

retroviruses (HERVs) are ancient retroviral DNA sequences established into germline. Their tight regulation is mainly achieved by epigenetic mechanisms, which can be altered by environmental factors - viral infections, inflammation, leading to HERV activation. The aberrant expression of HERVs associates with neurological diseases and mood disorders. We showed earlier that HERV-E λ 4-1 activation is associated with the recurrent depression stage of exacerbation and are accompanied by a pronounced increase in the proinflammatory activity of the peripheral blood mononuclear cells (PBMC).

Objectives: The purpose of the study was to evaluate the activity of HERV-E λ 4-1 on PBMCs of patients with recurrent depression in remission, including under the influence of recombinant human IL-1 β .

Methods: The study included 30 patients with an established diagnosis of recurrent depression (F 33.0) aged 26–45 years. PBMC were isolated using the Ficoll density gradient method and further cultured in the presence or absence of 1 mkg/ml of recombinant human IL-1 β for 24 hours. HERV-E λ 4-1 env gene expression was determined by the PCR. Cells proliferative activity was determined by H³-thymidine incorporation. Cytokines content in culture supernatants was assessed by ELISA.

Results: It was shown that in all samples of PBMC cultured without IL-1 β the HERV-E λ 4-1 env expression was not determined. After the PBMC cocultivation with recombinant human IL-1 β , HERV-E λ 4-1 env gene expression was determined in 86,7% of cases. The HERV-E λ 4-1 activation in PBMC after IL-1 β influence was accompanied by increased cells proliferative activity and production of IL-1 β , IL-6.

Conclusions: Our data indicate that the HERV-E λ 4-1 env expression in PBMC of recurrent depression patients in the stage of remission induced by the influence of proinflammatory cytokines, such as IL-1 β . This mechanism may be one of the possible regulators of HERV-E λ 4-1 activation in recurrent depression.

Disclosure of Interest: None Declared

EPP0216

Depression and Medierranean diet: analysis of the PREDIDEP randomised trial

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Introduction: Unipolar depression is a growing global Public Health challenge. During last years, life factors such as diet, have been identified as a target for the development of adjunctive treatment that could reduce the rates of depression. The Mediterranean Diet (MD) is one of the most studied dietary factors that has been inversely associated with depression (Rahe et al. Eur J Nutr. 2014;53:997–1013). The PREDIDEP study is an ongoing secondary prevention trial aimed at assessing the effect of a MD enriched with extra virgin olive oil (EVOO) on depression recurrence (Sánchez-Villegas et al. BMC Psychiatry. 2019 Feb 11;19(1):63).

Objectives: This study aims to assess the effectiveness of a remote Mediterranean diet-based nutritional intervention in the context of a trial of depression.

Methods: The PREDIDEP study is a 2-year multicenter, randomized, single-blinded trial designed to analyse the effect of the MD enriched with extra virgin olive oil (EVOO) on the prevention of depression recurrence. The intervention group received phone contacts with dietist and had access to web-based information, and the control group had usual care for depressed patients. The 14-item MD Adherence Screener (MEDAS) questionnaire and a semiquantitative food frequency questionnaire (FFQ) were collected by dietitians at baseline and at 1-year and 2-year of follow-up. We used mixed effects linear models to assess changes in nutritional variables according to the group of intervention. The trial was registered at ClinicalTrials.gov NCT03081065.

Results: We observed that participants in the MD group increased their adherence to MD (between-group difference: 2.50; 95% CI 1.88-3.12; p<0.001) after one and two years (between-group difference: 2.57; 95% CI 1.93-3.22; p<0.001) of intervention compared with control group.

MEDAS questionnaire	Control, mean (95% CI)	Intervention, mean (95% CI)	Between group difference, mean (95% CI)	P value
Baseline	6.96 (6.54-7.39)	7 (6.63-7.39)	N/A	N/A
1 year	7.2 (6.82-7.58)	9.74 (9.3-10.18)	N/A	N/A
1-year change	0.23 (-0.19-0.65)	2.74 (2.28-3.19)	2.50 (1.88-3.12)	<0.001
2 years	7.06 (6.66-7.46)	9.68 (9.28-10.07)	N/A	N/A
2-years change	0.10 (-0.38-0.58)	2.67 (2.24-3.1)	2.57 (1.93-3.22)	<0.001

Calculated using mixed-effect models with center as random factor.

P value between group intervention difference.

N/A: not applicable.

MEDAS: Mediterranean Diet Adherence Screener

Conclusions: We found that this multifaceted remote nutritional intervention is a useful tool kit to maintain the quality of the diet according to the goals of the MD among patients at risk of depression.

Disclosure of Interest: None Declared

EPP0217

Progressive grey matter atrophy in adolescents with major depressive disorder revealed by causal structural covariance network

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Introduction: Adolescence is a period marked by highest vulnerability to the onset of depression, with profound implications for adult health. Neuroimaging studies have revealed considerable atrophy in brain structure in these patients with depression. Of particular importance are regions responsible for cognitive control, reward, and self-referential processing. However, the causal structural networks underpinning brain region atrophies in adolescents with depression remain unclear.

Objectives: This study aimed to investigate the temporal course and causal relationships of gray matter atrophy within the brains of adolescents with depression.

Methods: We analyzed T1-weighted structural images using voxel-based morphometry in first-episode adolescent patients with depression ($n=80$, 22 males; age = 15.57 ± 1.78) and age, gender matched healthy controls ($n=82$, 25 males; age = 16.11 ± 2.76) to identify the disease stage-specific gray matter abnormalities. Then, with granger causality analysis, we arranged the patients' illness duration chronologically to construct the causal structural covariance networks that investigated the causal relationships of those atypical structures.

Results: Compared to controls, smaller volumes in ventral medial prefrontal cortex (vmPFC), dorsal anterior cingulate cortex (dACC), middle cingulate cortex (MCC) and insula areas were identified in patients with less than 1 year illness duration, and further progressed to the subgenual ACC, regions of default, frontoparietal networks in longer duration. Causal network results revealed that dACC, vmPFC, MCC and insula were prominent nodes projecting exerted positive causal effects to regions of the default mode and frontoparietal networks. The dACC, vmPFC and insula also had positive projections to the reward network, which included mainly the thalamus, caudate and putamen, while MCC also exerted a positive causal effect on the insula and thalamus.

Conclusions: These findings revealed the progression of structural atrophy in adolescent patients with depression and demonstrated the causal relationships between regions involving cognitive control, reward and self-referential processes.

Disclosure of Interest: None Declared

Eating Disorders

EPP0220

Prevalence And Risk Factors Of Eating Disorders In The Tunisian General Population

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Introduction: Eating disorders (ED) negatively affect physical, mental, and social well-being. The exact psychopathology of ED is still unknown, with research suggesting the interplay of a combination of factors.

Objectives: The aim of our study was to estimate the prevalence of ED in the Tunisian general population, and to identify associated risk factors.

Methods: We conducted a cross-sectional, descriptive and analytical study among Facebook group members, using an online

questionnaire, over the period from February 17, 2023 to May 26, 2023. All respondents over the age of 18 were included in the study. All participants filled a socio-demographic questionnaire. The Eating Attitudes Test (EAT-26) was used to screen for those at risk of eating disorders.

Results: A total of 528 responses were included in the study. The mean age of the sample was 33.3 ± 11.95 years. The subjects were unmarried in 63.4% of cases, of low socio-economic level in 19.5%, with a university education in 75.2% and with a regular occupation in 56.1% of cases.

The mean EAT-26 score was 12.36 ± 10.34 . according to this scale, 12.3% of our population were at high risk of developing an ED.

In a multivariate analysis, the female gender ($p = 0.006$), the low economic status ($p = 0.012$), a psychiatric comorbidity ($p < 0.001$), and physical activity ($p = 0.037$) were strongly associated with ED.

Conclusions: This study highlighted the magnitude of the risk of disordered eating attitudes in the Tunisian population and the need for programs to prevent and control these disorders.

Disclosure of Interest: None Declared

EPP0221

Evaluating the role of autistic traits and sensory sensitivity in eating disorders and autistic-like eating behaviours

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Introduction: In recent decades, there has been extensive research on the association between Autism Spectrum Disorders (ASD) and Eating Disorders (ED), as well as the existence of sensory sensitivity alterations in both diagnostic groups.

Objectives: The present study aimed to examine the presence of autistic traits in a sample of adult women diagnosed with different ED, and the concurrent role of autistic traits and sensory sensitivity in both their eating disorder symptomatology and their autism-related eating behaviours.

Methods: Seventy-five women with different ED completed the Eating Attitude Test (EAT-26), the Autism Quotient (AQ), the Ritvo Autism Asperger Diagnostic Scale-Revised (RAADS-R), the Sensory Perception Quotient - Short Form 35 item (SPQ-SF35) and the Swedish Eating Assessment for Autism Spectrum Disorders (SWEAA), which investigates specific eating behaviour related to autism.

Results: 12% of the sample scored above the cut-off at both the AQ and the RAADS-R, while 68% scored above the cut-off at the RAADS-R only. We found an association between: i) hypersensitivity in the taste domain and ED severity and autistic-like eating behaviours; ii) hypersensitivity in the vision domain and