

Hallucinogenic Drugs in the Treatment of Alcoholism: A Two-year Follow-up

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THERE HAS BEEN CONSIDERABLE SCIENTIFIC INTEREST in the class of compounds commonly called Hallucinogens and their possible use as therapeutic agents in psychiatric disorders. Several pharmacologically dissimilar compounds, Lysergic Acid Diethylamide (LSD), Mescaline, Psilocybin, Dimethyltryptamine (DMT), Diethyltryptamine (DET) and Dipropyltryptamine (DPT), and, more recently, the methoxylated and amphetamine compounds, have been shown to produce hallucinogenic effects.^{3,6,9,14-17}

Two major treatment methods have been developed using hallucinogenic compounds: Psycholytic Treatment¹⁰ utilizes low doses of LSD as an adjunct to psychotherapy and Psychedelic Treatment³ usually involves the giving of a single large dose of LSD after proper psychological preparation in order to produce an overwhelming psychological experience. This latter method has been employed primarily in the treatment of alcoholism. When this method was first introduced there were enthusiastic reports of the therapeutic success with alcoholics.^{1,13} Other reports in the literature however have indicated that hallucinogenic compounds have had no substantial therapeutic effect on a variety of psychiatric illnesses, including alcoholism.^{2,5,12}

Several tryptamine derivatives have been shown to produce hallucinogenic effects, and these compounds were evaluated in a clinical study at St. Elizabeth's Hospital, and this study has been previously reported.³ The present paper deals with the clinical follow-up of these subjects two years after treatment.

MATERIALS AND METHOD

Subjects

Twelve chronic, nonpsychotic alcoholic patients volunteered to participate in the program. All patients had a history of over ten years of excessive alcohol ingestion. These patients were on the Alcoholic Ward at St. Elizabeth's Hospital. They were asked to volunteer to participate in a treatment program involving the use of hallucinogenic drugs. The volunteers who were selected had to be in good physical condition, without evidence of organic deterioration, schizophrenia, or the manic depressive illness. Their ages ranged from 29 to 48, with the mean age of 38.2. The length of hospitalization, prior to the start of treatment, varied from one month to five years. All had multiple hospitalizations for alcoholism, either in a general or psychiatric hospital, and the majority had a history of arrest for alcoholism. All subjects had a history of symptoms of alcohol withdrawal

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and were classified as Gamma Alcoholics, according to the classification of Jellinek.⁷ Prior to the start of treatment, all subjects had an extensive medical work up, including CBC, BUN, glucose, thymol turbidity, alkaline phosphatase, cephalin flocculation, SGOT, SGPT, EKG and EEG. The subjects were transferred to the Alcoholic Research Ward, two at a time. The drugs DPT, DET and 6-FDET were administered in a random design. The drugs were given in doses of 0.7, 1.0 and 1.3 mg./Kg. Each patient received at least one of the active drugs in a 1.0 mg./Kg. dose. The design, the psychological results and evaluation of the drugs have been reported previously.³

Drug Sessions

Each patient had five weekly drug sessions lasting approximately 2½ to 3½ hours. Three of the sessions, including the first session, were conducted in a darkened room in pleasant surroundings. There were two sessions held in a comfortable room, equipped to continuously record physiological measures such as blood pressure, heart rate, respirations, and EEG.

All the subjects received psychotherapy during their participation in this study. For two weeks prior to beginning the drug sessions each patient received intensive preparation from the same therapist, A. V. During this preparation the subjects were informed of the *possible* nature of the drug reaction and that they *might* experience some, all, or none of the possible effects which were described. This was done to inform the subjects fully and to prevent the appearance of overwhelming anxiety that could lead to panic reaction. Literature was made available about the effects of hallucinogenic drugs and the patients were encouraged to communicate with each other and to talk with the therapist and nursing personnel about any questions that might arise concerning the treatment.

During the pre-drug sessions the therapist established rapport with the subjects and began to understand some of their emotional problems. During the drug session the therapist was present and encouraged the subjects to discuss their problems. He was supportive if they became apprehensive and encouraged them to talk freely. Between the five weekly drug sessions the patients were given individual therapy twice weekly. During these sessions the therapist and patient discussed the previous drug session and preparation was made for the next drug session in which the patient was encouraged to discuss his problems. All but one of our 12 subjects reported experiencing profound psychological changes associated with the use of hallucinogenic agents.

Following the five treatment sessions, all the subjects were encouraged to continue psychotherapy with their therapist. Only two subjects availed themselves of this opportunity on a regular basis.

RESULTS

At the time of the two-year follow-up study data was obtained on 11 of the 12 subjects. The follow-up survey was made either by direct contact (nine subjects) or by mail (two subjects). Information gathered over a two year period is summarized in Table 1. These data show that, at the time of discharge from the hospital, four subjects were considered improved. One of these, Subject 12, could not be located at the end of two years. He was last seen approximately six months after discharge. At that time he had returned to excessive drinking and had been arrested by the police. Subject 1 never was discharged from the hospital. He had been hospitalized for five years prior to treatment, and following treatment he had repeated episodes of heavy drinking. The remaining seven subjects were discharged essentially unimproved. They had reverted to drinking either while in the hospital or immediately upon discharge. Subject 3 had a period of abstinence so that at the one-year follow-up he was sober and working, however he became depressed and re-

Table 1.—Rating of Patients' Condition During Two-year Follow-up

Subject	At Discharge from Hospital	One Year	Two Years
1	—	—	—
2	0	0	0
3	0	+	—
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	—
8	0	0	—
9	+	+	+
10	+	+	+
11	+	—	+
12	+	(Lost to followup)	+

+ = Improved; sober and working

0 = Unchanged; drinking heavily

— = Worse; in hospital

verted to excessive drinking and was hospitalized because of a severe suicide attempt at the time of the two year follow-up. Subject 8, who was hospitalized at two-year follow-up, died shortly afterward from his drinking and excessive Thorazine ingestion. Of the four patients whose condition was rated as unchanged at follow-up, one was drinking slightly less than pre-treatment, but was taking narcotics. Another was working, he had repeated bouts of heavy drinking, but was less concerned about it. Another was drinking excessively and had repeated hospitalization for his drinking. The last had left the City at two-year follow-up. When contact with him was made by mail he was wondering whether his continued heavy drinking was due to brain damage secondary to his drug treatment. A brief sketch of the three subjects who were sober and working at the second year evaluation follows.

Subject 9

A Ph.D., a psychologist, at the time of follow-up was working as a roofer. He had held his job since discharge from the hospital. He still had multiple psychosomatic complaints, but drinking did not appear to be a problem. He occasionally had a few beers. This patient did not think the drug sessions were of much help to him and did not think his improvement had anything to do with the treatment. This subject was the one who did not experience a psychedelic effect from the drug, despite being given 1.3 mg./Kg. of DPT.

Subject 10

Since the drug treatment, the patient has been abstinent. He continued individual psychotherapy on a weekly basis. At follow-up he still had many emotional problems but was functioning well and working. He had recently remarried. He is the most improved of the subjects.

Subject 11

Several months after discharge he went through several heavy drinking episodes resulting in his return to the hospital. He eventually found sobriety and a degree of stability and calmness which he attributed to his involvement with Alcoholics Anonymous. At follow-up he was actively involved with Alcoholics Anonymous and a strong believer in this form of treatment. He had been working and sober for six months. The role of Alcoholics Anonymous in his improvement is undoubtedly important, but the insights he gained during the drug sessions and the subsequent improvement in his behavior might have been significant contributing factors.

DISCUSSION

On evaluation of the two-year follow-up data, it is clear that only a few of the 12 chronic alcoholic patients treated with short acting hallucinogenic drugs and psychotherapy had benefited from the treatment.

At one year, three of the 12 subjects (25%) were considered improved. In terms of drinking behavior and social adjustment at the end of the second year three subjects were improved. Two of these were improved at one year. Of this small group, one denied that the drug sessions were of any benefit; in fact he never had a "psychedelic experience." Thus, only two, or 17 per cent, of the 12 chronic alcoholic patients showed improvement that can be attributed directly or indirectly to psychedelic drug treatment.

Our impression has been that the drugs brought a number of personal problems to the surface with which most subjects found it difficult to cope. With continued help from the therapist and Alcoholics Anonymous two of the patients seemed to be able to benefit from this awareness and find new meaning in life.

Criticism of research with Hallucinogenic drugs has centered primarily around the use of adequate control groups, especially when evaluating treatment outcome. A recent report on LSD treatment of chronic alcoholics has attempted, with some success, to design and carry out an adequate controlled study.⁴ Our study does not have a separate control group because of the primary purpose of the research design. However, despite an intensive therapeutic effort with a small number of patients in order to maximise the treatment benefit of these Hallucinogenic tryptamine derivatives, only minimal long term improvement occurred in our alcoholic patients. For psychedelic therapy to be considered appropriate treatment for chronic alcoholics a better therapeutic result would appear to be necessary.

In the clinical evaluation of any treatment regimen, the cost and risk to the patient must be carefully measured against the results achieved. In our study an intensive effort with many highly trained professions; time was required and the drugs are potentially dangerous. Their use required hospitalization with the utilization of specially trained personnel and special techniques to assure the minimal appearance of unwanted side-effects. The poor results at two year follow-up when compared to the high cost and risk raise serious questions about the practicality of using Hallucinogenic drugs in a treatment

program for chronic alcoholics. Admittedly our patient population was therapeutically the most difficult alcoholic patient type to treat. They were all long-term alcoholics with multiple hospitalizations for alcoholism. They had long since been estranged from their families and were dependent on their own or the very limited resources of the community upon discharge from the hospital.

The temporary improvement seen in some patients lasted mostly for only a few weeks. This relatively short lasting improvement is at variance with the expectation of the psychedelic concept which postulated a permanent change after a single overwhelming psychedelic experience.¹¹ A reexamination of this philosophy seems to be under way, and repeated administration of these drugs has been suggested to maintain the temporary improvement.⁸ The repeated administration, even in clinically controlled settings, might create other problems in replacing alcohol dependency with a drug dependency. Before such a treatment regimen could be attempted, more toxicity data on the effects of chronic administration of the Hallucinogenic drugs would be needed.

In contrast to some reports that have appeared in the literature about improvement in alcoholics,^{1,13} our follow-up data confirm other studies^{2,4,12} that have indicated that the use of hallucinogenic drugs have not been of striking benefit in the treatment of chronic alcoholism. Unless a new treatment philosophy, different from the psychedelic concept, is shown to be efficacious to sustain the initial improvement, hallucinogenic drugs, including LSD, DET and DPT, appear to have limited therapeutic value in the treatment of chronic alcoholism.

SUMMARY

Twelve chronic alcoholic patients who were treated with hallucinogenic drugs were evaluated two years after drug treatment. Of the 12 subjects, three were relatively stable, eight were drinking or hospitalized at the time of follow-up, and one subject was lost to follow-up. Of the three improved, only two could be considered to have benefited from the drug. From our data, the use of hallucinogenic drugs in the treatment of alcoholism appears to be of limited value.

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