OXCARBAZEPINE, TOPIRAMATE AND LAMOTRIGINE IN TREATMENT OF ALCOHOL CRAVING

Bajovic B, Zivkovic N, Djokic G, Pavicevic D.

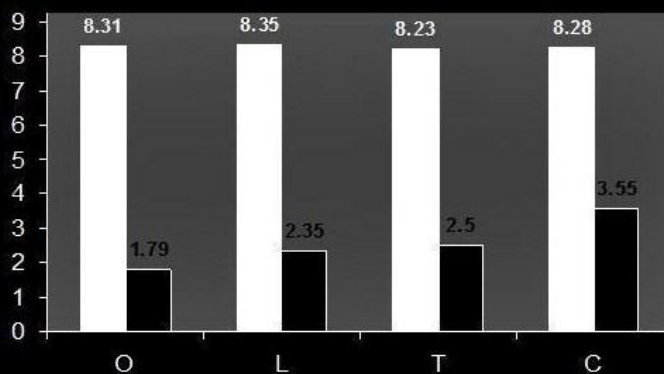**Institute for neuropsychiatry "Dr Laza Lazarevic", Visegradska 26, Belgrade, Serbia**

Midbrain dopaminergic system and neuroadaptive changes in almost all neurotransmiter systems has significant role in neurobiochemical basis of substance use disorders (SUD).

Aim of this study was to investigate efficiency of the OXC, TOP and LTG in treatment of alcohol induced craving.
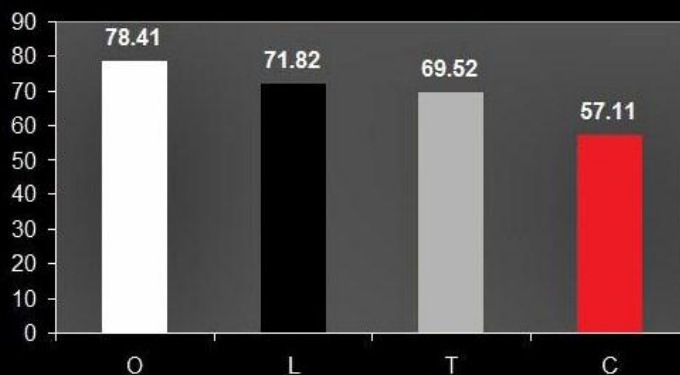
Methods: this clinical study included 182 patients with ICD 10 criteria for alcohol dependance, who were divided into four groups, control group (C) N=40, and three experimental groups: Oxcarbazepine (O), N=51; Topiramate (T), N=42 and Lamotrigine (L), N=49. Patients were observed for 6 months, according to specially designed protocol, which included ACS clinical score. Control group was treated with symptomatic therapy, and experimental groups were treated with symptomatic therapy and OXC (600-1200 mg/24 h), TOP (100-200 mg/24 h), and LTG (75-200 mg/24 h).

Results: there is no statistical significance in pretrial scores between groups, p=0.847 for ACS. There is statistical significance in ACS score reduction after 30 days (p=0.000) and 180 days (p=0.000) in all experimental groups. Results of ACS reduction between all groups are as follow: O vs. C, p=0.000 after 30 and 180 days with high statistical significance; O vs. T, p=0.011 after 30 and p=0.009 after 180 days with high statistical significance; O vs. L, p=0.856 after 30 and p=0.232 after 180 days with no statistical significance; L vs. C, p=0.000 after 30 and 180 days with high statistical significance; L vs. T, p=0.021 after 30 and p=0.039 after 180 days with high statistical significance; T vs. C, p=0.000 after 30 and 180 days with high statistical significance. After 180 days ACS reduction was significant in all four groups: 78.41% in O; 71.82% in L; 69.52% in T and 57.11% in C group. Percentage of relapse is significantly lower in all three experimental groups compared to control group.

ACS scores after day 1 and day 180

Craving reduction (%)

Conclusion: OXC, TOP ang LTG have potent anticraving effect in alcohol dependents. OXC, TOP and LTG are efficient in reducing ACS score. At the endpoint of study OXC showed the best efficacy. All OXC, TOP and LTG significantly lowered the risk of relapse comparing to control group.