pro-inflammatory role, but it also possesses regulatory functions by antagonizing Transforming Growth Factor beta (TGF-β). TGF-β acts as an anti-inflammatory and regulatory cytokine. The interaction between these cytokines remains inadequately explored in patients with depression.
Objectives: The aim of our study was to analyze the differences in serum concentrations of INF-γ and TGF-β between patients with Major Depressive Disorder (MDD) and healthy controls.
Methods: Blood samples were obtained from 55 patients who met the DSM-IV-R criteria for a current MDD episode without psychotic symptoms, and from 45 healthy controls, matched for age and gender. Participants were assessed using the Beck Depression Inventory (BDI) and the Hamilton Depression Rating Scale (HDRS). Serum concentrations of INF-γ and TGF-β were determined using enzyme-linked immunosorbent assays.
Results: The concentration of TGF-β was significantly higher in patients compared to healthy controls, while no differences were observed for INF-γ between the groups. Moreover, INF-γ concentrations were statistically higher in patients with more severe depression, as measured by HDRS and BDI. TGF-β levels increased with severity only as assessed by HDRS. Among various factors (sociodemographic, clinical, and hereditary), INF-γ was positively correlated solely with the number of hospitalizations, whereas TGF-β levels correlated with the duration of treatment and symptoms.
Conclusions: The interplay between TGF-β and INF-γ is frequently considered a crucial component of the inflammatory hypothesis in depression. Further research is needed to understand why concentrations are elevated in patients with more severe forms of depression, yet show no correlation with other clinical or sociodemographic factors.

Disclosure of Interest: None Declared

EPV0649

Lifting Spirits: Exploring the Link Between Strength Training Intensity and Depression

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Introduction: In recent years, the appealing aspect of strength training has grown beyond its physical benefits, promoting interest in its potential impact on mental health. Despite the curiosity, the association between it and depression remains unexplored.
Objectives: The purpose of this study is to examine at the link between strength training intensity and depression levels among active gym-goers in Tunisia.
Methods: This is a cross-sectional study, conducted from February to March 2024. Participants were recruited online through social media platforms (Tunisian facebook groups and fitness forums) using a posted survey link. We've included respondents who are 18 years of age or older who have been active in strength training with a gym membership for 1 month or more. The respondents were required to answer a questionnaire that included questions related to socio-demographic data and to provide strength training intensity related details (sessions frequency, duration, perceived overall intensity using likert scale)
Depression levels were measured using the Patient Health Questionnaire-9 (PHQ-9).
Results: The overall number of participants was 72, with 86% being male. The majority of responders (n=65, 90.2%) indicated that they performed strength training exercises at least three times per week, with an average session length of 45 minutes. In terms of strength training intensity, 38.8% (n= 28) of participants reported high-intensity sessions, 48.6%(n=35) moderate-intensity sessions, and the remaining participants reported low-intensity sessions.
The mean depression score on the PHQ-9 scale was 4.3 (SD = 2.1). Implying a prevalence of minimal to mild depressive symptoms among the research population.
Strength training intensity was found to have a negative correlation with depression scores ($r = -0.36$, $p = 0.03$), suggesting that higher intensity sessions were linked with fewer symptoms of depression.
Conclusions: This study serves to shed light upon the association between strength training intensity and depression levels among Tunisian gym-goers. The findings emphasise the positive impact of strength training with higher intensity, on depressive symptoms

Disclosure of Interest: None Declared

EPV0651

Vagal Nerve Stimulation for Depression: A Review of Side Effects in Unipolar and Bipolar Disorders

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Introduction: Vagal Nerve Stimulation (VNS) therapy has emerged as a promising treatment for individuals suffering from treatment-resistant unipolar and bipolar depression. Initially approved for epilepsy, VNS therapy's potential to improve mood symptoms in patients unresponsive to conventional treatments like antidepressants, psychotherapy, ECT, and TMS has garnered growing interest in psychiatry.This systematic review provides a comprehensive overview of the side effects associated with VNS therapy. It aims to offer a balanced perspective on the therapy's safety profile, aiding informed decision-making for depression.
Objectives:
1. To identify the most common side effects of VNS therapy.

Methods: A literature search was conducted within 2 databases (PubMed and Google Scholar). The PubMed search employed MeSH terms as follows: ((vagus nerve stimulation) OR (vagal nerve stimulation)) AND ((major depressive disorder) OR (MDD) OR (depression) OR (unipolar depression) OR (bipolar depression)) AND (side effects). Google Scholar search utilized Boolean operators as follows: "vagus nerve stimulation for depression" "adverse effects" "side effects." Tools that were native to the browsers of these respective databases were used to apply the following filters: publication date (2019-2014), free full text, English, no abstracts, no miscellaneous documents and the remaining results were reviewed independently by 2 investigators to screen for the remaining

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