaging (MRI) scans were graded for lesions (white matter hyperintensities, WMH), parietal, temporal and global brain atrophy

Results: In this pilot study of mostly elderly patients, 50% displayed signs of confusion. All patients improved substantially, as indicated by MMSE and GDS scores, irrespectively of whether they experienced transient confusion during ECT. Preliminary results indicate that WMH are unrelated to the emergence of confusion. Instead, brain atrophy, and in particular temporal lobe and mostly frontal lobe atrophy associated with confusion

Conclusions: In our sample of elderly inpatients with depression subjected to bilateral ECT, preliminary results of this pilot study indicate that brain atrophy, as evidenced by MRI scans, appears as a predictor of post-ECT confusion. Moreover, the Pasquier scale, and specifically the scale sub-scores regarding brain atrophy in the frontal and temporal sulci, could prove useful in helping the clinician estimate the probability of ECT-related confusion during ECT treatment

Disclosure of Interest: None Declared

EPP0059

Changing Tactics? Optimizing ECT in difficult-to-treat depression (ChaT): study protocol

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Introduction: Electroconvulsive therapy (ECT) is an evidence-based treatment for difficult-to-treat depression, in which an electrical stimulus is applied via right unilateral (RUL) (Fig 1) or bitemporal (BT) electrodes (Fig 2). Current guidelines recommend to start ECT with RUL placement, except for cases where rapid response is needed. BT ECT has the reputation of exerting a stronger and faster antidepressive effect, but is associated with more pronounced cognitive side effects, as compared to RUL ECT. Recent studies, however, suggest comparable outcomes. In patients responding to ECT, most of the improvement in depressive symptom severity is witnessed early in the treatment course. In case of non-response, it is common practice to switch from RUL to BT electrode placement, although scientific evidence is lacking. As an answer to this research gap, the ChaT-trial was designed: a randomized controlled trial (RCT) to address which treatment strategy (either continue RUL ECT or switch to BT ECT) speeds up recovery with the least impact on cognitive function, in case of early non-response after 4 ECT sessions.

Objectives:

- 1) To compare the antidepressant efficacy and cognitive effects of continuing RUL ECT vs switching to BT ECT.