

## EPP0984

### Depressive disorders in patients with sleep apnea syndrome

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**Introduction:** A growing body of literature has documented that obstructive sleep apnea syndrome (OSAS) is associated with an increased risk of depressive disorders.

**Objectives:** This study aimed to determine whether depression is associated with OSAS.

**Methods:** This was a descriptive prospective comparative study conducted over two years among patients with OSAS. Excessive daytime sleepiness was assessed by the Epworth Sleepiness Score (SES). The presence and intensity of depressive symptoms were screened using the Patient Health Questionnaire PHQ9. Data were analysed using SPSS software.

**Results:** A total of 139 patients participated in the survey with an average age of  $48.98 \pm 9.80$  years. According to the SES, the study population was divided into two groups: a group including 70 subjects with normal SES ( $< 11$ ); and a group including 69 subjects with pathological SES ( $\geq 11$ ). The PHQ9 depression score was higher in sleepy subjects with  $SES \geq 11$  compared to non-sleepless subjects; the difference being very highly significant ( $PHQ9=11.97 \pm 4.99$  and  $6.54 \pm 5.27$  respectively;  $p=0.0000$ ). The frequency of mild to moderate depressive disorders was found to be greater in non-sleepy subjects (94.3% and 78.3% respectively;  $p=0.007$ ). For moderately severe to severe depression, their frequency was more marked in sleepy subjects (21.7% and 5.7% respectively;  $p=0.007$ ).

**Conclusions:** Depressive disorders constitute a major comorbidity in OSAS. Therefore, it is necessary to improve the quality of these patients' health by the early detection of the symptoms of overlapping OSAS and depression.

**Disclosure of Interest:** None Declared

## EPP0985

### Association between Diffusion Tensor Imaging, inflammation and immunological alterations in unipolar and bipolar depression: a review

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**Introduction:** Major Depressive Disorder (MDD) and Bipolar Disorder Depression (BDD) are common psychiatric illnesses characterized by structural and functional brain alterations and

signs of neuroinflammation. In line with the neuroinflammatory pathogenesis of depressive syndromes (Mechawar N, Savitz J. Neuropathology of mood disorders: do we see the stigmata of inflammation? *Transl Psychiatry*. 2016;6(11):e946), recent studies have demonstrated how white matter (WM) microstructural impairments detected by Diffusion Tensor Imaging (DTI) are correlated to peripheral immunomarkers in depressed patients.

**Objectives:** In this context, the aim of our review is to report an updated overview of the evidence on the correlation between the blood immuno-markers changes and the brain WM disruptions in MDD and BDD patients.

**Methods:** Based on PRISMA 2020 guidelines (Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*. 2021;372), we performed a systematic search on original DTI studies exploring the association between WM integrity, neuroimmune alterations and inflammation in patients affected by MDD or BDD.

**Results:** Concerning MDD, most of the reviewed studies provided evidence of a link between systemic immune dysregulation, detected through the elevation of peripheral markers (IL-1 $\beta$  and TNF- $\alpha$ ) or an altered ratio between proinflammatory and counterregulatory cytokines (IL-8/IL-10), and DTI alterations in specific WM tracts, such as the genu of corpus callosum and the IFOF. As for the BDD, we detected an increase of pro-inflammatory molecules (such as TNF- $\alpha$ , IL-8, IFN- $\gamma$  etc.) that correlated with DTI changes in different cerebral areas such as cingulum, forceps, corona radiata, corpus callosum, longitudinal fasciculus and internal capsule. Furthermore, other molecules seem to play a specific role in BDD pathogenesis, including counter-regulatory cytokines, kynurenine and specific lymphocyte classes, such as Th1 and Th17.

**Conclusions:** Taken together, these pathogenetic insights could outline an integrated clinical perspective to affective disorders, helping psychiatrists to develop novel biotype-to-phenotype models of depression and opening the way to tailored approaches in treatments.

**Disclosure of Interest:** None Declared

## EPP0987

### Treatment of Seasonal Affective Disorder. The efficacy of Light therapy

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**Introduction:** Seasonal affective disorder (SAD) is a type of depression that comes and goes in a seasonal pattern. Symptoms of SAD can include: a persistent low mood, a loss of pleasure or interest in normal everyday activities, irritability, feelings of despair, guilt and worthlessness, feeling lethargic (lacking in energy) and sleepy during the day, sleeping for longer than normal and finding it hard to get up in the morning, craving carbohydrates and gaining weight, difficulty concentrating.

**Objectives:** The purpose of this study was to evaluate the response to different therapeutic interventions of seasonal depression