

Ketamine-Assisted Psychotherapy (KPT) In The Treatment of Heroin Addiction: Multiple v Single KPT Sessions

Krupitsky E.M. (kru@lond.spb.su), Burakov A.M., Romanova T.N.,
Dunaevsky I.V., Grinenko A.Y.

St.Petersburg Scientific-Research Center of Addictions and
Psychopharmacology affiliated with St.Petersburg State Pavlov
Medical University, Russia

Introduction

The number of registered and non-registered heroin addicts in Russia dramatically increases every year. Heroin addiction has a particularly high prevalence rate among Russian youth. During the last several years, the heroin addiction epidemic in Russia has become closely related to the HIV epidemic. Since methadone maintenance is prohibited in Russia by law, relapse prevention in heroin addicts is mostly limited to the use of naltrexone, antidepressants, and psychosocial treatment. Poor compliance with the above medications is a major problem, which makes it important to develop new treatment approaches based on combined pharmacological and psychotherapeutic interventions.

During the 1960s, psychedelic-assisted psychotherapy was demonstrated to be a promising approach to the treatment of addictions. However, studies of psychedelic psychotherapy were essentially stopped in the early 1970s due to political limitations resulting in part from adverse reactions associated with the non-medical uses of psychedelic drugs.

Ketamine is a government-approved registered drug used for general anesthesia. In small doses (1/10 to 1/6 of that usually used in surgery), it induces a profound psychedelic experience. It is safe, short acting, and has an approved medical use unlike other psychedelics which are criminalized and have no approved medical uses. The legal status of ketamine was one of the major reasons we chose to study the efficacy of ketamine-assisted psychotherapy (KPT) for alcoholism and heroin addiction. We have been doing studies of KPT since 1985. We have shown that a single KPT session is an effective method of treatment for alcoholism (Krupitsky, Grinenko, 1997) as well as for heroin addiction (Krupitsky et al, 1999).

We are currently exploring the question of whether increasing the number of KPT sessions will increase the efficacy of the treatment. That might be the case since many of the subjects who underwent psychedelic psychotherapy reported a specific "psychedelic afterglow" (positive psychological changes induced by the KPT session) which usually lasted up to several weeks after the session. Thus, multiple KPT sessions might have a cumulative effect that would generate longer-lasting positive psychological changes, thereby improving treatment outcomes. The study that we are currently conducting, with support from MAPS and Heffter Research Institute, is designed to test this hypothesis.

Methods

At this point in time (mid-April, 2001), forty-one detoxified heroin addicts have voluntarily given their informed consent and have been included into the study. All subjects received one KPT session at the end of their detoxification treatment course in the psychiatric hospital. At both one and two months after the initial KPT session, all subjects were invited back for one day to the same hospital and randomly assigned to one of two groups, an experimental group and a control group. Patients randomized to the experimental group (20 so far) have received their second and third KPT sessions at one and two months after their first KPT session. Subjects randomized to the control group (19 subjects) have received regular drug counseling sessions instead of KPT

sessions, at one and two months after their first KPT session. The third KPT session was considered to be the end of the treatment program for the subjects in the experimental group while the second counseling session was considered to be the end of the treatment program for the subjects in the control group. We are evaluating all subjects participating in the study at 1, 3, 6, 9 and 12 months after completion of the treatment program. We are monitoring their abstinence from heroin with the use of urine drug tests and are also conducting psychological assessments measuring such variables as anxiety, depression, craving for heroin, anhedonia, and purpose in life. Two subjects who relapsed after the first KPT session had not been randomized to either group.

Results

Two heroin addicts relapsed after the first KPT session, so that they were not randomized to either the experimental or control group.

In the experimental group (3 KPT), three subjects relapsed after the second KPT (without having a third KPT session), one relapsed after the third KPT session ("end of treatment"), one in two months after the third KPT session, and one in five months after the third KPT session. A total of six subjects have relapsed to date in the experimental group. Two subjects were abstinent one year after the last KPT session and thus finished their participation in the study. We continue to follow twelve subjects from the experimental group who are abstinent, with a period of abstinence of less than one year after the end of the treatment program.

In the control group (1KPT + 2 Counseling), six subjects relapsed after the first counseling session, one after the second counseling session ("end of treatment"), one within two months after the last counseling session, two in three months, one in five months, and one in eight months after the last counseling session. A total of twelve subjects have relapsed to date in the control group. We will continue to follow seven subjects of this group who are abstinent with a period of abstinence of less than one year after the end of the treatment program.

Thus, the preliminary data we have gathered so far provides some evidence that three KPT sessions work better than one KPT session followed by two drug counseling sessions. We will continue recruitment of new subjects into this study to at least double the number of subjects in each group since that is important from a statistical point of view.

It is important to note that KPT produced no severe adverse reactions in this study. The safety of KPT demonstrated in this study is also an important result.

Acknowledgment

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References

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