COMBINATION WITH ROPI N I POLO AND DISULFIRAM IN SUBJECTS WITH SCHIZOAFFECTIVE DISORDER IN COMORBIDITY WITH COCAINE ADDICTION: A PRELIMINAR DATA

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INTRODUCTION

The development of pharmacotherapies for the treatment of cocaine dependence has been a high priority in addiction research for more than two decades, yet no medication has been approved by the Food and Drug Administration (FDA) in the USA or by similar agencies in other countries for the treatment of cocaine dependence. Cocaine use is associated with significant medical and psychiatric comorbidity. Cocaine increases extracellular levels of dopamine (DA), norepinephrine (NE), and serotonin in the brain by blocking plasma membrane monoamine transporters. A number of DA receptor subtypes are presently known: these include the D1-like (D1, D5) and D2-like (D2, D3, and D4) receptor families, which are classified according to their molecular and pharmacological characteristics.

AIM OF THE WORK

Disulfiram, traditionally used for treatment of alcoholism, inhibits aldehyde dehydrogenase (ALDH) which results in the accumulation of acetaldehyde on ethanol ingestion. Surprisingly, studies in literature revealed that disulfiram is at least as effective as treating cocaine addicts who do not consume alcohol, and may even be more effective. Therefore, an ALDH-independent mechanism must be responsible for the ability of disulfiram to promote cocaine abstinence. Ropinrole is a D2-selective dopaminergic full agonist which does not show any significant affinity for the D1 receptor subtype, while it binds weakly to the μ-opioid receptor. It has proved useful and safe in the treatment of Parkinson’s disease. A pilot open-label trial of ropinrole for cocaine dependence has shown promising results.

MATERIALS AND METHODS

Seven hospitalized patients in Therapeutic Community (4-M 3-F) with diagnosis of Schizoaffective disorder in comorbidity with cocaine dependence, received disulfiram 400 mg once daily, in combination with 2 mg ropinrole once daily for six month. The assessment psychodiagnostics at baseline T0, after 12 weeks (T1) and after 24 weeks (T2) including: Brief Psychiatric Rating Scale (BPRS), Positive and Negative Symptom Scale (PANSS), Hamilton Depression Rating Scale (HDRS) and Hamilton Anxiety Rating Scale (HAM-A).

RESULTS

Adverse effects were recorded by using Record Dosage Treatment Emergent Symptom Scale (DOTES). The data obtained from the study were subjected to quality control and, subsequently, to statistical analysis descriptive and inferential. Given the small sample size and non-normal distribution of data, it was decided not to use parametric tests. The differences within groups between baseline and the time of enlistment term (T1) and late (T2) of the study were evaluated using the Wilcoxon rank sum test. The results were considered significant for p values <.05 (Figure 1). Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) 16.0 software.

STATISTICAL ANALYSIS

The treatment with disulfiram and ropinrole significantly reduced the total score and all domains PANSS, has improved throughout the global clinical symptoms. We observe an improvement of mood and anxiety symptoms in HDRS total scores of the scales and HAM-A at T1 and T2. The most common side effects were: agitation (71%), insomnia (42%), sweating (28%); these symptoms were evaluated from the sample considered as transient. The combination disulfiram-ropinrole in schizoaffective subjects with cocaine dependence was safe and effective in the treatment of schizoaffective symptoms. Craving symptoms were well tolerated and during the weeks disappeared. Side effects of the pharmacotherapy, which have never been high at the DOTES, have gradually disappeared during the weeks.

CONCLUSIONS

REFERENCES


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