

Psychoneuroimmunology And Neurobiology Lab, Mental Health Research Institute, Tomsk, Russian Federation

*Corresponding author.

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Introduction: Original compound ortho-fluorobenzonal, a barbiturate derivative, is shown to reveal strong anticonvulsant activity by means increasing GABA-mediation. Disturbance of GABA(A)-receptors functions play an essential role in both alcoholism and epilepsy pathogenesis.

Objectives: Taking into account the presence of GABA(A)-receptors on the lymphocytes surface and involvement of immune system in alcoholism pathogenesis, we investigated ortho-fluorobenzonal effects on the immune and nervous systems functional activities in mice with chronic alcohol exposure to find new perspective pharmacological substances in the treatment of alcoholism.

Methods: (CBAXC57Bl/6) F1 male mice with 6-month 10% ethanol exposure were undergoing intragastric administration of original compound ortho-fluorobenzonal for 10 days. Animal's alcohol consumption, behavior and immune parameters were estimated.

Results: It was found that ethanol daily consumption decreased sharply starting from 2 days of ortho-fluorobenzonal administration and led to the cessation of ethanol consumption by the 4 day in mice with chronic alcohol exposure. Pronounced changes in motor and exploratory activities in "open field" test was registered in long-term alcoholized mice after 10-day course ortho-fluorobenzonal administration. The above behavioral changes were recorded against the brain cytokines synthesis modulation. We have shown also the modulation by ortho-fluorobenzonal of immune system functional activity, in particular, significant cellular and humoral immune response stimulation, estimated by the relative number of antibody forming cells and reaction of delayed-type hypersensitivity respectively.

Conclusions: Original compound ortho-fluorobenzonal has a positive neuroimmunomodulation effect that manifests itself in the correction of immune and behavior disorders caused by the chronic ethanol exposure, therefore, this compound is promising in the therapy of alcoholism

Disclosure: No significant relationships.

Keywords: Original anticonvulsant; alcoholism

EPV0677

Six-month contingency management effects on smoking cessation in individuals with substance use disorders

G. Aonso-Diego*, A. Krotter, Á. García-Pérez and R. Secades-Villa
Department Of Psychology, University of Oviedo, Oviedo, Spain

*Corresponding author.

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Introduction: Persons with substance use disorders (SUD) smoke at strikingly high rates and tobacco use cessation rates are notably low in this population. Contingency Management (CM) is effective to promote substance abstinence, including tobacco, in a large range of populations. CM is scarcely implemented in clinical settings mainly due to barriers at the therapist and organizational levels.

Objectives: The study sought to examine the additive effectiveness of CM on Cognitive-Behavioral Therapy (CBT) over long-term smoking abstinence in persons undergoing SUD treatment.

Methods: A total of 54 smokers (75.9% males, $M_{age}=46.19$, $SD=9.21$) were randomly assigned to CBT ($n=30$) or to CBT+CM ($n=24$). Interventions consisted of eight weeks of group-based therapy. Participants were instructed to gradually reduce their nicotine intake by 20% weekly. The CM arm was voucher-based, and the primary outcome was biochemically verified tobacco abstinence ($CO \leq 4ppm$, and urine cotinine $\leq 80ng/ml$).

Results: A total of 42/54 (77.78%) participants completed the treatment (73.33% in CBT and 83.33% in CBT+CM; $p=.380$). At the end of treatment, participants in CBT+CM showed higher 24-hour smoking abstinence (50% vs. 20%, $p=.032$); however, both treatment conditions show equal abstinence rates in the remaining follow-ups (CBT_{1month} = 13.33% vs. CBT+CM_{1month} = 25%; CBT_{2months} = 10% vs. CBT+CM_{2months} = 16.66%; CBT_{3months} = 10% vs. CBT+CM_{3months} = 16.66%; CBT_{6months} = 10% vs. CBT+CM_{6months} = 8.33%; all p -values $\geq .244$).

Conclusions: CM facilitates early abstinence outcomes in smokers with SUD more than CBT only does. However, no additive effects of CM were observed at long-term, suggesting the convenience to intensify CM schedules or using technology platforms for incentives delivery.

Disclosure: No significant relationships.

Keywords: contingency management; smoking cessation; Substance Use Disorder; effectiveness

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Electronic cigarettes use among teenagers in Tunisia

R. Maalej¹, Y. Zgueb^{2*}, A. Aissa¹, U. Ouali² and F. Nacef²

¹Psychiatry A, Razi Hospital, Manouba, Tunisia and ²Psychiatry A Department, Razi Hospital, Manouba, Tunisia

*Corresponding author.

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Introduction: Electronic cigarettes (e-cigarettes) are battery-powered devices developed with the goal of mimicking the action of smoking. Their use has increased over the past years.

Objectives: The aim of this study was to evaluate the prevalence of the use of e-cigarettes among teenagers in high school and to examine the predictor factors.

Methods: A survey was conducted with a sample of 234 students in Mohamed Ali high school in Sfax, a town in the south of Tunisia, in February 2020. We estimated e-cigarette prevalence among adolescents and the predictor factors of vaping.

Results: Among high school students aged 15 to 20, 58,8% have ever used e-cigarette, 38,3% had done so within the previous 30 days and 20,5 % were regular users of vapes. The mean age of e-cigarette users was 16,59 +/- 0,908 years old, 83,3% of e-cigarettes users were males. Male gender, high socio-economic level, practicing leisure activities, smoking cigarettes and drinking alcohol were associated with regular use of e-cigarettes. Overall, 51, 6% of never smoking students reported ever use of e-cigarettes. The main reason for initiating e-cigarettes use was curiosity (65%).

Conclusions: Our findings showed the significant use of e-cigarettes among high school students thus it would be interesting to provide adolescents with information about the use of e-cigarettes and other tobacco products.