EPP0285

Association among early life stress, mood features, hopelessness and suicidal risk in bipolar disorder: The potential contribution of insomnia symptoms

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Introduction: Mood disorders are complex illnesses possibly resulting from the interaction of genetic, physiological, psychological, and environmental factors.Within this framework, a role for early life stressors has been proposed. Although this association is probably not specific to Bipolar Disorders BDs, with early life stressors predisposing to trans nosological indicators for severity of psychiatric disorders, it may represent an early marker both for triggering and long-term clinical manifestations of BDs.
Insomnia likely plays a triggering role in the onset and maintenance of BDs, as it may might play a key role in BDs by potentially dysregulating the systems involved in mood and emotion regulation, including stress and inflammatory systems and circadian rhythms alterations. Early life stressors have been demonstrated to alter sleep regulation. It has been hypothesized that sleep disruption related to early life stressors might contribute to the development pathways towards BDs in adult life through the epigenetic re-reprogramming of stress and inflammatory systems.
Objectives: We aimed to study their association with mood symptoms and suicidal risk in BDs with and without clinically significant insomnia symptoms. Since hopelessness is a construct strongly predicting depressive symptoms and suicidal risk in BDs and it has also been related to early life stress and to insomnia symptoms we aimed to specifically assess this symptom in our research.
Methods: a sample of 162 adult participants with BD I or II were assessed during depressed phase using the Structural Clinical Interview for DSM-5 (SCID-5), the Beck Depression Inventory-II (BDI-II), the Young Mania Rating Scale (YMRS), the Early Trauma Inventory Self Report-Short Form (ETISR-SF), the Beck Hopelessness Scale (BHS), the Insomnia Severity Index (ISI) and the Scale for Suicide Ideation (SSI). Participants with or without clinically significant insomnia were compared and we carried out correlations, regression and mediation analyses.
Results: Participants with insomnia showed a greater severity of depressive symptoms,of suicidal risk, of the cognitive component of hopelessness and of early life stressors. Insomnia symptoms mediated the association among early life stress and depressive symptoms ($Z = 2.72$, $p = 0.0006$), the cognitive component of hopelessness ($Z = 3.02$, $p = 0.0001$) and suicidal ideation and plans ($Z = 2.07$ $p = 0.0006$).
Conclusions: fnsomnia may mediate the relationship between early life stress and clinical manifestations of BD. Assessing the evolution of insomnia symptoms could offer an approach to characterize BD and to formulate treatment strategies. In particular targeting insomnia symptoms might potentially modify the clinical features of BD in response to early life stressful events.

Disclosure of Interest: None Declared

EPP0286

Series of periodic limb movements in sleep and heart rate variability

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Introduction: The relationship between a series of periodic limb movements in sleep (PLMS) and heart rate variability (HRV) is not clearly established. HRV reflects changes in heart rate (HR) and autonomic nervous system (ANS) tonus as 2 main components: low-frequency HRV (HRV LF) and high-frequency HRV (HRV HF). An accumulating body of evidence suggests that a single PLMS alters HRV parameters. However, less is known about the impact of HRV changes when a series of PLMS occurs. Both PLMS and HRV have been reported to show associations with cardiovascular and psychiatric diseases.
Objectives: PLMS have been associated with diverse psychiatric diseases in numerous studies. Longitudinal data demonstrate that patients with PLMS have an increased risk of depression and anxiety, and dementia. It should be noted, however, that it remains unclear how a series of PLMS affects the autonomic nervous system, cardiovascular system, and mental health. Therefore, the aim of this study was to verify the hypothesis that a series of PLMS is connected with a higher range of abnormalities in systolic and diastolic blood pressure (SBP and DBP, respectively), with particular interest in HRV HF and HRV LF scores before the series of PLMS and after the end of the series.
Methods: We undertook a retrospective analysis of polysomnography (PSG) and demographic and medical data of 5 patients with a total number of 1348 PLMS. We analyzed HR, HRV LF, HRV HF, systolic blood pressure (SBP), and diastolic blood pressure (DBP) for 10 heartbeats before the series of PLMS and 10 consecutive heartbeats as beat-to-beat measurements. The stage of sleep and duration of limb movement in each PLMS were also assessed. Statistics analysis was performed using IBM SPSS Statistics (v28.0.0.0). The Kruskal–Wallis test was performed to find statistically significant changes from the baseline.
Results: No statistically significant changes in HR, SBP, or DBP were found in our group. HRV changed after the series of 8 PLMS, with both HRV HF and HRV LF increasing.
Conclusions: Our study presents for the first time the co-activation of both HRV HF and HRV LF, pointing toward the possible autonomic dysregulation in patients with a series of PLMS.

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