Objectives: We hypothesize that the combination of "Almond TherapyTM" with intranasal ketamine will result in a statistically significantly better outcome as demonstrated by a greater reduction in MADRS scores and/or response rates and/or remission rates in TRD patients compared with those who receive esketamine plus TAU. Secondary outcome measures include PHQ-9, GAD-7, PCL-5, Asssessment of Quality of Life - 8D (AQOL-8D), and Rosenberg Self-Esteem Scale.
Methods: We have developed a research protocol combining a unique and specifically-designed, multi-modal psychotherapy program, "Almond TherapyTM", with intranasal esketamine in a randomized, controlled, single-blind 28-day study. The therapy utilizes an individualized, evidence-informed approach for each participant consisting of a number of modules selected using a shared decision-making process determined at the first study visit. This uniquely tailored approach ensures that the chosen modules are personally meaningful to the participant, and thus, promotes therapeutic adherence. The proprietary therapy combines elements of cognitive behavioral therapy (CBT), trauma focused-CBT, Dialectical Behavioral Therapy (DBT), and mindfulness, together with biofeedback. In addition to in-clinic sessions, participants also receive standardized remote therapy sessions by trained therapists.
Results: Patient recruitment and enrolment has begun. Interim results are anticipated.
Conclusions: This study is the first examination of the potential additional clinical benefit of adding a specific therapy program to existing intranasal esketamine treatment. If demonstrated to be of clinical benefit then further studies may potentially provide comparison to other therapy programs and in conjunction with other agents.

Disclosure of Interest: P. Chue Shareolder of: Zylorion, P. Silverstone Shareolder of: Zylorion, Employee of: Zylorion, T. Hillier Shareolder of: Zylorion, Employee of: Zylorion, S. Rizvi: None Declared, S. Phillips Shareolder of: Zylorion, Employee of: Zylorion, L.-A. Langkaas Employee of: Zylorion, K. Davidson Employee of: Zylorion, M. Brown: None Declared, J. Chue: None Declared

EPP0605

Linked patterns of symptoms and cognition with brain controllability in major depressive disorder

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Introduction: Major depressive disorder (MDD) is characterized by both clinical symptoms and cognitive deficits. Prior studies have typically examined either symptoms or cognition correlated with brain measures, thus causing a notable paucity of stable brain markers that capture the full characteristics of MDD. Brain controllability derived from newly proposed brain model integrating both metabolism (energy cost) and dynamics from a control perspective has been considered as a sensitive biomarker for characterizing brain function. Thus, identifying such a biomarker of controllability related to both symptoms and cognition may provide a promising state monitor of MDD.
Objectives: To assess the associations between two multidimensional clinical (symptoms and cognition) and brain controllability data of MDD in an integrative model.
Methods: Sparse canonical correlation analysis (sCCA) was used to investigate the association between brain controllability at a network level and both clinical symptoms and cognition in 99 first-episode medication-naïve patients with MDD. The potential mediation effect of cognition on relationship between controllability and symptoms was also tested.
Results: Average controllability was significantly correlated with both symptoms and cognition (r_{mean}=0.54, $P_{Bonferroni}$=0.03). Average controllability of dorsal attention network (DAN) (r=0.46) and visual network (r=0.29) had the highest correlation with both symptoms and cognition. Among clinical variables, depressed mood (r=-0.23) , suicide(r=-0.25), work and activities(r=-0.27), gastrointestinal symptoms (r=-0.25) were significantly negatively associated with average controllability, while cognitive flexibility (r=0.29) was most strongly positively correlated with average controllability. Additionally, cognitive flexibility fully mediated the association between average controllability of DAN and depressed mood (indirect effect=-0.11, 95% CI [-0.18, -0.04], P=0.001) in MDD.
Conclusions: Brain average controllability was correlated with both clinical symptoms and cognition in first-episode medication-naïve patients with MDD. The results suggest that average controllability of DAN and visual network reached high associations with clinical variates in MDD, thus these brain features may serve as stable biomarkers to control the brain functional states transitions to be relevant to cognitions deficits and clinical symptoms of MDD. Additionally, altered average controllability of DAN in patients could induce impairment of cognitive flexibility, and thus cause severe depressed mood, indicating that controllability of DAN may be a potential intervention target for alleviating depressed mood through improving cognitive flexibility in MDD.

Disclosure of Interest: None Declared

Eating Disorders 01

EPP0606

The medical consequences of eating disorders: the correlation between the severity of the disease and the degree of the cardiological changes in paediatric patients with anorexia nervosa

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Introduction: Anorexia nervosa (AN) is associated with several medical complications. The cardiac changes represent the most severe complications and are associated with higher mortality. For this reason, periodic evaluation is necessary, by ECG and echocardiography. Moreover, there is not a protocol that defines the timelines or how to select higher risk patients that must be evaluated more frequently.

Objectives: This single-center, retrospective, observational and epidemiological study aims to analyze the prevalence of cardiac changes and their correlation with disease severity, in patients admitted to the Child and Adolescent Psychiatry Unit, AOU Meyer, Florence.
Methods: The study population consisted of 123 children between the ages of 7 and 18 years old admitted to inpatient or intensive day hospital, with a diagnosis of AN, between January 1, 2019, to March 31, 2022. Data were collected by retrospectively consulting clinical reports. The correlation between BMI, percentage of weight loss since the onset of symptoms and HR, QTc interval values and pericardial effusion was evaluated. Furthermore, the correlation between cardiac changes and the intake of antidepressant and antipsychotic medications was analyzed.
Results: The overall prevalence of cardiac changes was 57.7%. In our analysis BMI showed a significant positive correlation whit HR. QTc prolongation was significantly related only to psychotropic drug intake. Pericardial effusion was evidenced exclusively in patients diagnosed with severe or extreme AN. After six months from the hospitalization and the beginning of treatment the prevalence of cardiovascular complications was reduced.
Conclusions: The present study identifies criteria able to select patients with AN at higher risk of developing cardiac changes and underlines the importance of performing more frequent and targeted cardiologic evaluations in this subgroup of patients. This suggests the importance of establishing a common protocol for all clinicians.

Disclosure of Interest: None Declared

EPP0607

The relationship between alexithymia and Nyght Eating Syndrome

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Introduction: NES is characterized by daytime anorexia, sleep difficulties with nocturnal food intake, resulting in obesity (*Stunkard et al.* Am J of Med. 1955; 19 78-86). Alexithymia refers to the impairment in recognizing and describing feelings. The impairment in distinguishing emotions from body sensations may lead patients to confuse emotional arousal with physical hunger (*Sifneos et al.* Mod. trends psychosom. med. 1976; 3 430-439). This mechanism could lead to nocturnal food intake. Alexithymia was firstly described in BED and was related to BED severity.
Objectives: To our knowledge no studies have investigated the relationship between alexithymia and NES. The aim of the present study was to assess alexithymia in patients with NES, to improve surgical and nutritional outcomes.
Methods: 110 patients with clinical diagnosis of NES admitted to the Eating Disorder Unit, between 2013 and 2022 underwent psychiatric assessment for bariatric surgery. Clinical assessment consisted of clinical interview and the following psychometric rating scales: 20-item Toronto Alexithymia Scale; Eating Disorder Inventory 2, specifically the Interoceptive Awareness subscale; Barratt Impulsiveness Scale; Binge Eating Scale.
Results: The mean BES score was 24.14(SD 8.23), computed on 107 patients, of which 16 (14.5%) had no or minimal binge eating problems and 91 (82.7%) had moderate-severe binge eating problems. The mean TAS total score was 55.11(12.92), computed on 103 patients. 42 patients had a TAS-20 total score ≤50 and were categorized as non-alexithymic, and 61 had a TAS-20 total score >50 and were categorized as alexithymic. Simple linear regression was used to test if TAS-20 total score significantly predicted EDI-IA in the whole sample (97 patients). The overall regression was statistically significant (R^2=0.27, F(1,96)=35.46, p< .001) and TAS total score significantly predicted EDI-IA score (β=0.519, p<.001). In the alexithymic group, the regression was statistically significant (R^2=0.305, F(1,57)=25.07, p< .001) and TAS total score significantly predicted EDI-IA score (β=0.553, p<.001).

	Whole sample	Alexithymic	Non-alexithymic	*p*
Female (%)	79(71.8) N=110	48(64.9) N=62	26(35.1) N=42	.087
Age mean(SD)	36.41(12.6) N=110	34.65(12.7) N=62	38.48(11.31) N=42	.11
BMI mean(SD)	44.05(7.61) N=106	43.97(7.9) N=60	43.82(7.38) N=40	.92
TAS mean(SD)	55.11(12.92) N=103	64.05(7.06) N=61	42.12(7.13) N=42	<.001*
BIS mean(SD)	67.58(10.35) N=98	70.07(9.93) N=59	63.26 (9.85) N=35	.002*
BES mean(SD)	24.14(8.23) N=107	25.7(6.89) N=62	21(9.25) N=40	.004*
EDI-IA mean(SD)	8.95(6.44) N=103	10.82(7) N=60	6.05(4.44) N=39	.000*

**significant difference between alexithymic and non-alexithymic groups according to independent sample t-test.*

Image:

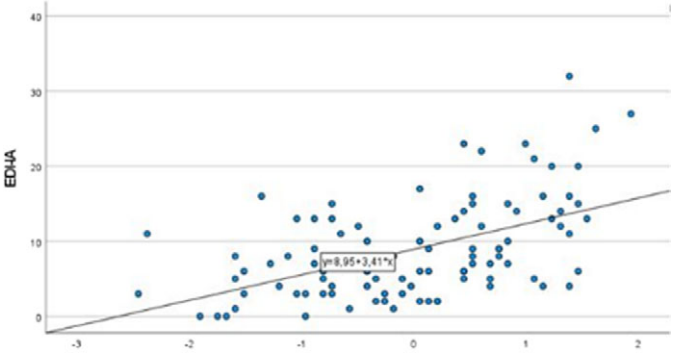

Figure 1. Linear regression (whole sample).