

symptoms were reported by 15.4% at least three times per week, while 8.7% experienced RLS symptoms at least once weekly. EDS and fatigue symptoms ($\geq 1x/week$) were present in 30.6% and 35.8% of patients, respectively. Signs of parasomnias ($\geq 1x/week$) were identified in 4.3% of patients.

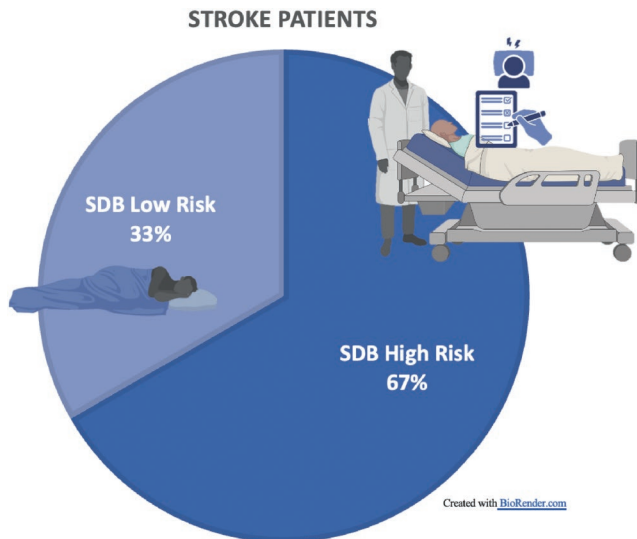


FIGURE 1 An elevated risk for SDB, according to a NoSAS-Score of ≥ 8 , was found in 66.7% of patients.

Conclusion: The BSHQ revealed high rates of SWD in acute ischemic stroke patients, aligning with prior evidence. The BSHQ may serve as an effective screening tool for SWD in stroke patients, further validation studies are ongoing.

Disclosure: Nothing to disclose.

EPO-170 | Stress in adult DoA: A web-based survey

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Background and aims: Disorders of Arousal (DoA) are NREM parasomnias, encompassing three main clinical entities: sleep-walking (SW), confusional arousals (CA), and sleep terrors (ST). Clinical evidence suggests a bidirectional relationship between stress and DoA, wherein stress exacerbates parasomnia episodes, and the episodes themselves may contribute to psychological stress, impacting quality of life. The aim of our study was to evaluate the prevalence of these three DoA entities and their relationship with subjective perception of distress within a university population.

Methods: A web-based survey was conducted among students aged 18 to 35 at Bicocca University of Milan between May and June 2023. The survey collected data on sociodemographic

characteristics and lifestyle habits, along with responses to two validated Italian questionnaires: the Arousal Disorder Questionnaire (ADQ), used to assess the occurrence of DoA (1), and the General Health Questionnaire (GHQ-12), a widely utilized tool for measuring current psychological distress (2).

Results: A total of 1,039 students completed the survey (259 males, 780 females), with a median age of 23.0 years (IQR: 21.0–25.0). The prevalence of SW, ST, and CA was 2.7%, 3.0%, and 5.9%, respectively. The overall GHQ score was 6.0 (IQR: 5.0–8.0). Comparing subjects with or without DoA, perceived distress was significantly higher in individuals with ST ($p=0.0359$) and CA ($p=0.0034$), whereas no significant differences were observed for SW.

Conclusion: These findings align with prevalence rates reported in broader adult populations and confirm an association between DoA and stress, claiming for new targeted therapeutic strategies.

Disclosure: Nothing to disclose.

EPO-171 | ECS improves depression and sleep regulation through modulation of the microbial-gut-brain axis

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Background and aims: Electroconvulsive therapy (ECT) has shown potential to alleviate depressive symptoms, but its impact on the gut-brain axis and microbiome is underexplored. This study investigates how ECT regulates depressive behaviors and the composition of the gut microbiota via the microbiota-gut-brain axis.

Methods: Chronic Unpredictable Mild Stress (CUMS) was used to induce depression in rats, which were divided into control, depression, and ECT treatment groups. Depressive behaviors were assessed by body weight, the open field test, sugar and water consumption, and the forced swimming test. Brain and intestinal histology, microcirculatory blood flow, and inflammatory factors (TNF α , IL1 β , IL6) in intestinal tissues were measured by HE staining, immunofluorescence, and ELISA. Intestinal microbiota composition was analyzed via metagenomic sequencing. ANOVA and Kruskal-Wallis tests were used for data analysis ($P<0.05$ considered significant).

Results: ECT treatment significantly improved depressive behaviors ($P<0.01$), reducing immobility time in the forced swimming and hanging tail tests ($P<0.05$). Histology revealed reduced intestinal inflammation ($P<0.05$), and immunofluorescence showed increased c-Fos expression ($P<0.05$). ECT also significantly decreased TNF α , IL1 β , and IL6 levels ($P<0.01$). Metagenomic sequencing revealed increased intestinal microbiota diversity, with a significant restoration of Bacteroidota and Verrucomicrobiota abundance ($P<0.05$).