

Correlation between **ketamine** psychotherapy (KPT) induced psychological changes and alcoholism treatment outcome

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In OUR PREVIOUS MAPS-funded study of underlying psychological mechanisms of KPT, thirty alcoholic in-patients (age $40,1\pm 1,8$) were treated with KPT at the end of their 1.5 month treatment at the Leningrad Regional Center for Alcoholism and Drug Addiction Therapy. All 30 patients were assessed before the ketamine session and in the days after it with the *Questionnaire of Terminal Life Values (QTLV)* (Rokeach, 1973; Senin, 1991) and the *Locus of Control Scale (LCS)* (Phares, 1976; Bazhin et al., 1993). Ten out of 30 alcoholic patients treated with KPT were assessed with regular (verbal) and color (non-verbal) repertory grids (Kelly matrices) (Francella and Bannister, 1977) to assess the subtle changes in self-concept as affected by KPT. Additionally, ten other alcoholic patients (age $41,1\pm 2,4$) were studied before and after KPT with the *Purpose-in-Life Test (PLT)* based on the Frankl's concept of man's aspiration for the meaning of life (Crumbaugh, 1968; Leontiev, 1992). All psychological tests and scales that we used were specially adapted in Russia.

Our study has indicated that ketamine-assisted psychedelic therapy of alcoholic patients induced a positive transformation of non-verbalized (mostly unconscious) self-concept according to the color repertory grids data, rising of the internalization of locus of control in personality according to the LCS, positive changes of life values and purposes according to the QTLV, and important insights into the meaning of life according to the PLT (Krupitsky, Burakov, 1996; Krupitsky, Grinenko, 1997).

To answer the question whether all positive psychological changes mentioned above contribute to sobriety after KPT we collected follow-up information about 38

out of 40 alcoholic patients studied with different psychological tests (2 patients were excluded because they did not fill out tests properly), and then carried out a correlation statistical analysis between the follow-up data and psychological tests data (LCS, QTLV and PLT).

According to the follow-up data, abstinence of more than one year was observed in 21 out of 38 patients (55.26%), abstinence between 6 and 12 months in 3 patients (7.9%), between 3 and 6 months in 8 patients (21.05%), and less than 3 months in 6 patients (15.79%). These follow-up data are in a good correspondence with the data of our previous studies carried out in 80s which showed that 65.8% of KPT treated alcoholic patients were totally abstinent for more than one year.

The correlation analysis revealed a number of correlations between the psychological tests indices and follow-up data. In particular, the more internal was the locus of control in the personality after KPT according to LCS, the longer remission (period of abstinence) was observed ($r=0.35$, $p < 0.05$). That means the more responsible became patients for their life after KPT, the more sure they were in their ability to control and manage different situations in their life, the longer they were able to stay abstinent.

The length of the period of abstinence in KPT treated patients was positively correlated with such indices of QTLV after KPT as Active Social Contacts ($r=0.38$, $p < 0.05$), Self-Perfection ($r=0.37$, $p < 0.05$), Spiritual Contentment ($r=0.38$, $p < 0.05$), and also with the Index of the Importance of Life Values Actualization in the Area of Family Life ($r=0.41$, $p < 0.01$). These data mean that positive changes in life values caused by KPT in alcoholic patients favored a sober lifestyle.

There were no statistically significant correlations found between the length of the abstinence and the PLT data, which is probably due to a small number of patients (just 10) studied with PLT.

There were no correlations found between the length of the abstinence and indices of all psychological tests before KPT. That means only psychological changes induced by KPT (but not initial psychological characteristics of the patients) favored a sober lifestyle and a stable remission.

Thus, it is possible to conclude that KPT-induced psychological changes in alcoholic patients contribute significantly to the abstinence following the KPT. •

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The syndrome of anhedonia in recently detoxified heroin addicts: assessment and treatment

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IT'S IMPORTANT to note from the very beginning that methadone maintenance is

not available in Russia. Therefore, the treatment of heroin addicts in the in-patient department of the Leningrad Regional Center for Alcoholism and Drug Addiction Treatment consists of two major stages: The first one is a treatment of withdrawal syndrome with antidepressants, tranquilizers, analgesics and clonidine, and the second one is supportive psychotherapy and pharmacotherapy to prevent a relapse.

In our clinical practice we noted that soon after the termination of withdrawal syndrome, many detoxified heroin addicts report having a specific state which can be described as a "Syndrome of Anhedonia" (SA). The SA includes affective, cognitive and behavioral components. The affective component includes tension, irritability, nervousness, anxiety, indifference, depression, psychological discomfort without cause, feeling that life is dull and empty, sleep disorders, and craving for heroin. The cognitive component of SA includes thoughts about heroin, memories about heroin, dreams about heroin, and imagining use of heroin. The behavioral component includes actions to acquire heroin, discussing heroin use with other addicts, and passivity.