Body mass index change in patients on antipsychotic treatment: findings from a 1-year follow-up of the early intervention program in first-episode psychosis [abstract only]

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Topic: AS08 Diseases of The Nervous System (including, infective and psychiatric)

DO ALL PATIENTS SUFFERING FROM DISORDERS OF CONSCIOUSNESS RESPOND IN THE SAME WAY TO THE TRANSAURICULAR VAGUS NERVE STIMULATION?: AN ELECTROENCEPHALOGRAPHIC STUDY IN RESTING STATE

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Disorders of Consciousness (DoCs), both Minimally Conscious State (MCS) and Unresponsive Wakefulness Syndrome (UWS), have diverse etiology like Traumatic Brain Injury (TBI) or Anoxic-Vascular Injury (AVI). Transauricular Vagus Nerve Stimulation (taVNS) has been postulated as a promising treatment, although few studies have proved its effectiveness. Consequently, an electroencephalographic (EEG) approach is proposed here, testing its efficacy. For it, twenty DoCs patients participated in this study, being subjected to a resting EEG recording. Then, they were treated with taVNS and the EEG recording was again performed. Subsequently, EEG data was analyzed and the spectral power was calculated in Delta, Theta, Alpha and Beta. Finally, a Repeated Measures ANOVA was performed, taking the spectral power of brain oscillations before and after taVNS as within-subject factor and diagnosis (EMC or UWS) or etiology (TBI or AVI) as between-subjects factors. No differences were found taking the diagnosis as between-subject factor. However, when comparing between etiologies, TBI showed a decrease in Delta ($pBonferroni = 0.0098$) accompanied by an increase in Alpha ($pBonferroni = 0.035$) and Beta ($pBonferroni < 0.001$) for Parieto-Occipital after the stimulation. Furthermore, they also showed an increase in Beta for Fronto-Central ($pBonferroni = 0.011$), Right ($pBonferroni = 0.01$) and Left regions ($pBonferroni = 0.010$). Conversely, AVI only showed a decrease in Alpha for Fronto-Central ($pBonferroni < 0.001$). To conclude, taVNS effects were not equitable for all patients and TBI seems to benefit more than AVI, since the decrease in Delta accompanied by the increase in Alpha for Parieto-Occipital and the general increase in Beta is supposed to be closer to healthy people activity. Despite being expected that EMC could benefit more than UWS, data showed no difference and a misdiagnosis can be suggested. Finally, more in depth studies are needed to envisage the neural correlates of taVNS and discover why some patients benefit more than others.

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BODY MASS INDEX CHANGE IN PATIENTS ON ANTIPSYCHOTIC TREATMENT: FINDINGS FROM A 1-YEAR FOLLOW-UP OF THE EARLY INTERVENTION PROGRAM IN FIRST-EPISODE PSYCHOSIS

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To evaluate the long-term changes in body mass index (BMI) and related metabolic abnormalities in psychotic patients receiving antipsychotics, and determine if childhood trauma is associated with these changes. We included 62 first-episode psychosis patients (FEPp) aged 16-64 years treated for up to three weeks with antipsychotics at baseline, followed up after one year. We evaluated fasting glucose, total cholesterol, triglycerides, HDL-c and LDL-c. Childhood trauma was evaluated using Childhood Trauma Questionnaire. Data were analysed by ANOVA followed by post-hoc Bonferroni tests. Forty FEPp were men (64.5%), 38 were white (61.3%), and the average age was 31.6 ± 14.5 years. Patients exhibited a significant increase in BMI (baseline: 24.2 ± 6.2 kg/m^2; 1-year: 27.1 ± 7.5 kg/m^2, $p = 0.011$). The percentage of obese (BMI $\geq$ 30 kg/m^2) subjects among FEPp rose from 14.5 to 27.4% after 1 year. The percentage of those meeting criteria for overweight (BMI $\geq$ 25, $<$30kg/m^2) also increased, from 25.8 to 29.0%. At baseline, 71.0% received haloperidol and 29.0% second-generation antipsychotics. After one year, 27.4% received haloperidol, and 72.6% of patients second-generation antipsychotics, grouped based on the antipsychotic propensity for weight gain (low: haloperidol; high: quetiapine, risperidone, olanzapine, clozapine). Thirty-nine (62.9%) FEPp gained clinically significant ($\geq$7%) weight ($p = 0.042$), with a greater proportion in the high group compared to the low group ($p = 0.054$). However, the mean difference in BMI during the first year did not significantly differ between the antipsychotic groups (low: 2.4 ± 4.0 kg/m^2; high: 3.0 ± 2.4 kg/m^2, $p = 0.632$). Cholesterol ($p < 0.001$), triglycerides ($p = 0.05$) and LDL-c ($p < 0.001$) significantly increased at follow-up. Triglyceride also correlated with BMI change ($r = 0.343$, $p = 0.006$). History of emotional abuse or physical neglect was significantly associated with elevated cholesterol ($p = 0.05$; $p = 0.025$) and LDL-c ($p = 0.05$; $p = 0.016$). The first year of antipsychotic treatment has significant effects on BMI, and experience of childhood maltreatment may contribute as a risk factor for increased lipid profile in psychosis.

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