EPP0298

Estimating the prevalence of alcohol abuse using phosphatidylethanol

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Introduction: Currently, there is an active development of methods for the laboratory diagnosis of alcohol abuse using biochemical markers.
Objectives: The aim of this work was to estimate the prevalence of alcohol abuse among the urban population of Belarus using the concentration of phosphatidylethanol in the blood as a biochemical marker of alcoholism.
Methods: 220 blood samples from Grodno residents of both sexes aged 15 to 65 were analyzed. The AUDIT questionnaire was used as a screening tool. Determination of the concentration of phosphatidylethanol in the blood was carried out using the method of high performance liquid chromatography - tandem mass spectrometry (HPLC - MS).
Results: The average concentration of phosphatidylethanol in the blood of men and women was 266.11±54.57 and 55.27±9.43 nmol/ml, respectively. In 9.6% of blood samples, the concentration of phosphatidylethanol exceeded the threshold level of alcohol abuse. It was found that the concentration of phosphatidylethanol in the blood does not correlate with the total score, as well as the frequency and quantitative characteristics of the AUDIT screening test.
Conclusions: Determining the concentration of phosphatidylethanol in the blood is a more reliable way to diagnose alcohol abuse than using screening tools.

Disclosure of Interest: None Declared

Bipolar Disorders 02

EPP0299

Effect of Regulated Add-on Sodium Chloride Intake on Stabilization of Serum Lithium Concentration in Bipolar Disorder: A Randomized Controlled Trial

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Introduction: The therapeutic use of lithium in bipolar disorder is often restricted due to its narrow therapeutic window and adverse drug reactions. Lithium-induced early renal dysfunction is clinically important as it may lead to sodium depletion due to natriuresis leading to lithium retention and lithium toxicity. This is most often seen in the initial phases of therapy, and psychiatrists struggle titrating the dose of lithium and stabilizing the serum lithium level.
Objectives: The present study was conducted to evaluate the effect of add-on sodium chloride on serum lithium levels in bipolar disorder.
Methods: The present randomized controlled trial (NCT04222816) was conducted in 60 patients with type I bipolar disorder who were randomized into the control group who received lithium carbonate with the advice not to take additional salt (at the table) and the test group who received sachets of sodium chloride (1 g/d) as an add-on to lithium carbonate and were advised to restrict their additional salt intake (at the table) to 1 g/d. After baseline assessments, all patients were followed up at 4 weeks, 8 weeks, and 12 weeks when serum lithium, sodium and potassium were estimated. Serum creatinine and aldosterone were repeated at 12 weeks.
Results: In the test group, the fluctuation rate in serum lithium (26.7%) was significantly (p=0.01) lower than in the control group (63.3%). There was a significant difference in serum lithium in the control group at different time points; however, the changes were not significant in the test group. There was a significant difference in serum lithium between the groups at 8 and 12 weeks of follow-up. There were no significant differences in the change in serum sodium, potassium, creatinine, aldosterone, creatinine clearance, and blood pressure within the group and between the groups. A significant positive correlation was found between serum lithium and aldosterone at baseline.
Conclusions: Intake of add-on sodium chloride (1 gm/day) may reduce the fluctuations in serum lithium during the maintenance phase of lithium therapy in type I bipolar disorder.

Disclosure of Interest: None Declared

EPP0300

Clinical and neuroendocrine correlates of childhood maltreatment history in adults with bipolar disorder

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Introduction: Childhood maltreatment (CM) has been associated to an increased risk of developing bipolar disorder (BD). A role of the hypothalamus-pituitary-adrenal (HPA) axis in mediating trauma-related risk for adult psychopathology has been suggested but scarcely investigated in BD.
Objectives: The aim of this study is to explore the impact of childhood maltreatment on clinical features of BD and on the activity of the HPA axis.
Methods: One hundred and six patients participated in the study. On the basis of their history of childhood trauma, as assessed by the Childhood Trauma Questionnaire (CTQ), they were divided into a group with a history of childhood maltreatment (CM+) and a group without (CM−). Twenty-nine participants (16 with a history of childhood trauma and 13 without) underwent the cortisol awakening response (CAR) test. Saliva cortisol concentrations were determined by an enzyme immunoassay method, using a commercially available ELISA kit.